KADIR HAS UNIVERSITY

GRADUATE SCHOOL OF SOCIAL SCIENCES

EXPLAINING THE LABOR SHARE OF INCOME:
A SYNTHETIC ANALYSIS WITH CAPITAL ACCOUNT OPENNESS AND
FINANCIAL DEVELOPMENT,
OECD AND NON-OECD COUNTRIES 1995-2015

DISSERTATION

ONUR ÖZDEMİR

May, 2017

ONUR ÖZDEMİR

Ph. D. Dissertation

2017

EXPLAINING THE LABOR SHARE OF INCOME:
A SYNTHETIC ANALYSIS WITH CAPITAL ACCOUNT OPENNESS AND
FINANCIAL DEVELOPMENT,
OECD AND NON-OECD COUNTRIES 1995-2015

ONUR ÖZDEMİR

Submitted to the Graduate School of Social Sciences

in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

in

Economics

KADIR HAS UNIVERSITY

May, 2017

KADIR HAS UNIVERSITY

GRADUATE SCHOOL OF SOCIAL SCIENCES

EXPLAINING THE LABOR SHARE OF INCOME:
A SYNTHETIC ANALYSIS WITH CAPITAL ACCOUNT OPENNESS AND
FINANCIAL DEVELOPMENT,
OECD AND NON-OECD COUNTRIES 1995-2015

ONUR ÖZDEMİR

APPROVED BY:

Assist. Prof. Dr. S. Arhan Ertan (Advisor)   Kadir Has University

Assoc. Prof. Dr. K. Ali Akkemik   Kadir Has University

Prof. Dr. Ferda Yerdelen Tatoğlu   Istanbul University

Assoc. Prof. Dr. Halil Tunalı   Istanbul University

Assist. Prof. Dr. Eylem Z. Gevrek Demiray   Kadir Has University
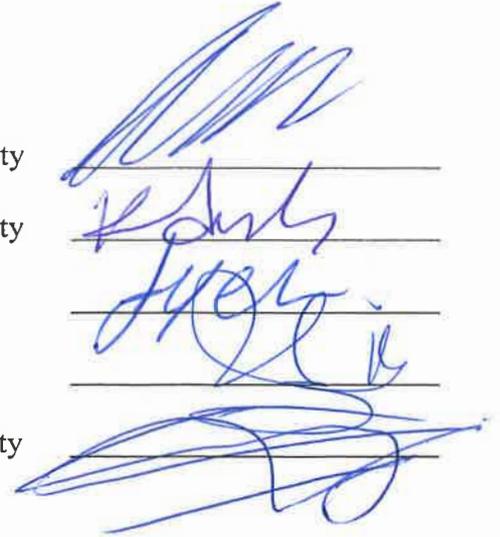
APPROVAL DATE: 30/05/2017

"I, Onur Özdemir, confirm that the work presented in this dissertation is my own. Where information has been derived from other sources, I confirm that this has been indicated in the dissertation."

ONUR ÖZDEMİR

GENEL BİLGİLER

İsim ve Soyadı	: Onur Özdemir
Anabilim Dalı	: Ekonomi
Tez Danışmanı	: Yrd. Doç. Dr. S. Arhan Ertan
Tez Türü ve Tarihi	: Doktora – Mayıs 2017
Anahtar Kelimeler	: Emek Gelir Payı, Sermaye Hesabı Açıklığı, Finansal Gelişme, Finansal Liberalizasyon, Neoliberalizm

ÖZET

2007-2008 krizi ile başlayan ekonomik çöküşün etkileri 2017 yılı itibariyle tüm dünya ekonomilerinde hissedilmeye devam etmektedir. Bu çerçevede, mevcut ana akım ekonomi politikaları yeniden gözden geçirilmekte ve büyük oranda yenilenmeye ihtiyaç duymaktadır. Özellikle Keynesyen politikaların 1970'lerden itibaren sosyo-iktisadi ölçekte çökme noktasına gelmesi ile birlikte şiddetlenen emek-karşıtı hareketler, tüm dünyada temel politika bileşenlerini de şekillendirme gücünü elde edebilmiştir. Bu akımlar arasında gücü eline geçiren ise neoklasik yaklaşım olmuştur. Ancak sistem içi bu dönüşüm sosyo-ekonomik ve politik tabanın oyun kurucularının ve öznelerinin çıkarlarındaki değişim sonucu kolay olmamıştır. Diğer bir deyişle, sınıfsal temelde, emek-sermaye çatışmasının tarih içinde en ciddi düzeye çıktığı neoliberal dönem, beraberinde birçok parametrenin, özellikle baskı yoluyla, sermaye lehine düzenlenmesini zorunlu kılmıştır.

Özünde neoliberalizm Keynesyen dönemde emek-sermaye anlaşması çerçevesinde elde edilen emek-temelli kazanımlara yönelik sosyal, ekonomik ve politik bir karşı atak olarak da değerlendirilebilir. Bunun bilimsel düzeyde kanıtlarını veya çıktılarını birçok farklı alanda görmek mümkündür (örneğin, sendikalaşma oranları, işsizlik oranı düzeyleri, esnek emek piyasası politikaları ve ucuz emeğe dayalı üretim planlaması). Ancak makroekonomik çerçevede bunun en önemli örneği düşen emek payı oranlarında görülebilir. Çalışma içinde detaylarına girileceği üzere, bu düşüş hem gelişmiş hem de gelişmekte olan ülke grupları için geçerlidir. Bu ülkeler gayri safi yurtiçi hasılanın (GSYİH) yaklaşık olarak %90'ına sahiptirler. Yani iktisadi gücün çok önemli bir kısmını ellerinde bulundurmaktadırlar. Bu nedenle, emek payı ölçeğinde yaşanan değişimler, kapitalist sistemin işleyişini sağlayan politika bileşenlerini birbirleriyle etkileşimli olarak etkileyebilmekte ve dönüştürebilmektedirler.

Tüm ülke gruplarında, 1980 yılından 1995 yılına kadar ılımlı bir düşüş sergileyen emek payı oranları, özellikle 1995 yılı sonrası ciddi bir düşüş eğilimi göstermeye başlamıştır. Yaklaşık her ülke örneğinde bu düşüşü görmek mümkündür. Düşüş yaşanmayan ülkelerde dahi emek payı oranları, ülke içi ve uluslararası faktörlere bağlı olarak, yükselme eğiliminden çok uzaktır. Oysa ki bu durum neoliberal politikaların iktisadi ve sosyal ortamda zafer elde etmesinde öne çıkardığı söylemlerin bire bir tersini teşkil eder. Ayrıca, neoliberal yaklaşım, bu tür iktisadi koşulların ortaya çıkmasına neden olan politikaları üstü kapalı uygulamaktan ziyade tüm sosyo-ekonomik ve politik alanlarda açık bir şekilde yapmıştır. Emek piyasalarında neoliberalizm tarafından öne çıkarılan tüm politika bileşenleri açık biçimde uygulanan bu stratejilerin en

önemli ifadesidir. Bunun aksini iddia edenler, 1980 yılından başlayarak ve özellikle 1995 sonrası devam eden dönemde emek piyasası ile ilgili olan parametrelerin nasıl bir eğilim çizgisi izlediklerini incelemeleri gereklidir.

Kapitalizmin neoliberal dönemdeki genel kapsamını anlamak için iki önemli politika aracının karakteristik özelliklerinin derinlemesine incelenmesi gerekir: (1) ticaret rejimi ve finansal sektör çerçevesinde uygulanan liberalleşme politikaları ve (2) emek piyasası odaklı uygulanan politikalar. Bu iki faktör emek payı gelirindeki düşüşte kilit rol oynamaktadır. Ticaret ve finansın küreselleşme odaklı değişen yapısı sermaye lehine politikaları öne çıkarırken, emek piyasalarında uygulanan karşıt politikalar, sermaye karşısında emeğin pazarlık gücünü olumsuz bir şekilde etkilemektedir. Diğer bir deyişle, küreselleşme dolaylı olarak emeğin pazarlık gücünü olumsuz etkilerken, emek piyasalarında uygulanan politikalar emek payındaki düşüşte direkt olarak etki yapmaktadır. Neoliberal çerçevenin bu emek-karşıtı politikalarının her ikisi de, emek ve sermaye arasındaki karşıtlığı artırmada olumsuz bir şekilde işlev görür.

Bu tez emek payının 1995-2015 yılları arasında yaşadığı düşüşün nedenlerini emeğin pazarlık gücündeki değişimleri ölçeğinde incelemektedir. İlk olarak, sermaye hesabının açıklığı ve ticaret rejiminin liberalleşme değişkenleri ele alınmaktadır. Bu iki temel gösterge çerçevesinde finansal gelişme endeksinin analize dahil edilmesi ile makroekonomik tabanda kurumsal bir bütünlük sağlanmaya çalışılmaktadır. Bu anlamda, sermaye hesabı açıklığı ve finansal gelişme endeksi değişkenleri, tek etkilerine ek olarak bir etkileşim terimi olarak ele alınacaktır.

Bu değişkenlerin emek payı üzerindeki etkilerinin ekonometrik analizi sabit etkiler panel veri yöntemi ile incelenmiştir. Ülkelerin özel koşullarının (örneğin, emek piyasasındaki koşullar, küreselleşme endeksleri, devlet faaliyetleri, teknolojik gelişim, insani sermaye ve yapısal değişimler paralelinde makroekonomik koşullar) arabulucu rolü göz önünde bulundurularak sermaye hesabı açıklığı ve finansal gelişme endeksinin etkileşim faktörü ile emek payı geliri arasındaki ilişki sabit etkiler methodu çerçevesinde analiz edilmektedir.

Buradaki asıl amaç, seçili OECD ve OECD dışı ülke gruplarında, herhangi bir göstergenin tek başına ekonomik ve politik bağlamda öne çıkmasının, emek payını düşürücü etkide bulunduğunu göstermesi üzerine kuruludur. Bunun emek piyasası ile bağlantısı sosyo-ekonomik ve tarihsel düzeyde derinlemesine incelenmektedir. Sermaye ve emek arasındaki çatışmanın emek lehine değişimi finansal liberalleşme sağlanırken finansal gelişmenin de bir arada sağlanmasının başarımına bağlıdır. Ancak, analiz sonuçları çerçevesinde, bu durum, emeğin pazarlık gücünü etkileyen tüm koşullarda olumsuzdur. Diğer bir deyişle, sermaye hesabı açıklığı ve finansal gelişme endeksinin etkileşim terimi emek payı üzerinde olumlu bir etki yaratırken, neoliberal politika bağlamında uygulanan emek karşıtı politikalar sonucu emeğin azalan pazarlık gücü değişkenleri emek kesiminin gelirleri üzerinde olumsuz bir etkiye sahiptir.

GENERAL KNOWLEDGE

Name and Surname	: Onur Özdemir
Field	: Economics
Supervisor	: Assist. Prof. Dr. S. Arhan Ertan
Degree Award and Date	: Ph.D. – Mayıs 2017
Keywords	: Labor Share of Income, Capital Account Openness, Financial Development, Financial Liberalization, Neoliberalism

ABSTRACT

The negative influences of economic downturn, which started with the 2007-2008 crisis, still maintain to affect the global economy as of 2017. In this framework, current mainstream economic policies are being re-examined and need to be renewed. Especially, with the Keynesian policies coming to the point of collapse at socio-economic scale since 1970s, the exacerbating anti-labor movements have obtained the power to change the fundamental policy components all over the world. Among different kinds of approaches, the neoclassical paradigm were the ones that had taken the power. However, this transformation within the system was not being easy due to the changes in the interests of policymakers and agents in the socio-economic and political base. In other words, in the class system, the neoliberal period, in which the labor-capital conflict has reached its most serious level in the history, required of the organization of many parameters, especially by pressure, in favor of capital.

In its essence, neoliberalism can also be regarded as a social, economic and political counter-attack against the labor-based gains obtained in the Keynesian period within the labor-capital accord. At the scientific level, it is possible to obtain evidences or outcomes in many different spheres (e.g., the rate of unionization, the level of unemployment rate, flexible labor market policies, and cheap labor-based production planning). However, the most important example of this case in the macroeconomic framework can be understood by looking at the falling labor share ratios. As will be noted in the study, this decline is valid both for developed and developing country groups. These countries have also about %90 of gross domestic product (GDP). In other words, they dominate a very important part of the economic power. For this reason, changes in the labor share scale can interactively affect and thereby transform the policy components that provide the functioning of the capitalist system.

In all country groups, labor share ratios, which showed a modest decline from 1980 to 1995, have begun to exhibit a significant declining trends, especially after 1995. In almost every country it is possible to observe these trends. Even in countries where there is no decline, the labor share ratios are far from the rising trends, depending on domestic and international factors. However, this constitutes totally a different discourse that neoliberal policies put forward in the triumph of the economic and social frameworks. Moreover, the policies that led to the emergence of these economic conditions were explicitly applied both in economic, social, and political spheres by the neoliberal paradigm. All policy components boosted by the neoliberal system in the labor market are one of the most important expressions of these explicitly applied

strategies. Those who argue against this case will have to investigate what kind of trend movement of the parameters related to the labor market starting in the 1980s and especially after 1995, have followed.

The characteristics of two important policy instruments need to be examined in detail in order to understand the general scope of the capitalist system in the neoliberal framework: (1) the liberalization policies applied in the context of trade regime and financial sector; and (2) labor market oriented policy applications. These two factors play a key role in the decrease of the labor share of income. While the changing structure of trade and finance, following the globalization path, puts more emphasis on capital-favored policies, the anti-labor policies applying in the labor markets negatively affect the bargaining power of labor in favor of the capital. In other words, while the globalization indirectly affects the bargaining power of labor in negative manner, the policies applied in the labor markets have a direct impact on the decline of the labor share. Both of these anti-labor policies of the neoliberal framework negatively influence on the increasing antagonism between labor and capital.

This dissertation examines the causes of the decline of the labor share of income in terms of the changes in the bargaining power of labor over the 1995-2015 period. First, the capital account openness and the liberalization policies of the trade regime will be addressed. Within the framework of these two major indicators, the macroeconomic integration will be attempted to being provided by incorporating the financial development index into the analysis. In this sense, the capital account openness and financial development index variables will be considered as an interaction term in addition to their single effects.

The econometric analysis of the effects of these variables on the labor share of income will be examined by the fixed effects panel data method. The relationship between the interaction term of capital account openness and the financial development index and the labor share of income will be analyzed in the empirical part by the fixed effects method, taking into consideration of the mediating role of the country-specific conditions (e.g., labor market conditions, the globalization indices, the government activities, technological developments, the progress in human capital, and macroeconomic conditions in parallel to the structural changes).

The main purpose of this analysis is to show that the single effects of any variable which stand out in the economic and political context, have negative effects on labor share of income in selected OECD and non-OECD country groups. This linkage with the labor market will be examined at the socio-economic and historical levels in detail. The changes emerging in the contradictions between capital and labor in favor of working class depend on a joint assessing of both financial liberalization and the financial development. However, in the context of the empirical results, this case is negative for all conditions that affect the bargaining power of labor. In other words, while the positive impact of the interaction term of capital account openness and the financial development index on the labor share of income are relevant, the anti-labor policies implemented by the neoliberal policy agenda negatively affect the labor share by declining the bargaining power of labor in favor of the capital.

ACKNOWLEDGEMENTS

CONTENTS

PART 1

INTRODUCTION

PART 2

HISTORICAL PROCESS OF THE ECONOMIC EVOLUTION

PART 3

THE MAIN STRUCTURES OF FINANCE AND TRADE IN THE NEOLIBERAL ERA

PART 4

EMPIRICAL LITERATURE ON FINANCIAL LIBERALIZATION

PART 5

RELATION BETWEEN INCOME DISTRIBUTION AND THE LABOR SHARE OF INCOME

PART 6

EMPIRICAL ANALYSIS

LIST OF TABLES

LIST OF FIGURES

Page No.

LIST OF ABBREVIATIONS

AFL	American Federation of Labor
AMECO	Annual Macroeconomic Database of the European Commission
AREAER	Annual Report on Exchange Arrangements and Exchange Restrictions
BIS	Bank for International Settlements
BSB	Bağımsız Sosyal Bilimciler
BW	Bretton Woods
CES	Constant Elasticity of Substitution
CIO	Congress of Industrial Organizations
CIP	Capital-in-Process
CRTS	Constant Returns to Scale
DCs	Developed Countries
EAEC/EURATOM	European Atomic Energy Community
EC	Economic Community
ECSC	European Coal and Steel Community
EEC	European Economic Community
EFTA	European Free Trade Association
EPU	European Payments Union
FDI	Foreign Direct Investment
FED	Federal Reserve
FGLS	Feasible Generalized Least Squares
FRA	Financial Repression Approach
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GLS	Generalized Least Squares
GMM	Generalized Method of Moments
GNP	Gross National Product

IBRD	International Bank for Reconstruction and Development
ICSID	International Center for Settlement of Investment Disputes
ICTs	Information and Communication Technologies
IDA	International Development Association
IFC	International Finance Corporation
ILO	International Labor Organization
IMF	International Monetary Fund
ISI	Import-Substitution Industrialization
IT	Information and Technology
KAOPEN	Capital Account Openness
KMT	Keynesian Macro Theory
LDCs	Least Developed Countries
MENA	Middle East and North Africa
MIGA	Multilateral Investment Guarantee Agency
MP$_K$	Marginal Product of Capital
MP$_L$	Marginal Product of Labor
NAFTA	North American Free Trade Agreement
NBER	The National Bureau of Economic Research
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organization
OECD	Organization for Economic Co-operation and Development
OEEC	Organization for European Economic Co-operation
OLG	Overlapping Generations
OLS	Ordinary Least Squares
OPEC	Organization of Petroleum Exporting Countries
OSPUE	Operating Surplus of Private Unincorporated Enterprises
OTC	Over-the-Counter
PCSEs	Panel-Corrected Standard Errors

PPP	Purchasing Power Parity
PWT	Penn World Tables
SDR	Special Drawing Rights
SSA	Social Structure of Accumulation
TFP	Total Factor Productivity
TRIMs	Agreement on Trade-Related Investment Measures
TRIPS	Trade-Related Aspects of International Property Rights
TRPF	Tendency of the Rate of Profit to Fall
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
US	United States
USA	United States of America
USAID	United States Agency for International Development
VAR	Vector Autoregressive
VECM	Vector Error Correction Methods
WB	World Bank
WDI	World Development Indicators
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

PART 1

INTRODUCTION

1.1 The Motivation and the Scope of the Thesis

The current determinants of economic systems and individual behaviors have diversified in the development process of the capitalism. Therefore, the scope of scientific analyses necessitates to dealing with many different parameters. In this sense, one of the most important points depends on the fact that the neglected economic topics of the previous periods become compulsory to explain and to analyze in the current economic framework. While some of the issues including the income distribution and the capital accumulation have been at the forefront in the past, we are now facing with the topics such as the economic growth, technical progress, and scientific developments which of them are become the basis for the economic subjects. However, this is not to mean that the income distribution and the capital accumulation have been the secondary importance in economic activities. On the contrary, dialectical evolutions of current social and economic structures are increasingly depended on multi-step equations and inter-connected processes where one topic affects the others in different ways. Therefore, the substantial analyses on complex economic phenomena are possible to understand by the investigation of all socio-economic processes altogether.

The main goal and scope of the thesis focuses on the examination of economic and social forms of several scientific facts and thus it does not base on the investigation of the economic processes within the frame of pure economic fundamentals. As in the following sections focus on the details of this framework, the analysis of the thesis will include the parameters which are related to different components of several economic and social processes. Therefore, investigation of the variables based on these processes in conjunction with macroeconomic phenomena will make an important reform in terms of the contribution to the different spheres of economics as a whole.

Especially, the economic studies and the empirical analyses in the post-1980 period have separated from the real social processes in order to reveal the dynamics of the capitalist system and more specifically of the individual relations. This epistemological break has led individuals to be regarded as homogenously in the context of human behaviors and attitudes. It has not discussed the effects of capitalist processes for the formation of consciousness and logic of modern humans. Therefore, it has diverged from the heterogeneous views in the analysis of socio-economic factors. The factors that affecting the human behaviors designed on rationality has begun to develop on the basis of the irrationality framework and capitalist logic to the extent that breaks from the heterogeneous structure.

The economic and social practices actually shows the refusal of the current theory. The scientific developments, especially in mathematics and physics, and the emergence of new software programs in computer engineering provide a sound basis for the current theoretical assumptions of the theory in order to defend their hypotheses and to prove their theoretical underpinnings. However, these theoretical facts proceed away from the results of socio-economic phenomena in practice. Especially, the arguments of new economic paradigms of post-1980 period and the practical results of those arguments are not coincide with the current

phenomena[1]. It is possible to compare and contrast the practical results of these arguments either with their theoretical assumptions or with their experiences in the real socio-economic mechanism, depending on different types of topics.

However, the accurate representation of these comparisons is only possible by taken together of a mutual relationship between the changes in the economic and political environment. The expansion of these changes to the social strata by way of laws, implemented by the institutional superstructure and policymakers, have led to affect the current structures in different contexts such as economic, social and political. For instance, International Monetary Fund (IMF), World Bank (WB) and World Trade Organization (WTO) are the leading institutions in the institutional superstructure and they have adopted to use the neoliberal policies after the collapse of Keynesian paradigm. According to these institutions, the major way to impose the neoliberal policies in different economies depends on implementing indebted methods related to their economic problems in which the application fields of the policy instruments can be categorized into three groups: (1) globalization; (2) financialization; and (3) neoliberalism.

Although these three categories have their own dynamics, they exhibit a structure that is intertwined with each other and thus they form the building blocks of the post-1980 period. For instance, the current reflections on practical structures and results of these three categories can be summarized in the following manner (Hossein-zadeh, 2014: 1): (1) Transfer of a huge amount of money from the public to the financial oligarchy; (2) Privatization of public assets and goods; (3) Transforming of corporate/banking welfare policies against people's welfare programs; (4) Reallocation of an extensive share of government's monetary largesse to speculative investment instead of real investment; (5) Systemic collapse of retirement security of millions of workers and civil servants; and (6) Increasing scale of control of economic and/or financial policies by the representatives of the financial oligarchy.

In addition to the practical consequences of the neoliberal paradigm, the reasons behind these consequences should be also investigated. In other words, the factors that provide the efficiency of the continuity of the neoliberal policies should be examined in detail as well as the reasons for the alienation from the Keynesian policies of the pre-1980 period. Despite the emergence of many serious economic and social problems in the post-1980 period, how does the neoliberal paradigm still maintain its sovereignty and dominance in the socio-economic framework? What are the reasons behind the interconnected interpretation of both globalization and neoliberalism over the same period? What are the factors behind the relationship between the increasing dominance of finance and the neoliberal policies? Why should be the financialization and the globalization go with together as part of the socio-political-economic structure?

These questions - and many others - have considerably investigated in different disciplines such as economics, politics, sociology, culture and philosophy. Furthermore, apart from the social sciences, they were examined in natural sciences, depending on the increasing scale of information technologies. Therefore, the historical process has created a different types answers related to those questions.

In this thesis, the reasons behind these questions and the others will be contextualized within the practical cases and the historical phenomena. Additionally, the method of the thesis will mostly use the dialectical conceptions as much as possible. In other words, the method of the thesis will focus on different historical factors and the processes in order to understand the

---

[1] Some of these results can be ranged as follows: (a) increasing prominence of deregulation and privatization policies; (b) increasing level of subprime mortgage lending; (c) securitization; and (d) greed.

dynamics of the neoliberal era and the capitalist system, which will also lead us to get different aspects of the historical accumulation.

In the light of this information, the abstraction method should be also considered in addition to the dialectical process of the scientific studies. This method is a substantial aspect of both technical and empirical studies. By using abstraction method, the complex structure of phenomena can be investigated without breaking away from the unity. The main aim is to depend on that unity and thus not to move away from the dialectical dimension of the unity.

The abstraction technique is the primary way in the formation of many important studies within the historical developments. For instance, "*Capital*" of Karl Marx ([1976] 1982, [1978] 1992, [1981] 1991), the "*Elements of Pure Economics: Or the Theory of Social Wealth*" of Walras ([1954] 2010), and "*The General Theory*" of Keynes (1964) mostly benefited from this abstraction method to understand the inner dynamics of economic and social systems in detail. They were sought to find the common points and determinants of these dynamics by investigating the root of phenomena. In all these studies, there is a tendency towards from abstract to the concrete. In that sense, it should be stated that the method of the thesis will mostly depend on the abstraction technique in order to understand the socio-economic process in the concrete basis.

The current economic mechanism, as it was mentioned above, has a complex structure in contrast to an incomparable case of the infant period of the capitalist system. Therefore, the dependence between individuals and social phenomena is increasing depending to the development process of the capitalist system. Thus, in this current structure, the analysis of inter-connected issues become more difficult due to an increase in technical innovations and progress, to the development of scientific studies, to the expansion of information and to the non-stop transmission of technical information among individuals.

The complexity and intensity of scientific studies lead us to approach the most important part of the unity in the neoliberal era. The analysis of the changes of the implications of the phenomena should be fundamental in order to understand the inner facts of the capitalist system. This is also urgent to focus on the analysis due to the dynamic characteristics of those phenomena. The aggregate economic and social structures may change from a priori to a posteriori in this dynamic process. Therefore, the major issue of the thesis depends on the fact that the scientists should focus on different parts of the unity rather than to focus on an analysis of whole structure by using the abstraction method. The accurate and sufficient examination of each part of the unity provides us with a lot of valuable information for the unity.

However, there is also another point to be focused on, which is related to the differences in perceptions, conceptions, and understandings between the scientists. They have different kinds of ideas for any subject. These differences are actually compulsory in the evolution of the new synthesis emerging from the conflict between thesis and the anti-thesis. From Heraclitus to Hegel and from Marx to Foucault, this dialectical structure will pursue until the mankind proceeds upon the development of its mind and knowledge. In this sense, the major aim of the thesis is to depend on this kind of method for the analysis. Therefore, the scientific reasons and results of the thesis will be examined on the basis of this kind of logic and thereby will provide new ways and understandings for scientific progress. However, this method also necessitates an investigation of related literature and the re-interpreted of factors used in the previous studies. In the following parts and their sub-parts, it will mostly be referred to general

characteristics of those studies and thereby the analytical results will be provided to the reader in detail.

1.2 The Aim of the Thesis

The thesis will focus on a specific category, i.e., the labor share of income, of economic and social phenomena at the primary level. This category includes the major determinants and thereby the results of the economic, social and political activities. Thus, it has a key role for an understanding of the dialectical process of these phenomena.

From the beginning of the contradictions emerged in the distribution of income, the allocation problem of resources has been an important role in the changing relations among the production system and the civil society. The rules of distribution based on power relations in primitive societies have led to the emergence of new processes pursued by new property relations.

In the time period, from slavery to the capitalist societies, the different components of the income distribution have been investigated both in the theoretical and practical levels at different scales. In the current capitalist mode of production, the distributional issues have become more significant than the other modes of production such as the feudalism and slavery. The reasons behind this condition should be sought in the socio-economic facts of the capitalist system, which of them can be cyclically transformed from one form to another due to changes in capitalist productive relations[2].

Depending on this fact, in the thesis, I will focus on the last era of capitalist system which is called as the neoliberal period. Hence, I will analyze the distributional problems in the context of the neoliberal framework, but apart from its current theoretical structure. In order to understand the dynamics of this period, I will begin by the investigation of the major factors of the neoliberal agenda. In the analytical part, I will narrow the investigation scale by focusing on the 1995-2015 period. One of the major reasons behind using of these two empirical strategies depends on the structural change of the capitalist production system such as the collapse of Keynesian revolution and the triumph of neoliberalism after the 1980 period. This structural change has been a significant impact on the distributional practices among individuals. The other reason is to include the various political components of neoliberal policies into the analysis by comparing the theoretical structures with the classical and the Keynesians frameworks. While the empirical tools of this thesis using in the analysis of distributional issues will be investigated in the following parts, the details of what types of structures I will use in the analytical process may be analyzed in brief by focusing on these reasons.

The relations of production in the capitalist system have different kinds of theoretical basis, especially in the case of distributional issues. Foremost among these theoretical assumptions, the Cobb-Douglas production function leads the way in the analysis of the distribution of production factors. It bases on a constant structure about the distributional issues between the capital and labor. In addition to the Cobb-Douglas production system, the neoclassical distribution theory has also other different frameworks, which of them use the analytical tools

---

[2] From different disciplines, many scientists have been focused on an understanding of the dynamics of the economic issues. For example, the logic of the capital accumulation (*Marx*); the reasons and causes of wealth of nations (*Smith*); the rules of redistribution in world production system (*Ricardo*); the human behaviors in business (*Marshall*); the price system and its effects on economic activities (*Davenport*); and the human behaviors in terms of the relationship between alternative use of means of production and the scarce resources (*Robbins*).

of the welfare-oriented Keynesian thought and the free market based classical arguments. However, the major assumptions in the neoclassical paradigm are basically constituted on a constancy view of income distribution and thus the social conflicts are not relevant in the long-run.

On the contrary, the main arguments of the thesis challenge the assumptions of the neoclassical framework, which claim that the class-relations have already been collapsed. Therefore, the major assumption of the thesis depends on the fact that the social classes are still an important factor in all process of the socio-economic system. In this context, the major focus of the analysis benefits from the different theoretical foundations such as the Marxian surplus-value theory, Kaldorian system of distribution and the Keynesian framework towards the determination of income. The thesis embraces the theoretical foundations of the counter-orthodox arguments and thereby creates a framework for the analysis of these arguments in the intellectual base. Although the scope of the analysis benefits from all those arguments, it involuntarily diverges from these schools of thought in some points, depending on various reason such as the scarcity of variables and the difficulty of getting proper data.

The main aim of the thesis is to investigate the changes in the labor share of income in the neoliberal era for sample countries by looking at the economic, social and political dimension but also to discover the reasons and the major factors of those changes. All in all, the thesis will base on the investigation of the joint effects of the financial openness and the financial development on the labor share of income taking into account of the mediating role of the country-specific conditions. For instance, I will focus on (a) the financial market development; (b) the level of technological progress; (c) the conditions in the labor market (specifically the "quality" of the labor and the factors affecting the bargaining power of the labor); (d) the political infrastructure; (e) the globalization indicators of the country; and (f) the standard macroeconomic variables.

The determination of the measurement of income inequality and different kinds of measurement methods of labor share of income stands as the most important criteria in the analytical process. Therefore, the method that the analytical question of the thesis uses is in connection with the reasons of the study. The differences in empirical tools and techniques for estimation process may create complex results within the frame of their reciprocal dealings. In this sense, the methods of the analysis will give more reliable results based on the availability of data.

The thesis constitutes on the argument that the process of financial openness and the trade liberalization have differential impacts on the labor share of income in different countries over the neoliberal era. Above-mentioned conditions act an important role in this changing pattern of labor share of income. For instance, any increase in the degree of financial openness may create negative results for countries having less developed financial sectors both for macro and micro contexts. Thus, it may lead to the emergence of distributional problems between labor and capital. In this context, it is possible to experience ups and downs in the labor share of income both in the short-run and long-run. These changes may also emerge in less developed countries or emerging economies having underdeveloped financial markets and trade regimes. Hence, the liberalization of financial sector and trade regime may not be the "correct" policy recommendation for each country. To understand the dynamics of the income inequality and the fluctuations in the labor share of income in a country, I argue that the economic, political, social and cultural factors, all should be considered. Additionally, the major variables should be interactively estimated with each other in the empirical analysis.

For this purpose, the main framework of the thesis will focus specifically on the following factors: (1) the macroeconomic conditions and structural variables; (2) the globalization index (i.e. including indices for economic, social and political globalization); (3) human capital; (4) the government activity; (5) technological progress; and (6) bargaining power measurements. In this sense, the empirical analysis of the thesis covers the 1995-2015 period for 44 countries from Organization for Economic Co-operation and Development (OECD) and non-Organization for Economic Co-operation and Development (non-OECD) regions, which will be measured by the Driscoll-Kraay method in the linear form. The following sub-section presents the outline of the thesis.

1.3 The Outline of the Thesis

The content of the dissertation is composed of six parts in total. These parts cover the core components of a multidisciplinary study of the dissertation topic. In this framework, not only the economic aspects of the issues will be addressed, but the historical and social propositions and assertions will also be addressed in the research process. In other words, the economic dimension of the thesis significantly uses of the arguments and theoretical orientations of different disciplines. However, it is necessary to add a footnote at this point. The multi-faceted perspectives and structures that are included in the scope of economic analysis will be studied periodically, depending on the theoretical background of other disciplines. For this reason, the importance of comparative analyses at the periodic level will be devoted to the second plan. However, this case does not mean that historical, social, and political elements will be examined separately on the basis of periodical paradigms. On the contrary, while the comparative analyzes (at the periodic level) are examined in the second plan, the whole of the dissertation will try to provide the basic elements that will enable a reader to understand the dynamics of the capitalist system within the frame of a comprehensive analysis of the socio-political-economic developments at different periods. In other words, this kind of method will construct the parts as a whole and thereby will provide us to understand the current quality and major elements of the capitalist system. In this sense, the most important factor is to provide a simple explanation to the reader about the economic and political components of the evolution of capitalism into different accumulation processes, depending on the historical developments in capital accumulation. Additionally, the other factor is to briefly summarize the basic features of the characteristic and the major ingredients of the economic paradigm to which specific capital accumulation processes depend on.

In the opening part, i.e., the Part 1, I introduce the motivation, scope and the aim of the dissertation. Part 2 focuses on four different periods of the capitalist system. These periods investigate the socio-economic and historical process of the development process of the capitalism. A multi-factorial analysis of the capitalist mode of production is being exerted in order to understand the economic changes that take place in the background of differentiating social processes and accumulation systems. This part will allow us to figure out this integration by focusing on different periods of the capitalist system in terms of the characteristics of the accumulation of the capital. In this sense, I will try to summarize the historical processes that economic components are the active factors in a simple and abstract framework. In particular, the analysis will depend on several factors and parameters which are influential on the capital accumulation and thus the income distribution between the capital and labor. Additionally, the role of the problems in capital accumulation peculiar to intra-system changes will be emphasized. Finally, another characteristic of this part is that the general characteristics of schools of thought that each socio-economic structure of the periods to be studied are connected will be introduced.

Part 3 focuses on the examination of the main structures of the financial sector and the trade regime in the neoliberal era. Primarily, I categorize the major policies towards the neoliberal agenda. In that sense, I summarize some pros and cons of that period within the frame of those policies. Then I introduce the major components of the liberalization process of financial sector and trade regime. However, in the direction of the main framework of this section, the change in the financial sector based on the liberalization policies initiated by the neoliberal paradigm will be prevailed. In this framework, I classify the financial markets into three parts as money and capital markets, primary and secondary markets, and formal and informal markets. These different kind of arrangements of the financial markets will lead us to understand the role of capital in these markets, and particularly, the limits of the ranges of the financial markets in the neoliberal framework. In addition to these categorization of the financial markets, I also introduce the features of financial sector by pointing on six different functions: (1) the mobilization of funds; (2) risk management through diversification; (3) the reduction of information costs; (4) the reduction of monitorizing costs of firm managers; (5) easing the exchange of goods and services; and (6) the reduction of financial intermediation costs. Besides these practical categorization of the financial sector by investigating the major functions in the economic activities, I also promote the theoretical underpinnings of these several functions and policies led by the neoclassical paradigm. In that sense, there will be focused on two major theoretical studies of the neoclassical thought. On the one hand, McKinnon-Shaw hypothesis, which is favored as the fundamental theory of the financial liberalization, will be investigated in detail. On the other hand, one of the most critical parameter of finance, which is the level of financial development, will be examined together with the economic growth indicator. Finally, one of the key approaches emerging as opposed to financial liberalization will be tried to be assessed in a critical context: *financialization*. The major aim in this context is to keep on the dialectical process by focusing on both the orthodox perspectives and the critical approaches of the liberalization process of the financial sector and thus to get a comprehensive understanding about this topic.

Part 4 investigates the empirical findings on financial liberalization, depending on several parameters. In this manner, these empirical findings will be mostly focused on the orthodox perspectives about the liberalization process of finance, except the last sub-section which is related with the literature on the labor share of income. Therefore, the critical approaches for financial liberalization will not be addressed within this part. The empirical findings will be examined in six different categories. First, I will search on the earlier models beginning from the studies of Schumpeter. One of the most important reason why I use these models is to understand the development path of the financial sector on behalf of the orthodox perspectives. However, these earlier studies do not contain any empirical outcomes, but they theorize the movements in financial markets by looking at the practical phenomena among individuals. In addition to the earlier models, the other empirical categories will be included the following investigations: (1) the empirical findings on finance and endogenous growth; (2) the empirical findings on banking sector development and economic growth; (3) the empirical findings on stock market development and economic growth; (4) the empirical findings on financial liberalization, savings, and investments; (5) the empirical findings on financial liberalization, poverty and income inequality; and (6) the empirical findings on financial liberalization and the labor share of income.

In Part 5, I examine the determinants of the labor share of income as a special case of functional income distribution. This part, primarily, investigates the difference between personal income distribution and functional income distribution. The theoretical structures in which the personal income distribution and functional income distribution depend on will be addressed in

comparison with each other. One of the major subject is to understand the inter-related relationship between the labor's share and these two different theoretical frameworks of income distribution. Therefore, the essential aim will be to investigate the basic approaches toward income distribution without directly focusing on the labor share of income. Additionally, the characteristics of four basic economic schools of thought will be elaborated, depending on the theoretical and epistemological backgrounds of labor share of income. In each framework, the major aim will be to focus on leading studies related to the arguments of that school of thought on income distribution, and more specifically, on the labor share of income. The purpose is to provide an accurate perspective to the reader about these two issues.

I also directly focus on the investigation of the labor's share in detail in this part. The fundamental issue is to show the reasons for why and how the labor's share is one of the most important indicators of the analysis of income distribution. In that sense, I will make comparative analysis between the labor share of income and other income distribution measurements. Furthermore, I will examine and criticize two types of orthodox measurement methods of income distribution in technical level, in parallel to the measurement methods of labor's share, which are Cobb-Douglas production function and the CES function. At the end of this part, I will diverge from the orthodox perspectives on labor's share and thereby will focus on the investigation of different measurement methods, which will be used in the empirical analysis. In this framework, I will focus on six different types of measurement methods on labor share of income. Each method will be examined related to their characteristics in the literature.

Furthermore, I will probe on some basic issues related to the labor share of income. Indeed, these issues will be dealt with in order to exhibit an integrated structure with the other four main categories examined in the previous part. Subsequently, the two fundamental economic models that constitute the theoretical integrity of our empirical investigation will be examined in detail. The first model will be summarized in the simple theoretical framework that Jayadev (2007) derived from the study of Mezzetti and Dinopoulos (1991). However, this first model is an important building block in the creation of the second model, which is based on my own theoretical structure including the financial development parameter. In other words, the second model, which will be derived from the first model, will be the wage-bargaining model with financial development parameter. In this case, the fundamental issue is to understand and thereby to analyze the interaction effects of both financial development and capital account openness on the labor share of income. This theoretical background, depending on the second model, has important implications in terms of providing important theoretical outcomes about the effects of different parameters related to the financial development and capital account openness on the labor share of income. In that sense, the reader will understand that the theoretical propositions of the economic model and the empirical outcomes are in harmony with each other.

Furthermore, I investigate the macro-scale factors affecting the labor share of income. In this context, I will focus on the specific factors which are effective on the changes of the labor share of income in the neoliberal era. These factors will be evaluated in four different categories as follows: (1) the globalization; (2) the skill-biased technological progress; (3) labor market policies and product market policies; and (4) privatization policies and structural changes. Each factor includes its different types of characteristics and parameters. Therefore, they will be elaborated only at the epistemological level. The main aim in this categorization is to understand the ways in which these factors may influence on the labor share of income in the neoliberal era.

8

Finally, Part 6 includes the data structure and thus focuses on the empirical analysis. Following the investigations of theoretical models and the factors affecting on the labor share of income, I will present the details of the econometric method which will be used in empirical analysis. Additionally, I will descriptively present some stylized facts over 1980-2015 period related to the labor share of income and other variables affecting the labor share within the context of the historical development process. Thus, I will show the empirical results of my hypothesis by examining the technical features of independent and control variables.

PART 2

HISTORICAL PROCESS OF THE ECONOMIC EVOLUTION

2.1 1873 – 1914 Period

The historical process of the capitalist system has many ups and downs, depending on both economic, social, and political factors. Although the increasing dominance of the capitalism as a new mode of production have started in the beginning of the 18th century, the major changes were emerged in the late 19th century, depending on the social revolutions, and in the beginning of 20th century, depending on the increasing dominance of financial relations. Especially, the growing financial markets and the evolution of finance-capital (Lenin [1916] 1996; Bukharin (1917); Luxembourg (1972); Marx [1976] 1982; Hilferding [1981] 2006) was indicating a new type of systemic formation in the socio-economic process. If the 1873-1914 period is classified as the first phase of the development process, the analysis may get more accurate results. These two basic development phases are defined by different terms in the historical process (e.g., Hobsbawm (1989: 56): "The Age of Empire"; Fülberth (2011: 174): "Organized Capitalism and Imperialism"; Beaud (2015: 187): "From Great Crisis to Great War"). All of these cognitive specifications focus on to emphasize the development of capitalism.

The fundamental progress of capitalist system can be classified, depending on the following historical processes, respectively: (a) the commodity and manufacture production; (b) the industrial production; (c) the imperialistic production; and (d) the digital-based production. The capitalist system exhibited a relatively incremental development in itself from 16th to the 19th century (see Table 2.1.A, Table 2.1.B, Table 2.1.C), and experienced a significant changes in the production methods, in the consumption patterns, and in the conditions of human behaviors, after the industrial revolution. According to Beaud (2015: 185), the acceleration was obvious whether in the income per capita across the world or in the income per capita of rich countries[3].

Table 2.1.A: Level and Rate of Growth of Population: World and Major Regions, 0-2015 A.D.[4]

	0	1000	1820	1998	2015	0-1000	1000-1820	1820-1998	1998-2015
	(million)					(annual average compound growth rate)			
Western Europe	24.7	25.4	132.9	388	444	0.00	0.20	0.60	1.72
Western Offshoots	1.2	2.0	11.2	323	386	0.05	0.21	1.91	1.86
Japan	3.0	7.5	31.0	126	126	0.09	0.17	0.79	0.52
Total Group A	28.9	34.9	175.1	838	957	0.02	0.20	0.88	1.92
Latin America	5.6	11.4	21.2	508	591	0.07	0.08	1.80	1.98
Eastern Europe & former USSR	8.7	13.6	91.2	412	292	0.05	0.23	0.85	-3.63
Asia (excluding Japan)	171.2	175.4	679.4	3.390	3.918	0.00	0.17	0.91	2.31
Africa	16.5	33.0	74.2	760	1.180	0.07	0.10	1.32	2.21
Total Group B	202.0	233.4	866.0	5.069	5.983	0.01	0.16	1.00	2.42
World	230.8	268.3	1.041	5.908	6.941	0.02	0.17	0.98	2.43

Source: Maddison, 2001: 28

---

[3] Please note that the Turkish-based references are translated by the author to the English; and therefore, any shortcomings or mistakes in these translations are the responsibility of the author.

[4] The period from 1998 to 2015 is measured by the author in Table 2.1.A, Table 2.1.B, and Table 2.1.C. The data for 1998-2015 period is obtained from ILO KILM database in Table 2.1.A, from World Bank, World Development Indicators database in Table 2.1.B and Table 2.1.C. Also, Appendix A11 lists countries used in 1998-2015 period.

Furthermore, the population growth rate was increasing across the world in line with the rise in the income per capita and gross domestic product (GDP). The growing opportunities in social structure were also providing new conditions for higher rates of growth in population. In addition to population growth, the mobility of people across boundaries, the progress in war industry, the trigger effect of energy power in production, and the scale of information flows were significantly increasing in that era.

Table 2.1.B: Level and Rate of Growth of GDP per Capita: World and Major Regions, 0-2015 A.D.[5]

	0	1000	1820	1998	2015	0-1000	1000-1820	1820-1998	1998-2015
	(1990 international dollars)					*(annual average compound growth rate)*			
Western Europe	450	400	1.232	17.921	36.844	-0.01	0.14	1.51	0.70
Western Offshoots	400	400	1.201	26.146	48.309	0.00	0.13	1.75	0.72
Japan	400	425	669	20.413	47.150	0.01	0.06	1.93	0.67
Total Group A	443	405	1.130	21.470	44.101	-0.01	0.13	1.67	0.70
Latin America	400	400	665	5.795	7.338	0.00	0.06	1.22	0.57
Eastern Europe & former USSR	400	400	667	4.354	10.832	0.00	0.06	1.06	0.65
Asia (excluding Japan)	450	450	575	2.936	10.833	0.00	0.03	0.92	0.63
Africa	425	416	418	1.368	2.736	-0.00	0.00	0.67	0.50
Total Group B	444	440	573	3.102	7.934	-0.00	0.03	0.95	0.60
World	444	435	667	5.709	26.018	-0.00	0.05	1.21	0.66

Source: Maddison, 2001: 28

Table 2.1.C: Level and Rate of Growth of GDP: World and Major Regions, 0-2015 A.D.

	0	1000	1820	1998	2015	0-1000	1000-1820	1820-1998	1998-2015
	(billion *1990 international dollars*)					*(annual average compound growth rate)*			
Western Europe	11.1	10.2	163.7	6.961	17.786	-0.01	0.34	2.13	4.50
Western Offshoots	0.5	0.8	13.5	8.456	19.863	0.05	0.35	3.68	4.65
Japan	1.2	3.2	20.7	2.582	5.986	0.10	0.23	2.75	4.00
Total Group A	12.8	14.1	198.0	17.998	43.636	0.01	0.32	2.57	4.84
Latin America	2.2	4.6	14.1	2.942	5.609	0.07	0.14	3.05	4.30
Eastern Europe & former USSR	3.5	5.4	60.9	1.793	3.086	0.05	0.29	1.92	4.19
Asia (excluding Japan)	77.0	78.9	390.5	9.953	15.804	0.0	0.20	1.84	4.85
Africa	7.0	13.7	31.0	1.939	2.248	0.07	0.10	1.99	4.14
Total Group B	89.7	102.7	496.5	15.727	26.749	0.01	0.19	1.96	4.97
World	102.5	116.8	694.4	33.726	70.385	0.01	0.22	2.21	5.16

Source: Maddison, 2001: 28

The difference of this period from the other periods of the capitalist system depends on the fact that this period was providing a wide range of opportunities for people having different purchasing powers even as enfolding the power of rich people (Beaud, 2015: 185-186). The new types of job opportunities and production systems were emerging, while the scale of

---

[5] Please note that the data units in Table 2.1.A, Table 2.1.B and Table 2.1.C is different from the data units used by Maddison (2001). Therefore, the 1998-2015 period should be evaluated in different units for all lists of countries in Table 2.1.A, Table 2.1.B and Table 2.1.C.

production and employment structure was developing in almost all economic activities. Therefore, the income shares accruing from the total income were changing between social classes, depending on the level of progress in the capitalist system. The social dynamics were transforming the changing components of the social strata both in macro and micro scales.

These changing social structures were also leading to the dialectical interactions of the capitalist ingredients. Especially, the changing methods of capitalist accumulation and their corresponding results from the industrial revolution to the end of 19th century were the most significant indicators of those interactions. For instance, according to Marx ([1976] 1982), the major motive behind the industrial revolution was the higher rates of capital accumulation. In that sense, Marx ([1976] 1982) totally understood that the engulfing of the non-capitalist factors such as labor force, raw materials, and the means of production into a mechanism of capitalist production (Fülberth, 2011: 177).

At the end of 19th century, the process of capital accumulation was fulfilled its inner process with the centralization and concentration of capital (Marx, [1976] 1982). The amount of existing capital stock was merging with the centralization process and the financial instruments were using in big capitalist joint companies for investments as commodities in parallel to the concentration process of capital. This new type of organization form of capital was carried out by cartels and trusts through the monopolization process of firms. As Fülberth (2011: 178) mentions that the capital was introducing two kinds of methods in this new type of organization form: (1) self-organizing method of capital and (2) government-based organization method. In this sense, Hilferding ([1981] 2006: 21) conceptualizes this new kind of capital form into two parts, which was depended on the concentration process of the capital. On the one hand, the process of concentration eliminates free market system and thereby the competition among different firms through the formation of cartels and trusts. On the other hand, the concentration process creates an ever more intensive relationship between banks and industrial capital. All these concentration practices are the leading factors behind the evolution of finance capital which is the "…supreme and most abstract expression" of the capital (Hilferding [1981] 2006: 21).

Moreover, Hilferding (1912: 283, quoted in Lenin, [1916] 1996: 45) makes an analysis for the growing effect of finance-capital by expressing that the increasing share of industrial capital does not belong to the industrialists any more. The only way to obtain the use of the industrial capital is mostly provided through the medium of the banks. In other words, the financial sector is increasingly involved in industry and thus is being transformed into an industrial capitalist. Therefore, the finance capital can be expressed as a capital which is controlled by banks, but employed by industrialists (Hilferding, 1912: 283, quoted in Lenin, [1916] 1996: 45).

According to Hilferding ([1981] 2006: 326), the policy of finance capital has three objectives. First, its major objective is to spread over the largest economic territory. Second, it restricts this territory from foreign competition by a strict protective tariffs. Third, it uses this restricted area for exploitation in favor of the national monopolistic combinations.

This third objective of the finance capital, which is the monopolization of the capitalist production system, through the processes of centralization and concentration of the capital, was also indicated the other changing framework of the capitalist system, especially the structure of the corporates. In theory, the abolishing of the competitive market system causes to the change in the capitalist system which transforms the productions system in line with the interests of cartels and trusts.

The summary of all those arguments can be classified in different ways at the cognitive level as follows[6]: (1) the centralization and the concentration of capital; (2) the growing scale of cartels and trusts and thus the large-holding system; (3) the increasing role of finance-capital in parallel to the merging between the industry and banks; (4) increasing flow of capital exports; (5) the increasing dominance of state in making public infrastructure investment; and (6) colonization and militarism.

In addition to the conceptualization of above-mentioned factors of organizational capitalism and of imperialism, the characteristics of that era are described as "New Imperialism" by John Hobson (1902). This new kind of imperialism is different from the older due to the two reasons (Hobson, 1902: 324). First, the theory and the practice of competing empires, which of them include similar passions of political growing and commercial gain, is substituted instead of a single growing empire. Second, there is an increasing scale of financial dominance over mercantile interests.

These processes were created the modern kings of finance, expressed by Kautsky (1899: 43; quoted in Salvadori, 1990: 64), which were dominated nations directly through cartels and trusts and therefore were subjected all production system to their power. According to Kautsky (1902), the growing militarism and a strong active governmental policy is desirable for financier. The modern kings of finance can directly or indirectly control and rule such a growing governmental power either as bondholders, or else via personal and social influences. For instance, in militarism, the financier have a direct interest as creditors and government contractors about war and public debts (Kautsky, 1902).

However, Otto Bauer (1913) conceptualizes the emergence and growing impact of finance capital by investigating the relationship between capital accumulation and the imperialism, but different from the cognitive structure of Hobson (1902). According to Bauer (1913: 873-874; quoted in Luxembourg, 1972: 139), the accumulation of capital is possible in an isolated capitalist system. However, it is not unlimited. It is emerged within limits. Thus, imperialism provides to the expansion of these limits. The roots of imperialism is placed in an expansion of these limits in front of the capital.

Finally, Bukharin describes the concepts of finance-capital and imperialism by referring to the suppression and colonization power of state. If the economic system is dominated by the finance capital, highly developed economic organisms are the major components in making of the economic relations. These developed economic organisms, therefore, imply the existence of a developed world economy including a certain state of production relations, organizational forms of economic structure, a certain interrelations of classes and a certain future economic relations (Bukharin, 1917: 114-115). These different factors from economic system are also combined by the social and political components, which are favored by the interests of finance capital.

While the era between the 1873 and 1914 was considered as the period of the development and prosperity of capitalism, the series of crises were also coming out due to an increasing scale of contradictions in the financial markets and the production system. In the literature, this period is also known as the period in which the capitalist system dwelled its first severe crisis in its history. For instance, increasing dependency relations between the finance capital and the

---

[6] Even though Lenin ([1916] 1996) made a comprehensive and sound investigation on finance and its characteristics, his arguments about the future development of stock markets in U.S. and UK would not be valid in the capitalist progress in the financial sector, especially for the post-1980 period.

industrial capital, increasing degree of class conflicts, increasing dominance of finance-capital, increasing level of financial transactions (e.g., coupon-capitalism), increasing level of transactions in fictitious capital, and increasing effect of militarism and war politics were the major reasons behind this very first severe crisis of capitalism. However, as Beaud (2015: 187) states that this crisis period opened the way for the imperialism era which could be called as the second period of capitalism. Beaud (2015: 190) also asserts that the most distinctive feature of this first severe crises of the capitalist system was depended on the emerging shocks in stock markets and bankruptcies.

According to Kindleberger and Aliber (2005: 94), the crash in the capitalist system can be described as a decline of the asset prices, or more specifically the collapse of an important firm or bank. The crash brings further panics in the economic system, especially in financial sector, which may occur in asset markets. A panic leads people to get much reliable securities such as government securities which are less liquid. The desire for getting more secure government securities depend on the belief that the government has unlimited power to print more money. Therefore, the possibility of bankruptcy of governments are very low. However, a financial crisis may occur in both sectors different from what people thing (Kindleberger and Aliber, 2005: 94). Before the panics and crash, the mania and the bubble emerge as a significant factor behind the problems in economic relations. Therefore, the word 'mania' indicates irrationality and 'bubble' ushers in that some values will eventually burst (Kindleberger and Aliber, 2005: 25).

However, Beaud (2015: 190-191) remarks that the logic behind this crisis depends on the following conditions: (1) the raising costs (e.g., the increase in wages or the prices of trackages in United States) and (2) the shrinking of markets (e.g., the erosion of the purchasing power in the agriculture; the decrease in the consumption of workers; the reduction in government expenditures; or the difficulties in the transactions in the foreign markets). In addition to these two cases and the other reasons behind the crisis can be extended with different factors such as the decline of marketing prices, the problems in the realization of profits, exacerbation of competition across different markets (Beaud, 2015: 191). All these reasons may also lead to an increase in the slowdown of the production process, increase in the unemployment rates, and the erosion of real wages in parallel to an increasing scale of crisis impacts on economic conditions of workers.

As a whole, Beaud (2015: 193) focuses on four basic contradictions of the capitalist system in order to understand the dynamics behind the factors of the first severe crisis emerged in the capitalism: (1) the contradiction between capital and labor; (2) the contradiction among capitalist class; (3) the contradiction among national capitalisms; and (4) the contradiction between dominant capitalist systems and the capitalist systems of nations under dependency.

Beaud (2015: 193) indicates that the contradiction (1) and the contradiction (3) are major determinants of the sample period. The contradiction (2) may also affect the capitalist system through to the emergence of new production methods and of the new capitalist-production factors. On the other hand, the contradiction (4) may be used as a tool to circumvent from the emergence of crisis.

The striking feature of this period depended on the multi-dimensional structure of those contradictions. However, the production style was changing and was also developing as well as the emergence of the contradictions and the crises. Therefore, that period was positively affecting the conditions of the working class and thus their impacts in the production system,

and also the class-based developments as a unity. Unlike the characteristics of the unorganized government structure and the working conditions emerged just after the industrial revolution, this period created an organized composition of working class, depending on the development scale of their entity. There were three important factors behind this development path: (1) the spread of wage-laborers at each point of the production system; (2) the development in city culture in parallel to the abolishment of the feudal system; and (3) the increasing scale of techno-scientific innovations over the capitalist structure and the production system. In this context, the capitalist system became the more complex structure for working class. This working class was not dependent, slaved or overwhelmed by the capitalist system anymore, rather was transforming through organized power in which the bourgeoisie should take in consideration in each phase of the socio-economic process (Beaud, 2015: 200).

This organized structure of the working class was also changing the conditions of the future policies in a cognitive base and a technical level. For instance, Fülberth (2011: 180) properly asks that the working class should gain a seat in capitalism for their own entity or should go beyond that. Within the frame of that question, the working class conditions were folding into a more structural and theoretical case (Fülberth, 2011: 180). This question was also stimulating the emergence of the most common debate on the left wing, which depended on the questions toward reform or revolution[7].

At the top the organization of working class, there was a power of trade unions and their persistent syndicate movements. These trade unions were increasingly proceeding to manifest their powers both in economic and social contexts. As Fülberth (2011: 180) states that labor unions that became a monopoly of the labor organizing adopted a function in the capitalist organization. However, it should be noted that the organized structure of the working class was not unique in total economy. In this sense, the employers were also collaborating in order to protect themselves from the attacks of the organized working class.

Fülberth (2011: 181-182) discusses the bilateral organization of the labor-power by dealing with two factors: (1) through the entrepreneurs and (2) through the trade unions and labor parties. On the one hand, the major motive of the entrepreneurs was to become a dominant power in all production process in order to maximize their profit rates. On the other hand, the major motive of trade unions and the working class was to earn higher wages and to decrease working hours by way of the economic and political tools.

Contrary to these two opposite classes, there was also another group of people who were trying to find a compromise. These group of people could be called as social liberals. The social liberals were basically attempting to smooth the revolutionary conditions. They were trying to change these conditions by focusing on political and social factors. In other words, the social liberals, who were supporting the reforms in the capitalist system, were trying to integrate the working class into the capitalist dynamics. In that sense, new opportunities and concessions for the success of these reforms had to be given to the working class such as right to vote and stand for election, recognizing the delegates of working class in the organization of industry, and providing of welfare increases (Fülberth, 2011: 180). By making these reforms, capitalism was accommodating, transforming, bringing new developments and changing the conflict areas (Beaud, 2015: 208).

---

[7] Please see Lenin ([1918] 2016) and Kautsky ([1918] 2013) for their theoretical conflict between each other.

The average scale of corporations and industries were growing in the developed economies. Their production scale was expanding in different industrial sectors. The national monopolies were being emerged through the cartels and trusts. The level of trade export and capital export were expanding all over the world in parallel to the development of finance-capital. Therefore, the capitalist elements were transforming by the increasing role of finance-capital in socio-economic relations. The new colonies and multinational capital groups were emerging and thereby the share of world lands was severely distributing in progress.

In the context of all these conditions, the conditions of the working class were changing and thereby were evolving to a much different sovereignty forms. The new types of relations were emerging between different forms of classes. According to Beaud (2015: 205), mass oppression and the voter's power, street protests, bleeding blood, trade unions, worker aids, cooperatives, backing funds, political parties and mass actions were forms of the struggles vis-à-vis the special conditions of each country and thus were prescribing the power balance. Additionally, the developments in the medical field were decelerating the premature death; the child labor was prohibiting; the opportunities for more education were increasing and the ways that lead to qualified labor-power were diversifying in this era (Fülberth, 2011: 181).

In addition to these developments in the production side, the government institutions were beginning to play an active and crucial role in each point of the socio-economic processes. For instance, the educational attainment and the security of qualified labors were being to suppose as a part of public investments of government. Also, the government was regulating the by-laws in order to decrease the maximum limit in working hours. However, even if the working hours of the working class were regulated to decrease by the government, the interests of the capital were pursued in this process.

In this era, Adolph Wagner ([1892] 2014, [1898] 2015) was leading to theorize the functions of state and to analyze the government expenditures as a result of an increased size of economic activities and the amount of income per capita. According to Wagner's theory, which is also called as "Wagner's Law", the increasing share of public expenditures and the size of government in total economic activities is inevitable if the income per capita increases in developed countries (DCs) in parallel to the socio-economic-political developments. Therefore, the Wagner's Law have been pioneer for other theories based on the government expenditures (e.g., Dalton [1922] 2003; Pigou, [1928] 2014; Bowen, 1943; Solow, 1956; Peacock and Wiseman, 1961; Keynes, 1964). Additionally, in recent historical process, the empirical studies have made to prove the hypotheses of Wagner both theoretically and practically (e.g., Meltzer and Richard, 1981; Landau, 1983; Ram, 1987; Barro, 1990; Persson and Tabellini, 1992; Henrekson, 1993; Bohl, 1996; Payne and Ewing, 1996).

All these changes and transformations in the production system; the formation and the development of working class in the power relations of the capitalist system; and the increasing role of state and the size of government expenditures in total economy directed Karl Polanyi (2001) to call this period as the start of "Great Transformation". According to Polanyi (2001) the money, land and labor-power become a social factor rather than to be a commodity in this capitalist formation. Related to that framework, Fülberth (2011: 186) describes this period as the period with increasing measures of protection and the increasing integration of labor-power in the social context (even if it is regarded as the commodity).

All in all, the functions of the state in this era can be classified as follows (Fülberth, 2011: 185): (1) the securing of markets by the accurate laws; (2) the securing of domestic markets by the

protective policies and customs; (3) making strong reforms through national defense and hegemony; (4) the securing of the social reproduction within the frame of social rights and social security system; (5) the supporting of the development of the technological researches for financial and institutional structures; (6) undertaking of non-performing infrastructural ingredients; and (7) functioning as a buyer of commodities (e.g., arming).

2.2 1914 – 1945 Period

The period from 1914 to 1945 can be specified as the most intensive period of capitalism both in social dimension and in economic dimension. This period was comprising of two world wars and the second great depression. While the capitalist system was experiencing these kinds of issues, the new mode of production was emerging in the east part of the world, i.e., in the Soviet Union, and was excluding the class-based socio-economic production system.

This period, which is called as "the Age of Extremes" by Hobsbawm (1994) and as "the Big Chaos" by Beaud (2015: 230), historically involves the following events (Fülberth, 2011: 203-204): (1) two world wars; (2) the European economic and political issues (1918-1923) after World War I; (3) the stable period (1924-1928) in West and Middle Europe; (4) the economic boom and prosperity period in United States (until 1929); (5) the Great Depression; (6) the clashes of armies before the World War II; (7) the fascist dictatorships in Italy (1922) and Germany (1933); (8) the second industrial revolution led by engine technology running with electric and fuel; (9) the powerful technological developments; (10) the increasing relations among capital and the state; and (11) the emergence of the new socialist state (namely the Soviet Union).

In addition to the commercial profit, this period was also included the new type of much developed method to get profit, namely through the industrial profit, in the context of the functions of the industrial revolution. However, the period was also based on an increasing scale of finance-capital in the economic mechanism. Therefore, this new method in making profit was emerging in parallel to the increasing scale of finance-capital[8].

For instance, the medical developments; the emergence of steel construction, especially in the United States; the prominence of petroleum in the industry; the proliferation of electric and fuel based engine system; the prominence of communication and entertainment technology in media sector; even more developments of railroads in an interregional railroads; and the important advances in science…All of these factors were forming the basic characteristics of that period. In that sense, Fülberth (2011: 206) summarizes the characteristics of this period as follows: *the tendency towards a creation of new capitalist job opportunities was gained momentum along with the industrial revolution: the newly created production and reproduction sectors were started to establish a further market presence in the capitalist economy.*

Initially, all these novelties in the determinations of human relations were containing the specific part of that relations, which were incrementally spreading out all over the social strata and were capitalizing all over the world. The initial phase of this period started with the World War I which was not experienced in the world before. The major effects of the war were felt almost in every country and thereby were incurred severe losses in their socio-economic environment. In the course of World War I and after that, the severe monetary crises and high

---

[8] For further discussions please see the theoretical background of "expropriation" term of Marx ([1976] 1982) within the frame of "historical tendency of capital accumulation", and more specifically, of Lapavitsas (2009a) for the financial sector.

rates of inflations emerged in the world economies in order to finance the expenditures of war. The gold system and the other types of money forms, depending on the gold system, were lost their significances in the context of an increasing scale of expenditures. Therefore, the stability of the value of money was collapsed in the case of an opportunity to print more money. The countries were initiated to devaluate their national currencies in order to proceed their mutual international economic relations. The foreign exchange controls became prevalent among economies and the world economy was divided into different areas.

Along with the Versailles treaty, the new type of economic organization was established over the world, which was called as League of Nations. This new organization developed as the organization of victorious countries of the WWI. The countries from the League of Nations took the highest share of the income after the war and also restricted the life standards and the economic activities of defeated countries.

They found a new kind of method of mandate in order to govern the piece of lands of defeated nations and the empires. The method of the mandate was giving them to control all the socio-economic conditions of any country. Therefore, they shared the lands of countries between each other in order to manage the controls of the government of all defeated countries and to benefit from their social and economic outputs. In addition to the League of Nations, there were also founded a new kind of sub-organizations (e.g., International Labor Organization (ILO)) in order to be stay stable in the economic system and thereby were attempted to make collaborations between those organizations.

From 1922 to 1925, the period was witnessed to the reparation of the losses of advanced countries. After this reparation and thereby the high growth rates, the countries were caught to the second most severe depression of the capitalist system. The basic determinants behind the great depression basically depended on three factors which are the high growth rates of many countries within the frame of restoration in the economic system, the economic prominence of Australia and Canada, and the excessive rates of growth of United States along with an increasing scale of financial transactions.

In the context of the existing economic changes, the total production was exceeding the total effective demand in domestic and international countries and thereby the overproduction crisis became a leading result of this period. In these circumstances, the demand for produced goods was felt down both in domestic and international spheres. The depression was expanded to countries and societies subject to the division of labor and therefore profoundly affected all these countries.

The international trade was almost ceased and the financial relations were being negatively affected. Therefore, the economies, especially the developed ones, were sharply affected from the economic crisis. The slowing down of their production level following the decreasing prices of goods in free market economies; the going bankruptcies of many industrial firms and financial corporations; and the mass unemployment all over the world were some of the major outcomes of the great depression. Hence, the arguments towards the intervention of government in the economic relations were gained strength and were become dominant in the capitalist system.

In this sense, the government intervention in the economy to protect the free market system was being increased in the capitalist economies. The scale of this intervention was also exceeding the limits of monetary and public policies. In that sense, the application of "New Deal" policies

and the theoretical assumptions of Keynes were being formed the basic foundations of the government intervention and its policies. Moreover, the "Fascist" and the "National Socialist" movements were organized as a form of government and thereby were claimed that they had different kinds of economic visions, especially in the government sector of the economic system.

Finally, the role of government was also initiated to evaluate in the socialist perspectives. The socialist revolution was provided a framework for the application of the government policies in the social and economic era. For instance, the range of different applications can be categorized as in the following factors (Zarakolu, 1981: 93-99):

1. The land-intensive goods and capital goods, which were used as inputs in the productions, would be under the control of public property. In the making of small unit productions where the labor was the dominant factor rather than the capital, could be delegated to individuals and cooperatives.

2. The conditions of private property were not allowed for land and capital in the socialist system and therefore the demise of non-existent property rights on land and capital were not possible via inheritance and bequest. However, the goods and assets subjected to the private property could be inherited a certain extent.

3. The economic system was entitled to have their own small enterprises for individuals and cooperatives, without appropriating the labor of someone else.

4. Having the property rights of land and capital under the public property and taking of organization of production and governance under public corporations were prevented the emergence of conflicts among people due to a higher scale of debt.

5. The commercial partnership between individuals was not possible.

6. The self-interest of individuals and profit motive under the capitalist market system were transformed to the common-interest and altruism under the socialist system.

7. In the socialist system, it was asked for the work from individuals in favor of the society. However, the wage rates were varied between different sections of works, depending on the capacity and the quality of the work. There was a difference between the supply of social services.

8. The right arrangement of the amount of using of land and capital was moved to the control of public authorities. The private corporations, which of them subjected to competition, were given way to the government enterprises. The changing conditions of the economic system were obliged to the economic organization, depending on the central planning. All kinds of economic organizations were controlled by the central authority.

Although the world economic system was divided into two blocs of countries as capitalists and socialists, the reasons and the dynamics behind the Great Depression were depended on the inner structure of the free market system of capitalism. According to Heilbroner and Milberg (1998: 98), the components of the tragedy of Great Depression could be explained by an increasing speculative fever. The major determinants behind the emergence of Great

Depression were not only confined to Wall Street but also were included "get-rich-quick philosophy" which had destroyed the business sector and the banking system. In addition to these factors, the increasing scale of investment trusts and holding companies were affecting the economic structure.

Heilbroner and Milberg (1998: 98) also express that all these manipulative activities prepared the conditions of depression and thereby intensified the factors behind the crisis. Following the stock market crash, the credit structure were collapsing, and thus individual investors were forced to sold out their stocks to brokers in order to meet their indebtedness. The financial sector were being suddenly insolvent which were included dubious foreign bonds. The policies pursued by monetary authorities were being unaffected in reforming the financial sector in many economic activities.

According to Fülberth (2011: 209-210), there was an alternative type of economic system which was called as corporatism, in addition to capitalist and socialist systems. This system had their own mechanism, which depended on the government intervention, without prohibiting the private property in economic relations. In that sense, the capital and labor had its own organization method in the socio-economic system. Within this framework, Fülberth (2011: 209-210) classifies the kinds of corporations into three parts: (1) war corporatism; (2) consensus corporatism; and (3) compulsory corporatism.

At the end of the World War I, the United States also came across to the emergence as a new hegemonic power in the capitalist system and the United Kingdom were lost their hegemonic power both in the production chains and the overseas all over the world. The United States transcended the United Kingdom, especially in the economic activities, as a financier of the Europe. In parallel to the increase in the production of the United States, finance-capital was also made an important progress in every aspect of the economic relations. On the other hand, in the two bipolar world, there was different types of capitalist state apparatus (Fülberth, 2011: 222-223): (1) bourgeois democracy; (2) military dictatorship; (3) command democracy; and (4) fascist dictatorship.

Even though the United States took the economic leadership from the United Kingdom, the country had some weaknesses. The migration through the West was almost stopped as an alternative to the urban unemployment. The demographic progress was significantly slowed down and thereby there was emerged an agricultural hesitation for the first time in the economic system. The wages could not follow the development process of the production rates. The increase in consumption was only realized by the sales on credit. A large amount of wage increases were cut the speculative activities. In addition, there was no relationship between the activities of the stock market and the economic realities anymore (Albertini, Pecherand and Poujet, 1990: 96-97).

In this catastrophic era, the Europe was devoid of making innovations in economic policies, the United States was in a great depression and the United Kingdom was in a trouble due to the failure of the transition to the gold standard. Therefore, there was only one way to stimulate the economic activities: *increase in government spending*. Through this way, the economy could be recovered and the foreign demand could be supported following to an increase in the domestic demand (Albertini, Pecherand and Poujet, 1990: 97).

The most striking fact of this crisis was depended on the difference of the parallelism between the prices of stocks and the development phase of the economic activities. However, the major

reason behind the crisis should have been sought in poor and superficial characteristics of the economic development (Albertini, Pecherand and Poujet, 1990: 98).

According to the classical thought, the reasons behind the crises basically depended on the macroeconomic issues and thereby the falling rates of profits. The wages should have been decreased in parallel with the decrease in prices and also the interest rates and the tax rates should have been reduced in order to slow down the effects of depression. The monetary system should have been well-constructed. The budget constraints should have been applied and the total savings should have been increased in order to increase the level of investment. All these components for the recovery would support the demand-side of the economy and thereby the total economic activity.

On the other hand, the critical approaches against the classical framework came from the well-defined policy suggestions of Roosevelt's New Deal propositions. The characteristics of this deal can be summarized as follows (Albertini, Pecherand and Poujet, 1990: 100-102): (1) providing a price increase in order to eliminate large amount of debts of industrialists and farmers through the devaluation of dollar; (2) providing of an increase for the assistance of farmers who accepted their production level to slow down; (3) the acceptance of the rearrangement of the competition system among the big corporations in the industry; (4) the acceptance of union rights and of the increase in the wage level; (5) the direct assistance for the unemployed people; (6) the emergence of a large amount of government investments; and (7) the recovery of the domestic market and the providing of the increase in the purchasing power of the working class.

The institutional framework of the capitalist system was shocked by these new policies. However, a new type of economic framework, namely the Keynesian paradigm, would emerge in this institutional change in which the government component would be the leading determinant in the economic activities. The capitalist system would be saved from the economic problems through these new policy agenda under the control of government hegemony.

Furthermore, the opposition of the American working class was increasing along with the increase in the severity of the economic depression. The labor acts such as strikes, the slowdown of the production, sit-in, the fabric occupations and the protest marches were widespread in the working class in spite of the mass unemployment and the wage cuts. The radicalization of the working class was appeared with the foundation of Congress of Industrial Organizations (CIO) by the working union unity and with the separation from the American Federation of Labor (AFL) (Doğru, 2015: 85).

However, Doğru (2015: 85) states that the New Deal policies were applied just after the severe economic crisis (e.g., after the depreciation of the capital), namely, approximately three years later of the emergence of the crisis, not before the emergence of crisis. This long-term depreciation of the capital was then caused to the following results: (1) the decrease of the general price level; (2) bankruptcies; (3) the general loss in value of assets; and (4) the decline in wages. All these factors were thus created opportunities for the recovery of the falling rates of profit in the American economy in the long-run.

2.3 1945 – 1973 Period

Two historic world wars, two dissociated blocks in West and East, the great economic depression across the world, the mass unemployment, diverging economies in the European

system, the increase in the scale of national discourses, the rising of the prominence of the policies of destruction and construction in both economic and social realms at the end of the period, newly-emerged nation states, the increasing hegemonic power of United States in the capitalist system were all the common facts of the 1945-1973 period.

Beaud (2015) describes this period as the large-scale development phase of the capitalist system. Therefore, this period can be regarded as a significant rise in the capitalist system. In the economic literature, this period is also known as the "golden age" of the capitalist system and thereby the characteristics of this period depends on the outcomes of the liberal policies and the innovations of the period itself.

The major ideas of this period are generally comprised of the harmonized assumptions and the critical arguments which are based on the liberal thought. This is a period in which the exploitation policies proceeded in different context. It could be seen that the capitalistic components were developed for each country in the world. As Beaud (2015: 286) states that, in this period, there was a matter of a new type of capital accumulation and a new type of class society in parallel to the high tension of state power and industrialization as well as the different forms of allocation of production and resources. But, on the other hand, the golden age was a period containing both of the internationalization of capital and of the insolvency of colonialism.

Within the frame of the liberation struggle of the colonial states, the new kinds of state apparatus were emerging, especially in the South of the World, called as the Third World countries, together with the capitalist bloc led by the United States and the socialist bloc led by the Soviet Union. The major factors behind the emergence of the Third World were the results of the following conditions (Beaud, 2015: 294): (1) the recovery of bourgeoisie in some part of the world and of the intelligentsia in the rest of the world; (2) the realization of the absolute presence of the dominance of colonists; (3) powerful anti-colonist movements under the demand through national independence; and (4) intensive wars.

Fülberth (2011: 233) classifies the major developments in the capitalist bloc between the 1945-1973 period as follows: (1) the presence of a conflicting circumstances between the Soviet Union and the capitalist countries in bipolar world of post-World War II era; (2) international alliances under the leadership of United States in both economic, social, political and military contexts; (3) the organization of goods, capital and the production process under the guidance of pioneer institutions such as WB, IMF and OECD in the international sphere; (4) the construction of welfare states under the principle of high and stable economic growth; (5) the rise of nation-state phenomenon and the collapse of colonials in the Third World; and (6) the special role of credit institutions in the concentration process of capital.

The post-war period had been significant rates of growth (especially in the capitalist bloc countries) all over the world. Both the world industrial production and the annual growth rates of trade were being at the highest levels[9]. However, the major reason behind the high growth rates depended on the efficiency increase in the labor-power rather than the quality increase of the labor-power. As Beaud (2015: 298) mentions that the high rates of growth basically depended on the increase in the efficiency of labor-power though there was an increase in the mobility of workers between different sectors and the countries. This increase in the level of

---

[9] For further discussion please see Rostow (1991).

efficiency was also depended on the increasing scale of means of production per labor and the increasing of the intensity of works per labor (Beaud, 2015: 298).

Indeed, the increasing efficiency in the golden age era was supplied by different trends of the extra labor-power of workers. Those trends were substantially different than the trends in the classic paradigm. Hence, they were depended on the adoption of differentiated working methods and the increasing use of developed means of production (Beaud, 2015: 299-300). Those methods could be only implemented by the following factors (Beaud, 2015: 300): (1) an increase in labor hours; (2) an increase in the concentration of the working conditions; (3) the reduction in the level of skills in parallel to an increase in the concentration of the working conditions; and (4) the deterioration of the living standards of workers.

Together with the efficiency increase in the production assembly, the concentration of capital was exacerbating. The accumulated capital was imposing its necessity for its transfer to the world economies having less capital formation by way of trading channels. On the other hand, this was stimulated to the spread out of the capitalist facts all over the world in conjunction with the increase in the terms of trade. Therefore, the policy agenda changed itself in order to adopt this new kind of methods.

Fülberth (2011: 234) states that the concentration of capital was supported by appropriate monetary and fiscal policies subject to the deficit-spending policies of the Keynesian thought. The states and corporations were taking credits and were making investments with these credits. Then they were promoting the aggregate demand along with the compensation of production. According to the Keynesian framework, all these economic factors would then provide the payment of principals and the interests along with the provision of full employment, the expansion of government spending, and making high rates of profit (Fülberth 2011: 300). Thus, the fundamental reason behind the concentration of capital depended on the support of aggregate demand via credit availability and the high wage rates (Fülberth 2011: 300).

In all these economic conditions, the laissez-faire policies were losing their impacts on the socio-economic era in the presence of high economic growth rates, high level of welfare, and the relatively stable period in terms of peace. The Keynesian paradigm was increasing their power in the economic mechanisms and thereby were coming into prominence as the leading economic policy. Keynes (1964) had already recognized the vulnerability of socio-economic conditions that took placed in the capitalist system. The major problem should not have been to focus only on the financial sector but to solve the problems of real economy such as high level of unemployment and the low rate of investment (Keynes, 1964: 381). However, the current authoritarian state systems were trying to be effective in solving of these problems at the expense of efficiency and of freedom in case of the capitalistic individualism. According to Keynes (1964: 381), the collapse of efficiency and the freedom were not needed to cure the economic system. The possible thing is to find right analysis of the problems whilst preserving efficiency and freedom (Keynes, 1964: 381).

The arguments of Keynes were almost taken account of all topics of the liberal policies and therefore were criticized those policies. In other words, the basic topics of these critiques were representing the emergence of the modern macroeconomic and were announcing Keynes as the founder and pioneer of the modern macroeconomics. These crucial points in which Keynes focused on can be ranged as follows: (a) the Say's Law; (b) the determination of employment level and output level; (c) the Quantity Theory of Money; (d) tax policies; (e) the demand for money – liquidity preference framework; (f) business expectations and the marginal efficiency

of capital; (g) the determination of the interest rates; (h) the money supply; (i) the expenditures of household consumer and the investment; (j) the government expenditure; (k) the aggregate planned expenditure – the principle of effective demand; (l) the analysis of labor market (e.g., the rigidity and flexibility of nominal wages).

As it is seen that the assumptions of Keynes embrace the general concepts of the socio-economic factors in detail. Even though all these assumptions would be criticized and transformed into a different context from various thoughts of economic schools, many scholars from the Keynesian framework would protect the main body of the Keynesian propositions and they would enhance their theories depending upon the basic arguments of Keynes. For instance, Snowden and Vane (2005: 144-146) summarize the basic propositions of Keynes in details as follows.

First of all, the modern industrial economies are prone to the severe recession originating from the deficiency of effective demand. The economic recessions should be explained as undesired shifts from the full employment equilibrium, depending on different reasons subject to demand-based components (e.g., real or financial). Secondly, the Keynesian era is based on demand-constrained economic activities, especially in the determination of output level. Thirdly, the unemployment is an important factor in the Keynesian framework and it only occurs as involuntarily. Fourthly, the discretionary and coordinated use of both fiscal and monetary policies is the fundamental tool for the stabilization of the economy. Fifthly, there are rigidities on prices and wages and thus any change in aggregate demand will have a short-run impact on the real output and employment level. Therefore, short-run aggregate supply curve is upward-sloping in the Keynesian framework. Sixthly, fluctuations in the aggregate output are described as a cause of business cycles which equilibrate the output level below the full employment level. Seventhly, in the short-run, there is a negative and non-linear relationship between inflation and unemployment and therefore both fiscal and monetary policies should be used in coordination by policy makers. Eighthly, according to Solow (1966) and Tobin (1977), the orthodox Keynesian perspective should use the "Guideposts" as an additional policy tool in order to achieve full employment level and to stabilize the general price level, which indicate the temporary use income policies. Finally, in contrast to the long-run problems of economic conditions, the short-run problems are more important in the Keynesian paradigm, especially in the case of instability.

These nine propositions point out basic points where the Keynes differentiates from the classical framework. In this regard, Fischer (1988) classifies these propositions by comparing two major views, i.e., Keynesians and classics. On the one side, one school of thought, attributed to Keynes, Keynesians and New Keynesians, argues that the private sector is subjected to co-ordination problems which are caused to the emergence of excessive levels of unemployment and harsh fluctuations in real economy (Fischer, 1988: 294). On the other side, associated with classical economists, including also monetarists and equilibrium business cycle theorists, the private economy can reach an equilibrium by adopting right government policies (Fischer, 1988: 294).

Furthermore, the criticism of Keynes and other Keynesian thoughts to classical economists through the extensive role of government intervention to the economic relations also shows the distinguishing point of the Keynesian theory. According to Keynes (1973: 486-489), one side of economic thinking believes that the existing economic system is a self-adjusting system in the long-run, though with many problems. However, the other side does not believe that the

economic system is self-adjusting. Therefore, there has been always a conflict in these two perspectives in the economic history over a hundred years.

As Snowden and Vane (2005: 14) indicate that according to the Keynesian thought, the capitalist system is not inherently unreliable but it is unstable. The main aim of the Keynesian thought is to strengthen the capitalist system and its inner structure, without changing the basis of its entity. Therefore, it aims to transform the policies for full-employment into a permanent norm in their theory.

Additionally, as Patinkin (1982) and Tobin (1995) state that Keynes achieved a significant breakthrough in the economic process by theorizing the principle of effective demand in his fascinating book, namely the "General Theory". Tobin (1987: 5) describes the Keynesian triumph by pointing on the strong policy framework of this school of thought. The Keynesian policies and strategies of demand management were adopted by almost all advanced democratic capitalist societies, in varying spheres, after World War II until 1973 (Tobin, 1987: 5). This was the period having low unemployment level and stable business environment, and thus was one of economic growth, prosperity and expansion of world trade (Tobin, 1987: 5). Stewart (1986: 146) also makes an argument similar to Tobin's (1987) speech by stating that the after-war governments in Britain and other Western countries were committed to full employment by using the Keynesian perspectives on economic activities.

Although the capitalist system has changed into a more developed structure together with the transformation of both economic, social, political and cultural contexts, it has not being disposed of the critiques related to its structural conditions. Especially, this period is the period in which the orthodox Keynesian thoughts adopted by many scholars (e.g., Stein, 1969; Robinson, 1972; Tomlinson, 1984; Booth, 1985; Salant, 1989; Laidler, 1999). In spite of the critiques to the Keynesian thought, given the high economic growth and the increase in the welfare, Maddison (1979, 1980) lists different kinds of factors behind this economic upheaval as follows: (a) the increasing scale of liberalization in trade regime; (b) using of possible policies for a reduction of inflation in parallel to the high level of aggregate demand; (c) increasing scale of state apparatus in the determination of the domestic demand; and (d) re-conceptualizing of the growth factors after World War II process.

Skidelsky (2003: 107) states that there is a unity in Keynes's "General Theory" (1964) and his "A Treatise on Money" ([1930] 2011). According to Skidelsky (2003), the unity conditions arise by the effective demand principle in the "General Theory" together with the assumptions on "Treatise on Money" such as the separation of saving and investment decisions, the stability of consumption expenditure and the variability in investment, and the accumulation of value function of money. Additionally, Skidelsky (2003: 107) notes that Keynes, as a first time, was initiated the general theory of supply and demand in production and showed that the production level could be reduced in order to provide the equilibrium condition if the aggregate supply exceeds the aggregate demand.

All of these differentiated production systems were led to a significant change in the concrete structure of the capitalist system. The intellectual revolution in economic sphere stimulated the emergence of social, cultural and scientific innovations in parallel. Especially, the innovative activities in the means of production and the production of consumption goods were noteworthy in the countries of the capitalist block. On the one hand, the emergence of advanced techniques and the automatization in the means of production were supporting the efficient adjustment of time of households; but also, it was supporting to the increase in the production scale and its

efficiency. The production chains were developing and the volume of these production chains were increasing in larger scales. In addition to the concentration of the production, the prices of goods were falling down and thereby were positively contributing to the purchasing power of households.

In this sense, some of the developments emerged in the "Golden Age" period can be summarized as follows (Fülberth, 2011: 236-240). The steam engine was totally discarded from the production system instead of the engines working by electric and fuel. The airplane became a mass means of transport, the phones were expanded as a basic device for each household and the space technologies were developed. The entertainment sector was increasing its scale in addition to the proliferation of the electronic devices. The emergence of refrigerators and the washing machines reduced the household works. The agricultural sector was losing its economic importance in the Central and Western Europe as a result of an increasing scale of industrial production and the growing import volumes in parallel to the developments of the industrial sector. The luxury goods throughout the Golden Age became normal goods of a daily life. The education system was spread into the social base and the university and the high school education were became available for large masses. In this context, the manual labor-power reduced by way of the scientific developments in industry, agriculture and non-wage housework. The internal migration in the industrial sector was increasing its impacts on the economic relations within the frame of low unemployment rates and the increasing level of aggregate demand for goods and services. In addition, the new production systems were emerging as a result of high rates of growth. The weapons industry was situating at the helm of these production industries in the context of the conflicting bipolar blocs of countries. Moreover, the service sector also became an area for an increasing employment in addition to agricultural and industrial sectors. All in all, the economic, scientific and the technological relations were spreading across the world along with these innovations[10].

On the other hand, within the context of these innovations, Fulcher (2004: 55-56) calls this process as the first transformation era from anarchist to managed capitalism. In that sense, the first transformation showed that the protection of people from at least some of the worst scenarios of the operation of market system is possible (Fulcher, 2004: 55-56). The working people understood that the conditions of work could be regulated and the employer's power could be limited by workers through collective organization and the negotiations could be provided to increase wages and to improve conditions (Fulcher, 2004: 55-56). The level of welfare became an important paradigm for states and governments which stimulates the managed economy by making cooperation between the state and organizations, unions, workers' institutions and employers (Fulcher, 2004: 55-56).

As a result of these conditions, the advanced technologies and the means of production were stimulating the automatization process in the production and consumption; the competition was becoming a severe in the context of the spread of the capitalistic issues over the world; the competition for the foreign markets were intensified among the imperialist countries; and the production methods were transformed into a different dimensions and thereby the concentration and the centralization of the capital were increased in this period relatively to the conditions in 19th century and the beginning of 20th century[11].

---

[10] All these factors have been changing the structure of aggregate demand and aggregate supply in economic activities.

[11] The result of this high-level concentration and centralization of capital would create the first severe depression of the modern capitalist system all over the world.

Screpanti (2014: 43) calls this period as "fourth type of imperialism" and then expresses as "postcolonial imperialism". By referencing to the case of the bipolar world, Screpanti (2014: 43-44) argues that the United States and the Soviet Union were created a new type of empire by destroying the old European powers. These two hegemonic powers focused on the South of the world, seeking to transform colonial rule with informal relations including dependence, influence, and alliance (Screpanti, 2014: 44). This transformation strategy was basically dependent on nuclear threat which might prevent a direct military conflict between the two super powers of the world (Screpanti, 2014: 44). Various Third World countries tried to achieve economic autonomy from the past colonial powers and some of these successful countries emerged in this transformation led to build of the infrastructures and to constitute social and cultural preconditions of capitalist development (Screpanti, 2014: 44).

In the context of the arguments of Screpanti (2014), this period also created the internationalization of capital and the differentiations in the organization of capital following the lessons learned from the liberal period. Thus, the most important characteristic of this period is the emergence of the prominence of the fundamental institutions among the states. The structure of the corporations was changing and the national borders became insignificant within the frame of international dynamics. As Fülberth (2011: 240) states that entrepreneur capitalism was replaced by manager-capitalism; companies were then managed by the board of directors of the incorporated companies, rather than the entrepreneur him/herself. National companies were replaced by transnational companies that manufacture in different countries (Fülberth, 2011: 240). Capitalism that had organized within the national borders so far was turning into international, organized capitalism (Fülberth, 2011: 240).

The managed capitalism was also under pressure due to the creation of new organizations for their survival in this period. The establishment of new types of institutions was depended on the treaties led by IMF and WB in the Bretton Woods (BW) conference. The major motive behind this conference was basically related with the reconstruction of trade regime and the revision of the international monetary system which was represented by Keynes for the United Kingdom and Harry White for the United States. IMF and WB were constituted in order to provide (which was promoted by the IMF) and to manage (which was promoted by the WB) the flows of money. Keynes was insisted on the establishment of a new type of international money, called as "Bancor", in order to protect the stability of the money flows around the world. Additionally, Keynes suggested to the establishment of a new type of supranational bank for the management of that deposit money.

Even if the arguments and the suggestions of Keynes were not supported by the BW organization, the intellectual base of White was benefiting from the vision of Keynes such that the indexing of the international currency units into the American Dollar and the enabling of the convertibility of American Dollar into gold in control of the Federal Reserve System. For instance, the dollar became to assume as the fixed exchange rate (e.g., 1 ounce gold = $35). According to Beaud (2015: 312) the fixed exchange rate system allowed to every American investor, every trader, and every speculator to purchase and make the business out of the boundaries set by the money authorities and bankers from the USA [United States of America].

The major position and its framework of IMF and WB were taking form by the rules determined in the BW. On the one hand, the functions of IMF were founded on the formation of the regulation of financial transactions and channels, the control of indexed exchange rates and the supervision and boost of the stability of the international monetary system. Furthermore, the Special Drawing Rights (SDR) were functioning as a power to keep the international monetary

system in coherence. On the other hand, WB was regulating and was determining the political limits of the monetary system across the world. Furthermore, WB was providing policy recommendations for the developments in the economic activities and guiding countries about the economic progress.

All kinds of processes about the evolution of the capitalist system in economic and social relations were proceeded by the Marshall Plan designed by the United States so as to reconstruct the damaged countries in the World War II. The main aim behind of that, the Marshall Plan was depended on the fact that the European countries would take credits and then would be used these credits on the consumption of the American goods.

In parallel to the Marshall Plan, the General Agreement on Tariffs and Trade (GATT) were established by 23 countries in 1947 in order to support the developments in the international monetary and credit system. It was constructed as a multilateral agreement organizing the limit of rights and responsibilities of international trade. In addition, this agreement was aiming to an effective use of resources and the increase in economic and social relations and was based on the liberalization policies in order to promote the competition for trade in the increasing scale of international relations of the capitalist system.

The European countries that took credits from the Marshall Plan became a unity under the Organization for European Economic Co-operation (OEEC) and then European Payments Union (EPU) were established. The aim of this organization and union was to facilitate the competition between debtors and creditors and to secure the flow of money in economic relations. However, it would be resolved after the establishment of the European Economic Community (EEC) in 1958. The more advanced structure emerged and thereby the cooperation was strengthened among the European states for their monetary system. Following the establishment of EEC, the perspectives on the construction of the common market became the dominant strategy in the European countries so as to converge and develop their economic policies. European Coal and Steel Community (ECSC) and the European Atomic Energy Community (EAEC or EURATOM) were also founded as an international organization. In addition, the European Free Trade Association (EFTA) was established as a regional trade organization and free trade zone[12].

The United States and Canada became a member of the OEEC by changing the inner structure of the community in 1960. Therefore, the foundation name was changed as OECD. The major aims of the organization can be classified as follows: (a) the development of life standards in the context of financial stability; (b) the support and aid for the economic progress; (c) the reduction of the unemployment rate; (d) the support for the development of socio-economic conditions; (e) the support for the development of world trade; and (f) the dependency towards democracy, human rights and freedom.

Finally, the ECSC, EURATOM and EEC were transformed into the Economic Community (EC) and thereby was led to the foundation of European Commission. This case shows that the European countries took lessons from the World War II, especially about the economic issues. In this sense, they followed the progressive ideas in economic, social and political spheres by depending on the facts of the capitalist system. The foundation of an advanced structure in order to protect the stability of socio-economic conditions and not to make the same mistakes became the main aim for European countries. Therefore, they conducted all steps about the unity in

---

[12] The United Kingdom, Scandinavian countries, Finland and Australia did not involve in the EURATOM but they established the EFTA.

details and formed the infrastructure of the unity within the frame of innovations. All these developments through the foundation of unity became important steps for an advanced structure of the European Union and the stability of the common currency.

The characteristics of the "organized capitalism"[13] were revealed the entity of the accord between capital and labor in the context of economy policies. While this accord was providing advanced rights to labor in each process of the production system, the increase in the production scale and its efficiency were supplying with the adaptation of labor-power as their work by labor. Heilbroner and Milberg (1998: 135) describe the conditions of this accord as a development in labor wage contract which made a strong dependence between wages and productivity. This dependence provided workers different kinds of benefits such as a direct control in effective management, attending in long-run strategies by helping managers, or maintaining a stable ratio of wages to national product (Heilbroner and Milberg, 1998: 135).

In the context of capital-labor accord, the strengths of the unions were increasing both in production and political determinations. The conditions of unions were become to play an active role in the economic and social relations. In this period, thus, labor unions became more powerful and efficient, however, they were more prompt to diverge from the issues of workplace organization and control in the hands of managers (Heilbroner and Milberg, 1998: 132).

Bowles, Gordon and Weisskopf (1983) describe the capital-labor accord of this period as "limited" in their study. According to their theory, which is called as Social Structure of Accumulation (SSA), the postwar period is described, depending on three factors: (1) "limited capital-labor accord"; (2) "the capitalist-citizen accord"; and (3) "the Pax Americana". According to Reuss (2009), the limited capital-labor accord had a much importance in economic activities because it was including the willingness of large employers to acknowledge unions and bargain collectively, the management of the unions' control over the production process in exchange for wage increases which were depended to productivity growth, health and retirement benefits, and job security (Reuss, 2009).

Furthermore, according to Reuss (2009), the reason behind the description of this accord as "limited" by Bowles, Gordon, and Weisskopf (1983) depends on the fact that the majority of workers (U.S.) were excluded employing in large companies in the core industries. Therefore, this limited accord between capital and labor were showing that the industrial conflict is still relevant in economic activities.

Fülberth (2011: 241) mentions that the unions (specifically the labor unions) had more powerful structure than the political parties. In addition, they had social democrat managers (Fülberth 2011: 242). Therefore, they could be dealt with the politics and the aims of the social democrat parties. Within the frame of the traditional visions of social democrat parties, all these factors were depended on not just to the labors, but also to the employees in the public sector.

Although Bowles, Gordon, and Weisskopf (1983) described the accord between the capital and labor in the limited sense, the effects of the accord on the increase in efficiency and the aggregate demand should not have been ignored together with the high rates of economic

---

[13] The fundamental component in the construction of "organized capitalism" was basically provided through the struggles of the unions and labor parties.

growth[14]. These kinds of effects were like a spiral. The increase in the efficiency of the production was led to an increase in the labor force in parallel. In the theoretical context, increases in the level of efficiency may have multiple effects on the economic system as follows (Fülberth, 2011: 243-244): (a) the increase in the wage level; (b) the evaluation of the worker as consumers, not as a cost element; (c) the stimulation for new investments; (d) the increase in the surplus value; and (e) the increase in the employment level.

Indeed, the consequences of an increase in the efficiency were not similar impacts on every country in the context of economic and social systems. Therefore, the results of this efficiency growth would have different impacts on economic fluctuations and recessions. For instance, the factors behind the increase in efficiency might be exhibited differential impacts on country-specific conditions to the degree of the historical movements of socio-economic and cultural conditions such as in the United States or Europe. For instance, in this period, it was possible to see that the consequences of the efficiency increases were also prevailing in the Third World countries.

The demographic factors and social systems were also affected by the increase in efficiency of production and the increase in the level of wages. Some other consequences of this phenomenon could be ranged as follows: (1) the prominence of education and human capital; (2) the differentiation of the characteristics of labor force in industrial-agricultural-services sectors; (3) the automatization-led development of labor-power in the production process; (4) the changes in the colonial structures; (5) the progress in the human rights and the woman rights; (6) the exacerbation of cold war between the bipolar world; (7) the changes in the characteristics of the distribution and the sources of income; (8) the increasing concentration of migration among DCs.

All in all, the inner structure of the Golden Age capitalism was still changing together with the criticisms to its existence theoretically. In other words, although this period was assuming as the golden age of the capitalist system, depending on above-mentioned factors, it was included different types of opposite movements. These opposite movements were not just originated from the left-wing parties, but also were originated from the right-wing parties. These movements can be listed as follows (Fülberth, 2011: 257-259): (a) the economic and political organizations in favor of the different fractions of neoliberalism; (b) the political parties and trade unions; (c) nationalistic movements in colonial states; (d) the guerilla movements in Latin America; (e) the resistance movements of different ethnic groups; (f) the movements towards the demand for civil rights in the United States; (g) the student movements in Europe; (h) the supportive actions for woman rights and sexual minorities; and (i) the opposite movements about war.

Although these different kinds of movements were supported by different groups of people both in right-wing and left-wing parties, the importance of these movements basically depended on the fact that they were included the main reasons behind the problems of the capitalist system. These movements showed that the capitalist system was not in the "Golden Age" in practice. Even though the Golden Age system supported some group of people economically and socially, they were not classified within these movements. Therefore, it could be seen that the

---

[14] Although there was a high rate of economic growth in absolute level, the distribution of the total income among economic agents was controversial in relative terms.

issues in the capitalist system were not only emerged due to the economic relations but were also depended on the social, political and cultural factors[15].

All in all, the year of 1973 was depicting a period in which different kinds of problems were emerged step-by-step in the socio-economic framework. As Backhouse (2008: 37) critically states that preceded by OPEC's [Organization of Petroleum Exporting Countries] decision to increase crude oil prices in 1973-1974, the economic crisis set the end of the period which was called "the period of Keynes". Keynesian policy not only was proven to be liar, but also it failed to lead when the inflation increased; the corporate structure that constituted the foundation of Keynesian politics was objected to. The reasons of the problems were evaluated in several theoretical contexts, depending on both right-wing and left-wing policy instruments. They spread the reasons of problems from economic basis into social, political and cultural fields and thereby ranged the common factors of the crises in detail. These factors were including different kinds of perspectives such as the critiques of Keynes's theoretical methods, the critiques for an incorrect evaluations of Keynes, the methodological and epistemological supports for Keynesian framework, and the necessity of the analyses for the major reason behind the crisis rather than to focus on the methods or the theoretical backgrounds of Keynes.

The method for the analytical investigation of the crisis should be depended on the inner dynamics of the capitalist system. In other words, the issues around the capitalist system, especially the accumulation problems of capital, were comprised of the basis of the Golden Age crisis. As Beaud (2015: 305) states that the main concern behind the crisis was the depreciation of the conditions for realization and the value and the surplus-value of capital. Although the wages (as a result of the development in trade unions and the political supports of labor parties) and the aggregate demand were significantly increased in this period, it ended up with the falling rates of profits of capital emerging with the changing conditions of the constant capital and variable capital. For instance, in the context of these differentiated conditions, Beaud (2015: 317) summarizes the steps of the crisis as follows:

1. The achievement to the limits of the markets, the slowdown of the growth in the resistance of working class and the falling rates of profits in the 1960s.

2. The increasing pressure in the competition, the necessity for external markets, the increase in foreign investments and the exports.

3. The dollar crisis of 1971 and the issues towards the international monetary system.

4. The devaluation of the American dollar and the counter attack for the competitors in Europe countries and Japan by increasing the price of petroleum.

5. The increasing price of petroleum in the context of the demand of Petroleum-exporting countries.

6. The stabilization efforts for the increasing prices of petroleum either by increasing the prices of industrial goods or reserving the petro-dollars.

7. The increasing demand for the industrialization of least developed countries (LDCs) (within the frame of contrasting interests of industrial sectors of DCs).

---

[15] For a comprehensive analysis and theoretical information on social, political, and cultural factors as well as the economic factors please see Gramsci ([1971] 1989; 2000).

Savaş (2007a: 7) propounds the similar arguments with Beaud (2015: 317) and thereby states that critics of KMT [Keynesian Macro Theory] are generally regarding KMT's failure to explain the "economic problems" that emerged particularly in the developed industrial countries and to bring politic solutions. For those who think that way, KMT did not include the issues of productivity and capital accumulation. Furthermore, KMT defined the economist as a person who has no personal value judgments and world-view and always acts objectively. According to Savaş (2007a: 7), these three points were the major factors behind the emergence of the crisis of KMT. Additionally, Backhouse (2008: 45) rigorously underlines the objective side of the Keynesian framework by stating that insolence of his claims [referring to Keynes] regarding what the book is to achieve may be a part of the problem.

For the same point, Savran (2013: 61) argues that the Keynesian thought did not comprehend the crisis due to its methodological deficiency in the approach for the capitalist economy. The main reason behind this lack of conception was depended on the high degree of concentration in the circulation phase of the capitalist system. Therefore, the Keynesian thought did not have a tool-box for the understanding of the dynamics of the nature of the contradictions in the production process and thereby the reasons of the crisis. Hence, the Keynesian thought did not make robust analyses to the recipe of the crisis (Savran, 2013: 61).

Because of the epistemological deficiencies and the methodological reasons of the Keynesian framework, the trade for petroleum and the petroleum-exporting countries were shown as the major figures behind the crisis and the Keynesian thoughts were depicted as accurate policies in itself. As Köymen (2007: 48) states that because economies of the developed countries are based on oil, when oil got expensive, production cost increased, profitability decreased and therefore, unemployment rose with reduced production. So, why did inflation increase? This was associated with the increase in oil prices. Thus, the guilty of the crisis was a few oil exporter countries that increased the price without any reason.

In furtherance of this argument, Savran (2013: 57) also mentions that the general ideological function of associating the crisis directly and only with oil is obvious. Responsibility for the crisis that left millions of workers unemployed and created a deep unrest in the society is therefore laid on an "evil" will that is out of the society. It is the "Arabic sheiks" who are behind all troubles. Neither the capitalism will be questioned as a system, nor the bourgeois societies will be held responsible.

All these kinds of discourses indicate that the dynamics of the crisis could be understood by focusing on the inner structure of the capitalist system, contrary to what the Keynesian and the classical thoughts asserted. In this sense, it was necessary to interpret the crisis in the context of issues around the capital accumulation and the realization problems. Thus, from the mid-1960s to the crisis of 1973, the history witnessed to the increasing costs, the satiation of the markets and the increasing fierce of competition in capitalist nations. Thus, the problems in the domestic markets were required to move into foreign markets which means that the spreading out of an increasing scale of competition in domestic markets and the concentration of capital towards the foreign markets.

This was indicating the changing characteristics of the capitalism because the centralization and the concentration of the capital would have new types of foreign markets based framework. Therefore, the speed of the capital between national borders was accelerated together with the increasing internationalization process of the capital. Thus, the continuum of the production did not only depend on the domestic markets but also spread to the foreign markets.

This also caused that the capital was tended towards to the sectors where the labor wages were almost at subsistence level for the production process in the context of the centralization and concentration. On the one hand, it was increasing the rate of exploitation, and on the other hand, it was leading to the spread of the capitalistic components all over the world. Both of these changes in the capital formation were especially spreading out to the Third World countries and thus were providing of the development of new kinds of economic and social thoughts and the progress in the philosophical and sociological approaches[16].

All of these processes also changed the capitalist system through the transformation of the production system. In this process, while the leading sectors, e.g., industry, agriculture, and services, were changing their inner structure but also the financial sector was also becoming to an increasingly prominent in the economic relations.

Although the financial transactions were significant in the determination of economic activities, they were being limited in the Keynesian period in contrast to the liberal period of 1920s. In the context of the slowdown in the production systems and the current issues in the capital accumulation, the speculative motives were having a significant role in the economic activities. In this case, there was no theoretical response of the orthodox Keynesian thought to an increasing scale of speculative motives. Therefore, the fictitious capital was increasing its impacts in the process of capital accumulation.

Although the relations between the economic activities which led to the crisis of 1973 were not so simple as it was, the factors that led to the emergence of the financial crises related to the real sector problems should be investigated in detail in order to understand the dynamics between different sectors[17]. In this sense, Krugman's (2010: 6) proposition about the reasons of the capitalist crises are not valid which includes the statement that "the leading enemies of the stability of capitalism have always been war and depression" in parallel to the problems occurring in the capital accumulation and the falling rates of profits. In the same methodological framework of Marx[18] who transposed the Hegel's dialectic as 'the right side up' to comprehend the historical movements in a concrete case, the arguments of Krugman should be also examined backward in their logic. In other words, wars and the recessions were the major results of the problems occurring in the capital accumulation and the realization of production.

One of the most crucial results of the economic instability in the capitalist system was depended on the effects of the virtual economy. Over the years after the World War II, the scale of the virtual economy was increased in the economic transactions in order to get profit easily in parallel to the reduction of productive activities. As Şişman (2011: 86-87) states that by the combination of low-interest rates following the collapse of BW system and the increasing inflation rates in advanced countries, the economies were exposed to the negative rates of interest in the market, which stimulated the speculation for raw materials. Therefore, in parallel to the changes in the price level and the deterioration of the production system, the following three cases would occur in the economic framework (Şişman, 2011: 90-91). First, the deficit in the balance of payments emerged in the petroleum-importing countries inasmuch as the petroleum reserves of the OPEC countries. It was caused to those deficit countries to tend towards the external finance and thereby the development of multinational corporations of center countries. Second, the OPEC countries chose to invest in financial markets of the United

---

[16] For example, post-modernism, post-structuralism, deconstructionism and logical positivism.
[17] Especially, this is one of the most crucial components of the 2007-2008 economic crisis.
[18] Please see Marx and Engels (2013) for an understanding of the epistemological and philosophical backgrounds of this case, especially the Part 1 which is based on "Theses on Feuerbach".

States by using petrodollars. This tendency towards the finance-based investments was also developed the financial markets of the offshore and tax haven countries and thereby was made a boosting impact on the Eurodollar markets. Third, in parallel to the reduction in the capital accumulation, the credit institutions of financial markets in center countries and the channel of product markets between the production and trade were reduced in the economic relations, which was led to the expansion of financial markets. In addition, fluctuating exchange rate applications in the 1970s created a pressure to abolish the capital controls in BW system (Şişman, 2011: 91). Likewise, the increased uncertainty led to the price distortions and increased speculative expectations (Şişman, 2011: 91). Thus, circulation system of the financial capital was expanded through the use of "risk reducing" financial instruments (Şişman, 2011: 91). This fact developed the derivative markets and increased the volume of the speculation-based transactions (Şişman, 2011: 91). Those were the clues for both the explanations towards the developments in Eurodollar markets and the future of financialization for further periods. As Şişman (2011: 85-86) expresses that although the speculation through the petroleum was recruited to the development process of financialization in the 1970s, it was pioneered to the spread of the recession all over the world.

However, the problems occurred in capital accumulation mechanism were the major reason behind the increasing scale of the speculative activities. The problems such as the recession or the stagnation were basically showed their impacts on the profit rates. In fact, the falling rates of profits became prominent as a leading factor in the emergence of the 1973 crisis which had started in the mid-1960s. Magdoff and Yates (2010: 45-46) indicates that the increasing scale of investment level could not be sustained anymore by means of a high level of government spending (e.g., by borrowing). Additionally, Magdoff and Yates (2010: 47) states that the 1970s were swarming with new industries, machines, means of productions and the goods and services; therefore, the investment opportunities became less and less profitable for the economic transactions.

Indeed, it is possible to investigate the major reasons of the crisis after 1973 period in different contexts besides the falling rates of profits. Although the falling rates of profit was a leading factor in the emergence of the crisis, there was also different factors and the theoretical and empirical analyses in different categories, which would provide more comprehensive understandings for an accurate investigation of the crisis.

For instance, Akman (2010: 290-298) classifies different kinds of perspectives about the crisis and thus calls this period as "the inflationist period of 1970-1983". Essentially, the focus on these different perspectives would provide prominent insights for the scale and the major axis of the crisis. These perspectives could be categorized as follows: (a) the orthodox Marxian analysis related to the law of "tendency of the rate of profit to fall" (TRPF); (b) the stagnation-based capitalist system analysis of the Monthly Review approach; (c) the analysis towards the dependency school in the context of under-developed countries; (d) the arguments of Regulation school; (e) the cost and wage based profit squeeze theories; (f) the analyses towards the credit mechanisms and the speculative attacks over the world; and (g) the analysis through the versatile perspectives in contrast to the one-sided crisis theory of Rowthorn (1985).

It is possible to refer to TRPF as an explanatory variable for an analysis of 1973 crisis. This analysis method was used as a tool by many scholars so as to understand the dynamics of the crises of the capitalism (e.g., Dobb, [1937] (2012); Sweezy, [1946] (1962); Gillman, 1957; Mage, 1963; Mattick, 1974; Wolff, 1979; Yaffe and Bullock, 1979; Mandel, [1980] (1995);

Shaikh, 1988; Roemer, 1989; Grossman, 1992; Dumenil and Levy, 1993, Wolff, 2001; Harman, 2007, Kliman, 2009; Foley, 2010).

The major assumption in this method depends on the fact that the organic composition of capital (c/v) increases and thereby the profit rates fall in parallel to the capital accumulation process. It is substantially used in the Capital III formulated by Marx ([1981] 1991). Bullock and Yaffe (1988: 291) tries to adapt this method for 1973 crisis and synthesize it with the case of increasing inflation following the World War II period. Bullock and Yaffe (1988) attribute the accumulation problems in terms of the behaviors of monopoly capital and the increasing price tendency of government expenditures in order to compensate the falling rates of profits. Even though the interventions on prices proceed in this period, it is not easy to intervene in market structure in monopoly capital era in contrast to free market period. Schumpeter ([1943] 2003) explains this case with the "corespective" notion. Each firm strives to protect its own advantages getting from the pricing policies and profit margins. They determine the price level by the collective agreements rather than the destructive price wars. Instead of the price competitions, they compete in techniques in favor of the reduction in production costs. Thus, they restrict the emergence of new players in the market. In this sense, Schumpeter states that three concerns have a crucial importance which should be called as corespective rather than competitive (Schumpeter, [1943] 2003: 90n). First, firms avoid from certain strict devices. Second, firms are in step with each other. Third, in doing so, firms play for points at the frontiers.

In addition, Yaffe and Bullock (1979) indicate that if the competitive structure of the produced commodities exporting from other countries are not perfect, the price declines will need large increases of productivity, which, simultaneously, create a growth of unemployment, or a large reduction of costs in parallel to a much lower wages.

The increasing level of unproductive employment was another negative point of the changes of the rates of profit. According to Yaffe and Bullock (1979), if the unproductive employment level increases faster than the employment level in the productive sector, the total wages can grow in national income. However, the exploitation rate can be increased as well. This is possible because the unproductive labor does not produce surplus value; on the contrary, it takes a substantial share from the aggregate surplus value.

Related to these conditions, the crisis of 1973 were investigated in the case of decreasing productivity rate of American capital vis-à-vis the capital of Japan and Germany. The overvalued American dollar also exacerbated the crisis. In this situation, the use of dollar as a national paper money for international payments could maintain only as long as there is an equality between the productivity increase of American capital and the dollar exchange rate (Yaffe and Bullock, 1979). But in 1973 crisis, it could not (Yaffe and Bullock, 1979). Therefore, according to Yaffe and Bullock (1979), the 1973 crisis was not only based on the problems of monetary system but also on the problems of productive sector of the economy.

Secondly, another leading approach for an investigation of the problems of this period was the Monthly Review. The inner structure of this approach was based on the theoretical and analytical assumptions of Paul Baran and Paul M. Sweezy. The major point in which the Monthly Review approach was focused on, was the expropriation of the surplus value. In the context of the expropriation problems, the stagnation tendency was the main characteristics of the capitalist system. According to Sweezy and Baran (2007), capitalism was in a monopolistic structure in the current economic system, contrary to the free competitive era of the pre-1945

period. Thus, within the frame of the expropriation of surplus value in this monopolistic structure of the capitalist system, Sweezy and Baran (2007) state that the system was based on the effective demand problems. This case proved that the major tendency of the capitalist system was the stagnation at the final phase of the production system. In this monopolistic economic framework, the government and the capitalist class were always searching for an alternative ways in order to solve the stagnation problems. Some of these alternatives could be listed as follows (Sweezy and Baran, 2007): (1) the consumption and the investment of capitalists; (2) selling effort; (3) the government expenditures; and (4) militarism and imperialism.

Indeed, the investigation of the monopoly-capital period was included the assumptions of the theorists of the imperialism. However, as Akman (2010: 291) states that although the theme that competitive capitalism ended and replaced by the dominance of large companies as emphasized by Sweezy and Baran, similar to the arguments of Hilferding, Hobson, and Lenin, Sweezy, and Baran were displayed differences from these writers, particularly from Hilferding and Lenin.

The major differences from leading theorists were depended on the demand-side explanations of Sweezy and Baran (2007) about the problems of the capitalist system. In the Orthodox Marxist framework, the dynamic structure of the capital accumulation was based on the Department I where the means of production was produced, however, Sweezy and Baran (2007) explained the accumulation process o capital based on Department II. Namely, Sweezy and Baran (2007) indicated that the goods would remain idle and thereby would be stagnant in capital accumulation process, without there was an effective demand for these goods. Therefore, Sweezy and Baran (2007) state that those idle goods were the major elements of the stagnation of the capitalist system.

Though Sweezy's description was indeed emanated as the crisis of over-production, the major issue was basically the effective demand-led problems occurring in Department II. Both Sweezy ([1946] 1962) and Sweezy and Baran (2007) significantly differed from the orthodox Marxist literature on this topic and thus can be regarded as a reformist approach.

According to Sweezy and Baran (2007: 113), the period of monopoly capitalism has its own logic as an economic system which was conflicted with itself. The logic of the system was depended on producing more and more surplus value. However, the system was ineffective in finding necessary spheres for consumption and investment so as to keep the capitalist system stable in the context of the expropriation of surplus value. Therefore, it was possible to describe the normal situation of the capitalism as stagnant because the reproduction of the non-expropriate surplus was not possible (Sweezy and Baran, 2007: 113-114). Thus, the crisis of 1973 was emerged due to the stagnation tendency of the capitalist system. Although the productive power was increasing all over the world, there were emerging problems in the consumption of this excess capacity. In 1974-75, the U.S. economy and the other world economies as a whole penetrated a solid structural crisis, terminating the long boom, and referring the beginning of deepening stagnation (Foster and McChesney, 2009).

In the historical process of the stagnation in the 1950s and 1960s, it was natural for new techniques to reach their limits of social and economic progress. In other words, it was meant that the innovations in the capital accumulation process were gradually exhausted in this historical approach. Although the era of monopoly capitalism was attempting to increase the scale of those innovations, the problems occurring in the consumption of those innovations

were surging depending to the systemic mechanism. Therefore, the permanent character of the stagnation became a more distinct feature of the capitalist system within the frame of the realization problem of investments.

The crisis of 1973 was largely the results of those contradictions in the capitalist system. The exceptional circumstances of 1950s and 1960s were thus come to an end. The capitalist system was, therefore, turning to its own situation, the stagnation. However, although U.S. economy was experiencing a recession, the various countries were still extracting the revenues of the innovations.

Because consumer liquidity supporting the purchasing power ended after the war, the country's enthusiasm in automobilization paused. Although military spending in Asia supported the country, they ended after Vietnam War. However, European and Japanese economies rapidly pulled themselves together after the war and led establishment of the new industries. These new industries created new producer capacities that occupy a significant place in the growth of the international excess capacity (Foster and McChesney, 2009).

According to the Monthly Review approach[19], all these circumstances prevented the emergence of the crisis, especially in the United States. The falling rates of profits in parallel to an increasing level of the expropriation of surplus value precluded the ways for new investments. Reduction of opportunities for new investments led to an increase in the rate of unemployment[20]. In addition to falling wage rates in the crisis, the wage-productivity gap was also widened in favor of the capital[21].

The policy differentiations between countries would also change the structure of the capital accumulation. The monopoly capital ran into a new phase following to the significant changes in the capital together with the rise of new big corporations after World War II (Foster, 2008a: 27). However, this new phase in the capital accumulation was totally consolidated in the United States following the World War II. As a result of this condition, a handful giant companies took the industry under control, which in turn led to a giant disengagement from the nineteenth century's free competitive system, where the economy consisted of small, family-based companies that have a limited control over the price, output and investment levels determined by the large market powers (Foster, 2008a: 27).

All these factors were stimulated the accumulation-led and unstable economic system having full of crises and were also changed the dynamic features of the competitive market system which were vanished in the nature of monopoly capitalism (Akman, 2010: 291). In other words, the long-run trend of capital accumulation was yielded to the cyclical recession tendencies. In order to get rid of the economic recessions, the new investments and the government expenditures were necessary for the accumulation of capital. However, the important thing was that the expropriation of the surplus created by new investments. Therefore, new economic opportunities were necessary for new investments and the increase in the consumption level. As Kalecki (1954: 161) indicates that his analysis shows that long-run development of the

---

[19] Although the theoretical background of Sweezy and Baran were mostly affected from the studies of Keynes (1964) (e.g., the effective demand principle), they also used many different theoretical components from the works of Kalecki (1954) and Steindl ([1952] 1976).
[20] As Marx ([1976] 1982) points out that the increasing rate of unemployment creates a "reserve army of labor" for capital and thus makes a downward pressure on the wages of labors.
[21] This case would be also affecting on the policies following the Golden Age era.

economy is not inherent in the capitalist system, and therefore, specific development factors are needed to maintain a long-run upward movement.

In addition to the stagnation theory of Monthly Review approach, the third approach comes from the dependency school which focuses on the issues of backwardness in LDCs both in social and economic contexts. The basic argument of the dependency school depends on the idea that the resources are largely transferred from poor and least developed "periphery" countries into rich and developed "center" countries. In other words, these periphery countries describe as depended to the center countries. This dependency, naturally, affects and changes the social framework of periphery countries as well as their economic extents. Therefore, these countries can acquire their own autonomy if and only if they escape from their dependency to the center countries.

Andre Gunder Frank's (1967)"*Capitalism and Under Development*", Emmanuel Wallerstein's (1992) "*The Modern World System*", and Samir Amin's (1977) "*Imperialism and Unequal Development*" are the outstanding paradigms in dependency theories. From the beginning of the 1960s to the end of 1970s, especially the assertions of Frank (1967) on the issue of underdevelopment in the context of Latin American countries were analyzed by many scholars so as to understand the main features of the dependency theories. In this case, Frank (1967) always pointed out that the dynamics of the capitalist system was the major and the only source of the emergence of the underdevelopment in low-income countries. Thus, the dependency approach always emphasized the power of the people's struggle against the ingredients of capitalism in order to escape from the underdeveloped conditions. In addition, Wallerstein (1992) integrates the arguments of Frank by theorizing the "world system". According to Wallerstein (1992), the poor countries were got within the world system. Therefore, the integration of the poor countries with the world system would make poor countries worse off by making rich countries better off[22]. As Akman (2010: 293) states that the arguments of world system then transformed into world system in which the evolution of the capitalist system pushed forward these changes.

However, the most important difference of dependency approach from those other approaches was its attitude about the imperialism within the frame of both political and military cases (Brewer, 2011: 176). Even if they corresponded the imperialism phenomenon into the background, the arguments of dependency approach were totally agreed with other approaches in the context of the effects of the capitalist system on the issue of underdevelopment. Frank (1967: xi) summarizes this case by stating that the capitalist system both at national and worldwide level produced under-development in the past and still creates underdeveloped economic systems in the present, similar to what Baran (1957) argued.

Frank's argument shows the major points where the dependency approach diverges from the orthodox Marxism. Related to this issue, Marx and Engels (1848) state that the national differences or antagonism between individuals are daily more and more disappearing, owing to the development process of capital-owners, to freedom of trade, to the world economies, to homogeneity in the mode of production and in life conditions corresponding thereto.

---

[22] Singer (1949) and Prebisch (1950) argue that the terms of trade turn out to the countries' advantage exporting industrial goods in the long-run. This argument is known as the Prebisch-Singer thesis in the literature. According to this thesis, since LDCs produce and then export the low-price products abroad, the economic trend will favor them. It means that some part of the surplus produced in LDCs will be transferred to the advanced countries.

Akman (2010: 294) states that the differences are not only limited by the definitions and arguments on imperialism but also includes the assumptions on the capitalist world system. The major indicator of this condition in the concrete level is the concentration to the analysis of periphery countries about the exploitation.

The concepts of imperialism and capitalism are interpreted within the frame of periphery countries. For instance, Amin (1984: 211-212) expresses this issue as the main aspect of the current depression is that it is the depression of the international division of labor, so a depression in the North-West relationships, a depression of the imperialist system. The opinion that the depression is the depression of imperialism is contrary to the opinion that considers the root and main aspect of depression in the internal conflicts, capital/labor relationships inherent to the capitalist countries. Amin (1984: 211-212) reckons that the transformation of the capitalist system into imperialist system at the end of 19th century and its main consequences (national liberation struggles in the entire social-democrat circle) shifted the main area of the conflicts from capital/labor conflict to imperialism/circle's public forces.

One of the most influential definitions of the dependency comes from Dos Santos (1970: 231). In the categorization of the countries as center and periphery, Dos Santos (1970) summarizes their relations in the dependency concept as a situation in which the certain economies are conditioned by the development and expansion of others to which the former is subjected. The interdependence between different economies presumes the form of dependence when the dominant nation can be self-sustaining, while the dependent nation can benefit from the expansion of the dominant nation as a reflection, which can affect the development process of the economy either as positively or negatively (Dos Santos, 1970: 231).

On the other hand, Baran (1957) investigates the "international division of labor" concept in the examination of dependency theories and the roots of the reasons behind the emergence of 1973 crisis[23]. This division develops around the skilled workers of center and the unskilled workers of periphery countries. Moreover, Baran (1957) states that the center countries increase their dominance by benefiting from the cheap labors of periphery countries in the production of goods and services and thereby their economic scales are increasing to the detriment of periphery countries. This argument also coincides with the assumptions of Amin (1977) on unequal development.

Laclau (1977) is involved in the dependency theories by his arguments on the changing relationship between capitalists and the landowners. Basically, Laclau (1977) criticizes the point in which Frank (1967) and Wallerstein (1992) focus on the exploitation relations between landlords and peasants in exchange system of capitalism. On contrary to this methodological understanding, Laclau (1977), initially, prioritizes the pairwise differences between the "types of production" and the "economic systems" and then analyzes the whole feudal and capitalist relations. Therefore, this is the basic point where Laclau (1977) differs from the argument of Frank (1967) and Wallerstein (1992) in the methodological framework.

Wallerstein (2012) evaluates this case by depending on the concept of "historical capitalism" and the relations of production in parallel to the world system. If economies are to make a balance-sheet of the historical capitalism, they need to consider all social areas existing in the world system, to evaluate each of these in terms of to what degree a decision-making hierarchy within the framework of high success intentions (rather than the framework of privilege) is to

---

[23] Baran (1957) mostly inspired from the studies of Lenin and Luxembourg in his theoretical context of international division of labor.

be appropriate, and to conclude these evaluations by comparing them with the parallel summarized evaluations regarding the former historical systems for our current world system (Wallerstein, 2012: 118).

Munck (2011: 234) states that the economic facet of the concept of dependency describes the compulsive relationship between the development of one part of the world and the underdevelopment of another part of the world. However, in addition to the economic facet, the dependency concept investigates the social and political components of these economic relations (Munck, 2011: 234).

Following all above-mentioned arguments on dependency framework between center and periphery countries, the 1973 crisis was basically revealed as a crisis of imperialism depending to the antagonisms between the center and periphery countries[24]. This is the basic proposition of what the dependency theories argued for the 1973 crisis. For instance, Amin (1984: 187) remarks the ways that lead to the crisis of 1970s and the major reasons of that crisis by stating that the depression commences with the dollar crisis in the second half of the sixties and America's military intervention in Vietnam and its failure commences with the politic-ideological crisis in 1968. With the oil crisis in 1973 and USA's failure in Vietnam in 1975, it manifests itself as a crisis in North/West relationships, so as a depression of capitalism (Amin, 1984: 197). In addition to these factors, the economic crisis is interpreted as the result of the problems among powers emerging from the struggle within and also the problems of foreign policies (Akman, 2010: 295).

Magdoff (1997) focuses on the underdevelopment issues of periphery countries in line with the objectives of foreign policies of the dominant power, namely the United States. According to Magdoff (1997: 261), the transition from underdeveloped to the developed socio-economic structure was depended on the changes in the structural framework. The demand-led structural changes of people were necessary for an efficient use of resources of less developed industrial countries. The psychological dependence on dominance and the culture of DCs should have been ended by the underdeveloped countries. Furthermore, the people, especially the working class, should gave an importance to the development of independence in reasoning, act, and self-confidence.

These assumptions also comprise the anti-thesis of the dependency theories. The arguments of Magdoff (1997) for the industrial breakthrough include the movements which can change the development process of dependent countries and their dependency power on the center countries. However, the major factor in these movements basically depended on the structural changes in the industrial components of underdeveloped countries. In the absence of the changes in superstructure and infrastructure and the reconstruction, the dependence of periphery countries to the center countries would proceed in many facets such that economic, political and social.

All in all, all these three different approaches (i.e., TRPF, Monthly Review approach, the Dependency theories) comprehensively introduced the infrastructure of the 1970s crisis of capitalist system by approaching different arguments and different theoretical assumptions. However, in addition to these three approaches, the examination of the perspectives of other approaches about this issue will also provide us to understand the dynamics of the capitalist system in the context of the relationship between periphery and center countries.

---

[24] In the literature of dependency school, these contradictions/antagonisms are also called with different labels among spheres such as center and periphery or north and south.

For instance, regulation theory/approach is one of them. The emergence of the regulation approach depends on the economic problems and the stagflation process of the 1970s crisis of France. The regulation approach adopts different kinds of economic and social perspectives such as from the structural Marxism, institutionalism, and substantive approaches. Thus, in its theoretical infrastructure, it is dealt with different abstraction levels of the capitalist system and different historical periods (Akman, 2010: 295). It presents different types of accumulation and regulation models for each historical phase of the capitalist system. Therefore, this approach favors the SSA Theory in many dimensions subject to the social and economic facets. In Aglietta's ([1979] 2000) leading study, the infrastructure of this approach is investigated in detail. In addition, the theoretical components are developed in Robert Boyer's (1990) significant work.

This approach is basically reflected the capitalist economic relations as a function of the social system. In some sense, it regards the role of government in social relations as well as the economic relations. Therefore, it tries to furnish a big picture of the relations between different segments of social, political and economic frameworks. For instance, according to Aglietta ([1979] 2000: 16), the major points of this approach depends on the investigation of the transformation of social relations as it makes to an emergence of new forms that are both economic and non-economic, that are constituted in structures and themselves reproduce a major structure, i.e. the mode of production.

The regulation approach describes four different concepts for the changes in economic infrastructure, depending on historical movements: (a) the regime of accumulation; (b) the mode of regulation; (c) the mode of growth; and (d) the ideological basis. However, in this historical movements, the concepts of "regime of accumulation" and the "mode of regulation" become interactively prominent in the determination of social and economic processes.

By the definition of Jessop and Sum (2006: 4), the "regime of accumulation" investigates the entire analysis of political economy with other analyses from civil society and/or the state to reveal how these analyses affect each other to normalize the relations among capital and to govern the conflicting system of capital accumulation.

In other words, the regime of accumulation is a kind of concept which investigates the patterns of circulation, consumption, production and the income distribution, in the context of both the expansion and the concentration of capital and the stability of economic processes. On the other hand, the modes of regulation focus on the set of institutional laws and norms and the state and the policy conditions in order to keep the pace of the regime of accumulation in safety. According to Boyer (1990), there have been existed two basic modes of regulations over the 19th and 20th centuries: (1) the "mode of regulation of competition" which covers the 1850-1930 period and (2) the "monopolist mode of regulation" from the 1930s to up to date.

The new type of accumulation regime of the post-1930s era and its diminishing power in the crisis of 1970s were all described in the Fordist regime of accumulation and the dynamics of the Fordist regime were of critical importance for an understanding the ways that led to the 1970s crisis of capitalist system. Therefore, the regulation approach was theorized the serial production methods using assembly line and the mass production which were become stereotyped in the production system (Akman, 2010: 295).

The regulation approach divides the structures of the economic crises into two parts: (1) cyclical and (2) structural. However, this approach was basically focused on the structural side of the

economic crises. According to the regulation school, the roots of the 1970s crisis were depended on the structural problems of the capitalist system. This unique case for the 1970s crisis was also generalized to the other types of crises emerging in this system. Therefore, the emergence of the crises was being evaluated on the structural basis, which was similar to the SSA approach, in the methodological framework. This structural concept was also led to the understanding of the major reasons behind the crisis of Fordist regime.

The end of each crisis was totally depended on the termination of an existing capital accumulation regime and the emergence of a new type of accumulation regime in the capitalist system (Akman, 2010: 295). It means that the resolution of 1970s crisis was depended on the emergence of new type of accumulation regime in the production system of capitalism. Especially, in this approach, the neoliberal policies were developed as a tough response to the crisis of 1970s period. For instance, within the frame of the specific characteristics of the 1970s period, Glyn (2006: 15) states that there were major symptoms of problems emerging in capital accumulation such as commodity price increases, high rate of inflation, profit squeeze, productivity slowdown, instable international financial system, tight labor markets and the industrial militancy.

The "profit squeeze" term of Glyn represents the other approach as an explanatory factor behind the reasons of the 1970s crisis. The details of this term were initially developed by Glyn and Sutcliffe (1972). Although the exploitation was proceeding in the capitalist production in different forms, it could be easily realized that the rate of (nominal) wage was still increasing, depending on several policies related to the economic activities and the socio-economic conditions. The major problem of the increases in the wage level basically depended on the increases of costs in economic circulation. In other words, the increases in total wage level in parallel to an increase in production costs were negatively affecting the profits of the firms. The profit squeeze was indwelled in almost every economic phenomena. As Glyn (2006: 7) stated that the increasing pressure of wage also contributed to a squeeze on profitability for the later periods. In addition, Akman (2010: 296) points out that the tendency towards an increase in the inflation in order to avoid from the falling rates of profits by capitalists and governments was sharpened the facts behind the crisis.

Contrary to the analytical and theoretical arguments of the theory of the profit squeeze for the crisis of 1970s, the most influential criticism made by Shaikh (1988) by describing the pattern of that theory within the frame of the crisis. According to Shaikh (1988: 169), this theory positions itself in excess value theory, but definitely neglects to consider the difference between this complex and powerful Marxist category and the bourgeois profit (i.e., net operation income) category. This way, reduction in profitability and therefore the current world depression is referred to a profit crunch arising from the wrong pricing.

These five approaches presented the leading explanatory factors of the crisis in the 1970s to the economic literature. All of these approaches acutely pointed the signals of the beginning of a new type of accumulation regime in the capitalist system and also sought to determine the basic characteristics of the changing regime in detail. However, it is also possible to encounter with other types of arguments besides these five approaches. For instance, Itoh (1983: 165) compares between the reasons of 1970s crisis and of the First Depression (1873-1896) of the capitalist system and further states that the strategies prepared for the First Depression are not proper for the 1970s crisis. In addition, Itoh (1983) mentions that the new type of capitalist system is not possible. Nevertheless, instability of the depression by no means guarantee that the economic activity displays a calm improvement. On the contrary, it may delay in melting the excess

capital based on the abundance of the facilities required for production and may render the depression permanent. Such a historical example is the 1873-1896 Great Depression that commenced one century ago where the English economy was the center. The exit from this Great Depression was found in the new development path of the capitalist system in the form of creation of the finance-capital and imperialist foreign policies, but basically, neither a similar exit nor a new type of capitalist system is possible for today's capitalism (Itoh, 1983: 165).

2.4 1973 – Up to Date

The social developments in the historical context and the theoretical progress in the capitalist system portrayed the major facts of the socio-economic framework and gave the signals of the changes in the capitalist infrastructure. These changes were comprised of both economic, social, political as well as the cultural factors. The counter movements on the Keynesian perspectives over the 1945-1973 period would expose all their developments in theoretical and practical contexts. By changing the theoretical mistakes and failures of the Keynesian and also of the pre-Keynesian perspectives, they would pursue to transform the dynamics of the capitalist system in pursuance of their theoretical and analytical assumptions. In other words, all these conditions were caused to the prominence of one kind of approach which was not being considered as important in many senses, however, it was seriously internalized the demand of capital across this period. This would be the footsteps of the neoclassical paradigm in the economic framework and the major determinants of the changes towards neoliberalism in the political sense.

The fundamental elements in the transformation through the neoliberal policies can be understood by the changes in the conditions of the labor markets. It is obvious that the full-fledged counter attack of the neoliberal policies to the working class, and more specifically to the gains of the labor obtained in the Golden Age period has changed almost all conditions of the labor market. For instance, Bluestone (1995) summarizes the anti-labor movements of the neoliberal system within the frame of an increase in inequality as follows:

1. The technological progress necessitates the increase in demand for skilled labor rather than the unskilled labor.

2. The employment switches into low-wage sectors and thereby the concentration of high-wage sectors become less prominent in the production process.

3. The deregulation policies come into prominence in the low-wage and non-union sectors of the employees.

4. The unionization dwindles among the working class.

5. The policy framework of corporate personnel changes the employment strategy from long-term employees to part-time workers.

6. The increasing shares of total earnings concentrate in giant corporations.

7. Foreign producers focus on markets for goods that are handled by relatively well-paid domestic workers.

8. There are increases in the international capital mobility.

9. There are increases in the competition in job market due to an increase in the immigration which causes to an increase in the supply of workers competing for low-wage jobs.

10. The level of trade deficits increase in parallel to an increase in the balance of payments deficits.

Furthermore, Fülberth (2011: 265) summarizes the general features of the social and political paradigms for the changes of post-1973 period as follows:

1. The information technology led developments in production and communication sectors (Fülberth (2011) calls this period as the "third industrial revolution").

2. The dissolution of the Soviet Union in 1989 and the integration process of the dissolved countries within the capitalist system.

3. The reduction of public investments and guiding function of the state, municipality and social institutions.

4. The increasing importance of international financial markets.

5. Internationalization of the production methods and techniques.

6. The increasing scale of offshore investments.

7. The increase and the expansion of the distribution of international goods and services.

As Fülberth (2011: 265) states that all above-mentioned factors, excluding the first factor, were composed of the main themes of the "globalization" phenomenon. However, this was not solely the geographical globalization but rather the current globalization structure were included the economic, social and political paradigms which of them formed the basic structures of the profit-led neoliberal policies. All these globalization patterns forming under the neoliberal facts were changing the daily practices and the life standards of the capitalist and non-capitalist societies all over the world. They were led to a new kind of age of reason upon people and were changed the logical determinants towards to the capitalist interests, not to the interests of working class.

Dardot and Laval (2012) describe these new kinds of conditions of the world as "the New Rationality" by referring to the Foucault's "governmentalite" concept and scrutinize the inner characteristics of the neoliberalism in the context of "the new rationality" term. This major feature of this new rationality phenomenon includes different kinds of components. Within the frame of these components, the subjects do not govern under the external imposition. On the contrary, Dardot and Laval (2012) create themselves in each moment of time and space by developing their behavioral patterns. Depending on this case, the neoliberal paradigm concentrates its methods and strategies upon the relationships among individuals. Therefore, the term of "neoliberal subject" evokes its importance in human practices in this period.

The globalization strategies of the neoliberal framework, depending on the logical framework of the neoliberal subject, categorizes by Beaud (2015: 377-378) with three topics: (1) the globalization of information and the consumption of several different commodities in addition

44

to the development of productive methods and the increasing mobility across regions; (2) the increasing level of concentration and the diversification of mutual dependencies by the changes in transportation and communication sectors all over the world; and (3) the prominence of globalization under neoliberal paradigm as an organic movement.

Indeed, all these different topics were led to the capture of each individual in socio-economic context by the facts of globalization. For instance, these conditions are included the life standards or consumption patterns, culture or information, the mobility of goods and services, the dynamic characters of economies, the environmental pollution and the climate change (Beaud, 2015: 378), which are also affected by the "neoliberal subject" proposed by Dardot and Laval (2012).

However, according to Screpanti (2014: 17), who evaluates the global accumulation process of the "neoliberal subject" in terms of production, the global accumulation was basically related to the work of multinational firms instead of an effect of neoliberal economic policies. In this case, the specification of the multinational firms as a major subject in global accumulation was also the expression of the plunge of the economic system of the 1970s. Hence, the neoliberal paradigms were included the most significant policies on behalf of the interests of capital about for both the accumulation strategies and the reduction of conflicts in labor movements. Therefore, the neoliberal economic policies were always transforming their own structure towards the interests of the concentrated and the centralized multinational and transnational firms pursuant to the accumulation of capital. The technological developments, production, investment, trade, financial transactions and political changes were all shifted towards to the new type of structure of capital accumulation, namely to the structure of neoliberal accumulation. As Milberg and Winkler (2013: 33) state that these factors have stimulated more international trade and foreign direct investment (FDI), transformed the structure of trade, and altered the relationship between FDI and trade, the effect of trade on income distribution, and the role of foreign demand in economic development process.

Furthermore, according to Fülberth (2011: 267), all these transformations in socio-economic system were required to the new kind of economy politics. Some of the crucial factors of this new type of economy politics can be listed as follows: (a) the reduction of taxes on firms, companies, the government expenditures, and the capital and property; (b) the privatization of state-owned enterprises; (c) the rearrangement of labor market policies; (d) the reduction of public assistances; (e) the renunciation of government from investment and the administrative regulations; and (f) the prioritizing of the stability of money. In the context of these conditions, Hossein-zadeh (2014: 28) argues that the transition from Keynesian to neoliberal paradigm incurred much deeper dynamics than pure ideology which started long before the crisis of 1973s both at economic and political levels.

Moreover, in parallel to this new economic policy structure, the demand-side economics was transformed into supply-side economics as the major determinant in the socio-economic framework of the neoliberal paradigm. As Bartlett (1981: 1) states that the supply-side economics was a pure rediscovery of the classical economics. On the other hand, according to Evans (1983: 19-20, quoted in Aktan, 2008: 52), the supply-side economics was an economic paradigm that investigates the factors affecting the productive capacity of the economic system. Roberts (1984: 314, quoted in Aktan, 2008: 52) also indicates that this school of thought examined the effects of public policies upon the incentives and relative prices. Within the frame of these descriptions, Aktan (2008: 52-53) notes that the supply-side economics is a school of thought which supports that the production and the tax revenues are positively affected by the

tax reductions and therefore the efficiency of the economic growth will be provided in usage of resources and their distribution among the factors of production[25].

The major determinants of the neoclassical economics[26] including the policy components of supply-side economics can be categorized as follows[27]: (1) the importance of the role of society; (2) the automatic regulatory role of the markets; (3) the rationality principle of prices and the expectations; (4) the importance of perfect competition model for firms and markets; (5) the efficient allocation of resources; and (6) the equal distribution of income among factors of production.

Guerrien (1999: 8-12) summarizes these categories of the neoclassical economics by investigating their dynamics in detail. In a nutshell, neoclassical economics tries to design the society based on focusing to the individual behaviors[28]. Although each individual has different kinds of resources and limited opportunities to reach the necessary amount of resources and to the technological apparatuses, they are basically regarded as free and equal in the social context. Additionally, each individual has different kinds of income level and utility. The exchange of goods and services increase the utility of each individual. Therefore, the markets are the places where the individuals are interacted with each other for an exchange of goods and services. The prices are determined, depending on the law of "supply and demand" in the exchange of goods and services. In this sense, the rationality principle of the neoclassical thought is prevalent both in the formation of expectations and the determination of prices.

This principle theoretically works under the guidance of perfectly competitive markets. The economic individuals try to use their available opportunities by taking into consideration of these factors and the restrictions they face. If there is no uncertainty in the economic system and perfect flow of information among agents, the rational agent is evaluated as irrational only under limited informational context and in the presence of high cost production context. The revision of irrationality problem is only occurred when there is a perfectly competitive markets in the economic system[29].

All these categories were imposed on various segments of the society by different methods under the neoliberal policy agenda following the collapse of Keynesian paradigm. Therefore, these different policy components should be investigated in detail in order to understand the role of "neoliberal subject" in socio-economic framework. In other words, the investigation of the evolution of the neoliberal policies and their changes over time are necessary to understand the role of "neoliberal subject" in the capitalist structure. Additionally, the effects of these neoliberal policies on capital accumulation in different kinds of social structure can reveal the power of tendencies in which the neoliberal policies have. For instance, Table 2.4.A shows some of key goals and tools of neoliberal paradigm.

---

[25] For an investigation of historical roots of the supply-side economics and its policies please see Say ([1821] 1971), McCulloch (1863), Hume (1955), Dupuit (1969), Cowen (1982) and Smith (2012).

[26] This is also called the mainstream economic paradigm in this era which is based on the neoclassical economics and the neoliberal policies.

[27] For detailed investigations please see Edgeworth (1904), Clark ([1899] 1908), Marshall ([1890] 1920), Hayek (1949), Böhm-Bawerk ([1884] 1959), Friedman (1962), Jevons ([1957] 1965), Menger ([1976] 2007), Walras ([1954] 2010).

[28] For a comprehensive understanding, analyze the "individualism" term within the frame of the "individual subject" of Dardot and Laval (2012).

[29] For a detailed analysis of the neoclassical economics and other schools of thought please see section 5.2.4.

Table 2.4.A: Key Goals and Tools of Neoliberalism

Key Goals:
• Reduce and control inflation; protect the value of financial wealth
• Restore insecurity and "discipline" to labor markets
• Eliminate "entitlements"; force families to fend for themselves
• Roll back and refocus government activities to meet business needs; cut taxes
• Generally restore the economic and social dominance of private business and wealth
• Claw back expectations; foster a sense of resignation to insecurity and hardship
Key Tools:
• Use interest rates aggressively to regulate inflation and control labor markets
• Privatize and deregulate more industries
• Scale back social security programs (especially for working-age adults)
• Deregulate labor markets (including attacks on unions)
• Use free-trade agreements to expand markets and constrain government interventions

Source: Stanford, 2008: 48

The country-specific, region-based and international organizations and also institutions have some crucial roles (e.g., as a policy-maker) in the determination of the socio-economic and political framework behind mentioned-above (i.e., in Table 2.4.A) neoliberal policy aims and tools. For instance, the major institutions of the post-1980 era were IMF, WB and WTO. The crucial point in this sense was the structural changes in policy agenda of IMF and WB by way of the neoliberal transformations. The social state based policies of the Keynesian framework were shifted through the free market-based policies of the neoliberal paradigm. For instance, the head of these policies were organized by two basic institutions of the neoliberal era: (1) IMF and (2) WB.

The major task of the IMF was to create technical support for the stability of the monetary and financial systems. Additionally, some other major tasks could be listed as follows: (1) the providing of economic stability and the monitoring of the global financial system; (2) the providing of the stability in exchange rates; and (3) the providing of supervision, operation and remedy for any kind of problem that could occur in payment schedules. All these duties showed that the role of IMF was changing in favor of the policies supported by the neoliberal paradigm, based on the socio-economic system. In the Keynesian framework, the major aim of IMF was depended on several tasks such as the providing of the available credit for the solution of the problems emerged in the balance sheets after World War II and the establishment of the free mobility of goods and services. Hence, in the context of these tasks, the IMF applied the neoliberal policies in both financial and real sectors and thereby spread out the neoliberal components to the each segment of the society.

The WB also experienced a significant change towards the neoliberal policy agenda, similar to the policy agenda of IMF. Although the WB was established as a self-governing and consultant institution of the United Nations in 1947, the changes in the economic and social systems through the neoliberal paradigm transformed the inner structure of the WB in the interests of the private capital after 1980s. The WB Group, in general, was working under the administrative power of five institutions[30]. These institutions also formed the power of WB in

---

[30] These are (1) the *International Bank for Reconstruction and Development* (IBRD), (2) the *International Development Association* (IDA), (3) the *International Finance Corporation* (IFC), (4) the *Multilateral Investment Guarantee Agency* (MIGA), and (5) the *International Center for Settlement of Investment Disputes* (ICSID).

the socio-economic system in order to affect each segment of the society. For instance, the human progress, agricultural development, environmental protection, infrastructure, the management of the society, the investment policies of the private sector were all managing and monitoring by the control of the WB Group. However, the aim of these factors were totally changed in the neoliberal socio-economic structure. For instance, while the long-term investment credits were provided to the countries for their economic and social reconstructions and the readjustments of their balance of payments after World War II, the same credits were provided to subject those countries to the neoliberal policies imposed by the WB Group after the 1980s. Therefore, the WB Group was used its political power in order to implement the neoliberal policies to every segment of society.

The final major institution, which was basically affecting on the trade regimes of the countries, was the WTO. In addition to the IMF and the WB, which were all managing the financial sector, political framework and the monetary system, the control of implementing policies on trade were supervising by the WTO[31]. The liberalization policies implemented for the financial sector (via IMF's policy agenda) were transformed by the WTO for the trade regime, and it was particularly decisive in the trade between developed and developing country groups. The organization was also undertaking the management of multilateral trade system among nations. The policy framework of the WTO was not limited at the international level but also was making country-specific trade policies at the national level. Basically, the main policy objectives of the WTO can be ranged in four different categories as follows: (1) initiating the multilateral trade relations among countries; (2) working as a forum in the discussions of the multilateral trade relations; (3) playing a crucial role as a negotiator in commercial conflicts; and (4) monitoring the national trade policies and providing assistance through making accord with the international institutions within the frame of national policies.

Furthermore, the WTO was controlling different socio-economic mechanisms of both service trade and commodity trade, depending on the neoliberal trade policies. For instance, the trade-related aspects of intellectual property rights (TRIPS), the trademark determinations, anti-dumping policies, the application of customs and incentives towards new trade agreements and the licensing were all controlling and managing by the WTO. Moreover, the organization was providing information to the emerging and developing country groups as a supervisor for more accurate relations in the world trade. This informational circulation could be extended from the national level to more micro levels such as to the technical issues of firms and to the policy tools of the governments. Related to this issue, the organization was arranging courses in countries in order to correct the commercial problems and disagreements at the international level. Finally, the WTO was making assistance for countries for their trade relations in an informational level referring to their economic development levels of countries, especially the emerging and developing countries. All these controlling mechanisms were imposed, depending on the neoliberal policy agenda, and more specifically were regulated in coherence with the neoliberal trade policies by the WTO.

The institutional change in the capitalist system could also be interpreted as the epistemological break from the old staff policy frameworks of the Keynesian era. From the changing production methods to the complex financial relations, this period was represented the increasing power of the capital all over the world systems in both theoretical and practical levels. Although the increasing hegemony of the neoliberal period was mostly depended on the failure of the

---

[31] However, it should be noted that these three institutions do not act separately in case of the financial sector and the real sector as well as of the trade regime in the determination of political and economic decisions. On the contrary, the theoretical and practical orientations of these three institutions are in harmony.

Keynesian policies which begun in 1960s, the major reason was the systematic problems of the capitalist system and thereby the capital, based on the falling rates of profits. Therefore, there are two crucial questions that waiting to be answered: (1) how did the neoliberal policies take the control of the transformation of the Keynesian system? And (2) what were the ways that the neoliberal policies organized?

The answer to the first question should be sought in the response of the public, depending on the crisis of the 1970s. Although the capitalist class mostly burdened the weight of this crisis due to the falling rates of profits, the working class was also affecting from the problems of the crisis in the economic, social, political and psychological spheres.

In this context, the theoreticians of the neo-liberal paradigm pointed on the continuity of democracy in order to secure its leading position in the capitalist system. Under the guidance of Reagan in the USA and Thatcher in England, the social state policies were evaporating by alleging the high rates of inflation and the other problems in the economic system. As Fülberth expresses that the state and capital relations obtained a new dimension by the withdrawal of public institutions from the economic organizations, the increasing scale of privatization and the staying away from the regulation of the economic system (Fülberth, 2011: 273).

The leading mechanisms in the socio-economic structure were readjusting within the neoliberal policy context and the tripartite relationship between state, capital and labor were rearranged on behalf of the interests of the capital within the neoliberal paradigm. In the government activity, the functions of the state, local government and cooperatives were adapted to the capital by the use of privatization policies (Fülberth, 2011: 273).

On the other hand, in the public framework, the "political consent" was tried to erect in the socio-economic structure. In other words, deus ex machina style transformation did not being used in the public relations. Most governments that embraced neoliberal politics required the prior construction of "political consent" in order to protect the interests of the capital (Harvey, 2005: 39). According to Harvey (2005: 39), the common sense is raised out long-term practices of cultural socialization based on regional or national traditions. However, it is not equal to the "good sense" that can be raised out of existing issues associated with critical engagement (Harvey, 2005: 39).

Additionally, the second factor behind the construction of "political consent" was the scrutinizing of the problems in public and strictly referring to the individual freedom notion. However, the neoliberal rhetoric has the power to diverge libertarianism, identity politics, multiculturalism, and consumerism from the social forces, with its critical emphasis upon individualistic freedoms by the conquest of state power (Harvey, 2005: 41).

Faulkner (2014: 385) refers to this period as the "neoliberal capitalism" and states that the motive of this period is the redistribution of wealth from wages to profits and from labors to capitalists. In addition, Faulkner notes that this motive of the neoliberal capitalism should be depended on the agglomeration of the following five factors: (1) the internationalization of capital; (2) the increasing scale of marketization and the priority for privatization policies; (3) the emergence of new methods (e.g., the financialization of the capital) for the expropriation of the surplus value; (4) the increases in the precarious works and the state power in favor of capital as a channel for the transfer of surplus value from labors to capitalists; and (5) the oppressive state (Faulkner, 2014: 386-387).

The investigation of the extent of the major problems within the frame of labor-capital conflicts in changing the socio-economic structure of the 1980s creates difficulties for a straightforward analysis. In other words, it is possible that new kinds of problems can be emerged by using problematic policy tools of the neoliberal paradigm. In this context, Stiglitz (2012: 59) approaches to the problems of neoliberalism based on the inequality, and thus focuses on the problems about the liberalization of markets by arguing that both trade and capital markets globalization have led to an increase in inequality in different ways.

In the neoliberal period in which there is an increasing level of income inequality all over the world, the labor-capital contradiction becomes mostly prominent in the wage system. The theoretical structure of the neoliberal policy context is constructed on the pressure of wages. Therefore, the labor-capital contradictions are spread out to each segment of the society in parallel to an incremental use of the neoliberal policies. The extent of this spread was depended on parallel motions of problems at national, regional and international levels. However, the hypothetical propositions of orthodox economics in favor of more flexible labor markets all increased the level of inequality and the contradiction between labor and capital[32]. The attempts for more flexible labor markets in parallel to the use of privatization and deregulation policies were all come into prominence of discriminations in those markets against labors. In contrast to this case, Stiglitz (2012: 65) states that strong protection favoring workers correct the imbalances emerging in economic power. It may depend on two reasons (Stiglitz, 2012: 65). First, such protection may lead to a higher-quality workers who are more faithful to their firms, or more willing to develop themselves and their jobs. Second, it may create more coherent society and developed workplaces.

However, the arguments of Stiglitz (2012) in order to prevent this problem may not change the possibility of increasing scale of income inequality emerging in other socio-economic context. For instance, the problems may occur in the political framework. In the context of increasing oppositions about the downward pressures on wages, the capital may have the power to maximize their profits and also may have possibilities to increase inequalities and discriminations among different social segments. There are two ways to do these: (1) by reallocation of investments to different sectors and (2) by creating a "reserve army of labor" through the decline in the level of real investment and thereby making a much pressure on wages. For instance, Harvey (2012: 31) notes on that the capitalists make investments but not necessarily to the production in the neoliberal era. Most of them choose to invest in asset values. Additionally, the rich people invest for an increase in all kinds of asset values: stocks, real estate, resources, petrol and other commodity future exchange and also art markets (Harvey, 2012: 31).

Heilbroner and Milberg (1998: 157) focus on the investigation of the characteristics of the neoliberal period by depicting the inequality fact and therefore approach to this problem in terms of the globalization phenomenon. Heilbroner and Milberg (1998: 156-157) specifically discuss the theory of "New Competition" of Michael Best (1993) and thereby use this theory to express their understandings on globalization phenomenon for the alternatives of the economic activities.

Not very similar to the arguments of Heilbroner and Milberg (1998), Harvey (2003) focuses on the inequality problem from the case of imperialism and discusses the post-Keynesian period within the frame of the superpower of the USA and its politics by referring to this period as the neoliberal hegemony. At the end of the Keynesian period, the major response of the USA to the

---

[32] Please see Figure 6.2.1.A: Labor share trends across country groups.

contraction in the real production was the creation of hegemony in the neoliberal paradigm in the financial sector (Harvey, 2003: 63). According to Harvey (2003: 63), the emergence of financial hegemony was only possible under the liberalization of the whole market system all over the world and the increasing degree of openness of capital markets to international transactions in the specific case.

As it was mentioned-above that the institutional framework was playing a crucial role in the construction of this hegemony in finance. In addition to the transformation of institutional background, new kinds of consensus on neoliberal policies were constructed for the interests of the finance capital. In this context, the process was accompanied by a change in the power relations in the financial markets of the capitalist class (Harvey, 2003: 63). As Harvey (2003: 63) states that in all these axial dislocations of the capitalist system financial power could be used to override working-class movements. The opportunity arose to initiate an attack on labor-power and to reduce the role of institutions in the political process (Harvey, 2003: 63). More specifically, the arguments of Harvey (2003) pertaining to the institutions about the labor markets are very important to understand the dimensions of the contradiction between the capital and labor. Hence, the downgrading of trade unions, the labor parties, pro-labor organizations and vocational unions were all made a serious impact on the socio-politic-economic power of the labor class.

In almost every stage of the Keynesian era, the capitalist class was left the accumulation method based on power aside but after the 1960s with the falling rates of profits and 1970s with the beginning of oil crisis, the capital was basically revolted to the rights of labor acquired after World War II within the frame of neoliberal rhetoric. However, the changing structure of the labor market did not limited with the production markets but also spread to the financial sector. Also, all political superstructure were transformed in favor of the interests of capital. As Arendt (1968: 23) states that an everlasting accumulation of property must be based on an everlasting accumulation of power. The capital accumulation process needs an unlimited power to protect growing property structure (Arendt, 1968: 23).

Within the frame of the arguments of Arendt (1968), the neoliberal hegemony created a profitable employment of surplus capital in the presence of easily exploited low-wage workers and increasing geographical mobility of production (Harvey, 2003: 63-64). More specifically, the mobility of capital had a negative qualification for the labor class in the neoliberal hegemony. Namely, the capital had much powerful to arrive in production systems where the labor-power has a low cost due to the capital-based international agreements.

Although these pro-capital agreements have positive effects on the interests of the capital in the foreign country, the risk of being unemployed is still prevalence for the labor class all over the world. Therefore, they all increase the intensity of competition among the labors and negatively affect the capital-labor accord in the long-run. For instance, the trend in offshoring is an important indicator to understand the regional mobility of capital. For instance, Milberg and Winkler (2013: 201) show that the labor share of income is negatively affected with an increasing in the offshoring in many samples from 2000 to 2008. In addition to the offshore movements, the collapse of the institutional framework has also negative pressure on the labor shares. In the context of these assumptions, Milberg and Winkler (2013: 202) summarize the general outcome of their analysis by stating that the labor market institutions are important in mediating the effects of globalization on workers in OECD countries.

At this theoretical context, the relationship between the capital and the state should be also investigated for an understanding of the economic problems. In other words, the transformation of the state in the neoliberal era should be analyzed to understand the general framework of the capitalist relations between the tripartite relationship between capital, labor and the state apparatus[33].

The organization mechanisms of all these three economic figures have different dynamics. However, although the relationship among these figures has become transformed into a much complex structure, their shares accruing in the aggregate economy have differentiated, depending on their positions in the social system. For instance, the share of government sector has exhibited sluggish movements in the total economic activities in average over 1980-2014 along with ups and downs in some periods for sample countries[34]. However, the neutral position of the government does not mean that their relations with the other economic factors are also neutral. For instance, the government sector has deepened their auxiliary position as a policy-maker through the interests of capital by the elimination of the barriers to trade or opening up new opportunities for foreign investment and financial transactions.

The major outcomes of this bilateral relationship did not create positive impacts on wealth and the income of labors. As Harvey (2005: 159) states that the major success of the neoliberal theory has been to redistribute the current income between different classes, rather than to create wealth or income. In other words, this was the way of determination of the law of redistribution (by the favour of the government sector) in the neoliberal period.

More specifically, the redistribution practices in the case of the government sector can be investigated by the Marxian theoretical components such as the way of "accumulation by dispossession" as Marx ([1976] 1982) introduced in the analysis of the primitive stage the capital accumulation. This kind of accumulation method includes four major characteristics (Harvey, 2005: 160-165) and therefore retains the accumulation of capital by the way of these characteristics in the neoliberal period: (1) privatization and commodification; (2) financialization; (3) the management of crises and their manipulation; and (4) the redistribution of income and wealth by the state apparatus.

Under the topic of privatization and commodification, the capital transforms the unproductive and unprofitable goods into economic units qualifying to the law of distribution through the power of policy-making instruments of the government sector. However, with an increasing scale of financialization[35] process, the regulatory precautions have become to dissolve day after day. Especially, the barriers on speculative flows of capital were removed and thereby the new kinds of investment methods were created in aggregate economic activities.

In addition to these economic movements, the neoliberal period includes the dynamics of crises in both national and international levels. In this sense, the neoliberal paradigm refers to various ways for making crises more prone to the interests of capital so as to change the class dynamics in favor of capital. For instance, two of them can be listed as follow: (1) taking the management of the crisis and (2) focusing on the manipulation method to open up new opportunities for the accumulation.

---

[33] For more information please see Bukharin (1917) and Althusser (2014).
[34] Please see Figure 6.2.5.H: Trends in government expenditures as a percentage of GDP across country groups.
[35] For more information please see Section 3.3.

Finally, the government sector may have its own self-power to differentiate the structure of distribution of wealth and income. Primarily, the government sector focuses on the change in the management of state-owned enterprises by way of the privatization and the wage policies. Additionally, instead of the income and wage-led changes in tax policies, the government sector may follow capital-based tax policies to change the distributional dynamics in favor of capital. The government sector may also redistribute wealth and income through the revisions in the tax system to increase returns on investment rather than incomes and wages, promotion of regressive tax codes, imposition of user fees, and the arrangement of a positive subsidies and tax breaks to corporations (Harvey, 2005: 164).

All these factors show that the government sector, under the method of accumulation by dispossession, has directed its working strategy to the redistribution of incomes and total wealth in favor of capital in the neoliberal era. Basically, it has focused on the fact of making aggregate economy to be more open to the international transactions and thereby making the market system as the primary sphere for the income and wealth generation. Therefore, the restrictions on the market system and any barriers on foreign transactions were all removed through the neoliberal policy tools of the government sector. In other words, the commodification of any materials was spread out of each economic activity. Investments and other activities were tied to the interests of the capital in the context of an increase in profitability rather than of an increase in employment.

In addition to the national reflections of the changes in the structural framework and the class-based contradictions between capital and labor in the micro level, it is necessary to understand their relationship within the frame of international institutions and the consensus in the macro level. For instance, Washington Consensus and the Post-Washington Consensus are the leading determinants in the neoliberal period for an understanding of the changing distributional conflicts between the capital and labor.

The profitability has a dynamic structure. The obstacles to profitability may be overcome by different methods in the production process of the capitalist system. This may be done through the government sector or the self-organization of the capital. Alternatively, this may be done by the mutual consensus between the government sector and the capital through the international factors. Therefore, the Washington Consensus and the Post-Washington Consensus can be evaluated as the mutual integration of both the state apparatus and the capital.

The Washington Consensus basically embodies the neoliberal economy policies constituted by the fundamental institutions such as IMF, WB, and WTO. The key goals of the Washington Consensus are the reduction of government share in the determination of the economic policies and the liberalization of the aggregate economic activities both for the trade regime and the financial sector. The change in property rights and tax laws were also important in the determination of the economic relations.

In general framework, the liberalization of trade regime and the removal of barriers to trade in an international spheres for trade sector; financial discipline, financial reform, the liberalization of capital flows, the determination of interest rates in the free market system and flexible exchange rates for financial sector; the reduction of fiscal expenditures, the privatization of state-owned enterprises and the tax reforms for government sector; and finally, the protection of private property for individual context are all the leading arguments in the Washington Consensus. For instance, Table 2.4.B summarizes the major policies constructed in the Washington Consensus.

Table 2.4.B: Major Policy Reforms in Washington Consensus

1) Fiscal policy discipline
2) Reduction of public spending from subsidies toward broad-based provision of key pro-growth
3) Tax reform
4) Market-determined and positive interest rates
5) Competitive exchange rates
6) Liberalization of the trade regime
7) Liberalization of inward FDI
8) Privatization of state enterprises
9) Deregulation of the economic policies
10) Legal security for property rights

Source: Williamson, 1990

Although the key assumptions of the neoliberal paradigm were spread out all over the world economies, especially to the Latin American economies after the construction of the Washington Consensus, the inner structure of this Consensus may have alternatively portrayed as a tool to adopt ingredients of the neoliberal policies of developing economies which were in severe economic crises. While the neoliberal counter-attack was almost completely taken the control of the socio-economic and political factors in DCs both theoretically and practically, the policy reforms of Washington Consensus was using as the tool of adoption of the neoliberal assumptions in developing countries.

Especially, these policies, which put forward as a treatment method in terms of solving the problems in the countries of Latin America[36], become an important field of experience in the practical case. According to Saad-Filho (2006: 36-38) that explains the existing problem, the limits of the import-substitution industrialization (ISI) strategy adopted by the Latin American economies between 1930 and 1980 can be understood by its internal factors and external factors.

The main objective of the ISI was to become an economic strategy towards the building of the chain expansion of domestic manufacturing industry rather than the import-led growth in the Latin American countries, and therefore, the major reasons of the dependency of the Latin American economies to neoliberal policies were all rooted in the limits of both internal and external problems. Some of them can be classified as follows (Saad-Filho, 2006: 34-38): (a) the currency shortages and the scarcity of external savings, investment, and technology; (b) financial sensitivity; (c) fiscal sensitivity; (d) inflation; and (e) the failure of the achievement for policy coordination.

In this sense, the problems arising in the control of inflation and the fiscal and financial distress required the economic-political transformation of Latin American countries. According to Saad-Filho (2006: 41-45), the following policy tools played a key role in this political transformation: (a) the liberalization of imports; (b) the overvaluation of the exchange rates; (c) the liberalization of the domestic financial sector; (d) the increasing scope of fiscal reforms (e.g., the tax increases and expenditure cuts); and (e) the liberalization of capital account (e.g., loosening of the rules in front of the capital flows).

---

[36] Especially in Argentina, Brazil, and Mexico.

As seen, the neoliberal policy recommendations of the Washington Consensus had been found the opportunity to be implemented in the Latin American countries and thus expanded the boundaries of the capital on the basis of the neoliberal policies. As Robinson (2008: 194-195) states that free trade policies, integration processes, and the neoliberal reform were all opened up the world economies to new forms of transnational capital.

However, the Washington Consensus, which is integrated with all theoretical tools of the neoliberal counter-attack, were collapsed due to the negative outcomes of the implemented policies, especially in the developing countries of the Latin America, in the early 2000s. Additionally, the increasing spread of the crises in 1990s and the escalating severe of their effects on socio-economic parameters in almost every economies, including developed and developing economies, accompanied the criticisms about the neoliberal policies by different schools of thought. However, the limits of the investigation of the reasons behind the crises did not go beyond the boundaries of the neoliberal policy framework. In other words, many of these schools of thought were focused on the re-arrangement of the neoliberal policy agenda rather than the structural change of the economy policies. As Williamson (2003) note that the propositions aimed at the internal changes of the neoliberal policies were all the major signals through the continuity of the neoliberal paradigm.

Kuczynski (2003a) suggest a series of "crisis-tough" precautions against the major factors of the crises emerged in the Latin American countries. Among these precautions, some of them are highly important in terms of the neoliberal paradigm and thereby can be listed as follows: (1) further liberalization of the trade regime; (2) the implementation of selective control over capital inflows (not over capital outflows); (3) emerging of new fiscal reforms; (4) further flexibility of labor markets; and (5) the institutional reforms. Indeed, all of these pro-neoliberal policies can be summarized as the *further liberalization in each socio-economic and political structures*. In that sense, according to the neoliberal thought, the problems in Latin American economies were all originated due to an incomplete implementation of the neoliberal policies.

Actually, the other factor on why Kuczynski (2003b) focus on these further liberalized policies is the harsh critiques on the policy tools of the Washington Consensus and their consequences. Especially, these policy tools of Washington Consensus were all criticized in the Post-Washington Consensus led by Joe Stiglitz who had to leave WB chief economist position because of his arguments against the neoliberal policy framework implemented in the Washington Consensus[37]. However, the Post-Washington Consensus is more challenging than Washington Consensus because it highlights the sociological and legal perspectives of development in such matters as the urbanization under the guiding principles of government, property rights, working patterns and family structure (Şişman, 2011: 103).

Additionally, according to Saad-Filho (2014: 199), the Post-Washington Consensus is not so much different in the theoretical base than the Washington Consensus. On the one hand, it espouses the dogmatic perspectives and thus the reductionism, individualism, utilitarianism and the fact of exchange are all the part of human nature; on the other hand, its presumptions on the development policies of the developing countries are not original in comparison to the Washington Consensus. Therefore, the Post-Washington Consensus internalizes the policies towards liberalization (for both trade regime and the financial sector), privatization and the deregulation, which of them had been specified in the Washington Consensus.

---

[37] For more information please see Broad and Cavanagh (1999).

Yeldan (2008a: 23) focuses on these two consensus through the concept of imperialism and interprets the policy agenda of these two consensus as a new method of the struggles for colonization among the imperialist powers. According to Yeldan (2008a: 23), new colonization forms that are based on turning the underdeveloped countries of the third world into import and inexpensive labor stocks by forcing their foreign trade to be deregulated, on seizing these countries' public resources under the fetishes of "privatization" and "foreign direct investment" and on putting them under the *direct* control of the transnational companies and international finance capital with independent high boards-based control and governance applications were developed.

Actually, the specific goal of Yeldan (2008a) is to evaluate the Washington Consensus and the Post-Washington Consensus in the imperialist context and to explain the reasons underlying the capital's adoption of new imperialist policies in the era of globalization[38]. This process, defined by Patnaik (2010) and Amin (2015) as "contemporary imperialism" for United States, United Kingdom, Japan, Germany and some other countries, is assessed by Yeldan (2008a) pursuant to the perspectives on "collective power". In this context, different from the propositions of Stiglitz and the other arguments (proposed in the Post-Washington Consensus), these perspectives focus on the issues about the dynamics of the capitalist crises by pointing on the class conflicts of the capitalist mode of production. Additionally, the finance capital in DCs is evaluated as the collective power of competition to take under control of the LDCs[39] (Yeldan, 2008b: 28).

The implementation of the policies constructed in the Washington Consensus do not being limited with the Latin American economies but also they can apply to the African economies. In this regard, Adesina (2001) states that the neoliberal thought and its institutional framework have significant impacts on the socio-economic and the political factors of African countries. For instance, the major effort was based on to develop a new generation in favor of creating the neoliberal vision at the level of civil society with different initiatives such as the African Economic Research Consortium (Adesina, 2001: 19-20). These initiatives, at the political level, were undermined the former principles on revolutionary insurgency in the presence of the neoliberal counter revolution (Adesina, 2001: 19-20). Few years later of this counter revolution, the wages in public sector collapsed and there was a secular decline in formal sector employment which were drifted into the non-formal sector (Adesina, 2001: 19-20).

As in the case of Latin American countries, there have been revolts in African countries to the policies of Washington Consensus as well. Especially, it is possible to ensue different types of counter-arguments (i.e., the limitation of roles of the neoliberal institutions such as IMF and WB in the continent) to the neoliberal policy contexts that spread to the continent implemented under New Partnership for Africa's Development (NEPAD) in Africa. For instance, Bond (2008: 259) mentions that these institutions should be closed down because of the following six reasons. First, they are the mastermind and the gendarme of the global neoliberalism. Second, they are active in each country of the African region. Third, they rely upon in almost all development policies from micro to macro perspectives. Fourth, they are even responsible for the project-level conditions. Fifth, they are commoditized the most vital public services. And

---

[38] For a detailed summary of the main purpose, the question of debates, fundamental institutions and the major proponents of Washington Consensus and Post-Washington Consensus please see the Appendix of Bond (2008: 279-280).

[39] In this context, according to Yeldan (2008c: 40-41), the decreasing trends in the labor share of income should be evaluated within the frame of an increasing hegemony of Washington Consensus.

sixth, they are periodically exposed to the anti-IMF demonstrations and the other activist movements and thus are experienced a severe legitimacy crisis.

These kinds of movements against the neoliberal paradigm in African and Latin American countries are also in existence in each region of the world. To categorize these counter-attacks on neoliberal virus[40], the social position of each country in the world in an impact of neoliberal paradigms should be addressed. Therefore, in many spheres, treating the attacks against the neoliberal policy framework will be more useful for the comprehensive understanding of the aggregate dynamics of the capitalist relations. However, in the 1990s and afterwards, an important factor that influenced the structure of counter-attacks in which the neo-liberal paradigm became a hegemonic power in the social system emerged: *the collapse of the Soviet Union and the consolidation of the neoliberal hegemony all over the world together with the reduction of the class-based power of the labor vis-à-vis to capital*. As a matter of course, these were led to the stagnation in the organization of the left-wing on anti-capitalist movements. As Fülberth (2011: 287) rightfully states that as a result of this stagnation, the right-wing, nationalist movements then took over the struggle against the international organized capitalism.

The interesting point was that the left-wing was organizing in this period in green actions against the neoliberal paradigm that was transcending the activities of labor-led movements. This green movement, which emerged on the scale of the destructive effects of the nature and the environment on industrial politics of the growth-led and consumption-led neoliberal paradigm, also received great support from the left-wing. Furthermore, the emergence of these "new social movements" was manifested other kinds of different movements against the neoliberal paradigm. For instance, the general framework of the feminist movements was changed in the neoliberal period and therefore they turned from an equality-based left-wing politics to gender-based politics. In addition to the changing structure of the feminist movements, there were also counter-attacks on globalized socio-economic activities. These movements against the globalization phenomenon were all ranged from taking the control of international capital to the liberalization of trade regime and the financial sector. Additionally, both liberalized countries, which were emerged after the collapse of the Soviet bloc and the guerilla movements in countries where have been independent after severe social conflicts, were all followed a much different way in left-wing structure than the traditional perspectives. And finally, the increase in the anti-American and European Islamic movements emerged in the Middle East and the African countries were indicated the other types of attacks on the neoliberal paradigm after the 1980s (Fülberth, 2011: 287-288).

As it is seen, although the neoliberal policies have led to consolidate their hegemony at each point of the world under their expansion, they could not run away from the emergence of the opposite movements in different social contexts. However, within the frame of the collapse of the neoliberal paradigm, all these social uprisings should be evaluated by the emphasis of Marx on the change of the production powers:

> "No social order is ever destroyed before all the productive forces for which
> it is sufficient have been developed, and new superior relations of production
> never replace older ones before the material conditions for their existence have
> matured within the framework of the old society. Mankind thus inevitably sets
> itself only such tasks as it is able to solve, since closer examination will always

---

[40] The term of "the neoliberal virus" which I use is inspired from the term of "the liberal virus" originating by Amin (2004).

show that the problem itself arises only when the material conditions for its solution are already present or at least in the course of formation".

(Marx, 1859)

PART 3

THE MAIN STRUCTURES OF FINANCE AND TRADE
IN THE NEOLIBERAL ERA

3.1 Main Policies towards the Neoliberal Agenda

The neoliberal policies have been a vital part of the trade regime and the financial sector after 1980s period. The neoliberal paradigm has declared its sovereignty in the world by way of the suppression of the current socio-economic structure, the using of democratic ways or using the economic and social problems. Therefore, it has different policy objectives and social factors within itself. However, these objectives and policy frameworks may differentiate subject to the regional factors and the country-specific conditions. Although there are differences within itself, it is possible to summarize the main headings of the policies that originate the neoliberal paradigm in many dimensions.

Basically, the changes in the neoliberal policy context are all taken formed subject to the contradictions of tripartite relationship between capital, labor and the state. However, different from the active state power in the economic activities of the Keynesian period, the hegemony of state was reduced and depended on the interests of the capital in the neoliberal era. Additionally, in contrast to the welfare increases of the working class in the Keynesian period, the class-based discriminations were all prevalent between the social and economic actors. In that sense, in addition to the capital-led policies at the expense of the conditions of the state power and the working class, the capital as a class were also constituted its own policy agenda in terms of its own interests. However, the important point is that all these policies in favor of the capital were depended on its own theoretical assumptions. In short, these assumptions can be listed theoretically as follows (Hossein-zadeh, 2014: 9): (1) "perfectly" competitive firms or markets; (2) "rational" prices; (3) "efficient" allocation of resources; (4) "just" distribution of income; and (5) "automatic" adjustment of any disequilibrium.

All these assumptions can be criticized in terms of both realistic and unrealistic contexts. However, all of these theoretical propositions behind the political case of the neoliberal paradigm were taken form in the presence of these assumptions. Therefore, the classification of these assumptions can be formed on the following principles: (1) the macroeconomic structure (e.g., interest rates, exchange rates and the international investments); (2) the government activities (e.g., government expenditures and the tax reforms); (3) the policies towards the privatization and the deregulation; (4) the liberalization of trade regime (e.g., the removal of all barriers on imports and exports of goods and services); (5) the liberalization of financial sector (e.g., increases in the free mobility of capital across boundaries); and (6) the more presence for economic and social rights and freedom (e.g., the property rights).

As a first case, the interest rates are one of the leading macroeconomic indicators in the neoliberal paradigm. In contrast to the Keynesian period, the positive interest rates are the critical elements in the neoliberal structure. These positive interest rates are necessary for both the production system and the capital flows. On the side of the real economy, the investments are needed to the positive interest rates because they fosters people to save more and thereby stimulates the supply of resources for the investments. On the other side, On the side of the financial sector, it limits the outflows of both domestic and foreign capitals. Additionally, they create an environment in which stock markets and financial markets can develop at the national level. It means that so many different financial investment opportunities can be created as long

as the capital can be attracted to the domestic market. Positive rates of interests will also ensure the restraint of inflation[41] in terms of the neoliberal factors as long as there is a competitive market structure in the economic system.

In addition this positive framework of the interest rates, the determination of the exchange rates is the second crucial macroeconomic indicator in the neoliberal paradigm. The basic components of the exchange rates are taken form subject to the relationship between the state and the capital. The competitive devaluations are not a correct strategy in the neoliberal era for the interests of capital. Any kinds of government interventions on the market structure in the determination of exchange rates are not normal for the neoliberal paradigm. On contrary, the exchange rates should be determined in the competitive and free market system, irrespective of the government interventions.

As a result of the market-based determination of the exchange rates, the current problems in the mobility of capital can be limited, depending on several factors. For instance, by means of the limitation on the capital controls, the exchange rates risks will cease to exist and thereby the problems that may arise in balance of payments can be avoided. However, all these limitations on the capital mobility should be applied in the short-term. Any intervention to currencies may negatively affect all these conditions as well as affect the prices of imported and exported goods and services in the trade regime which can lead to the deterioration of international trade or can create negative conditions for the economic system of a country at the expense of the economies of other countries.

The third principle is about the international investments. The main goal of the neoliberal paradigm is to add an international dimension on investments. Therefore, as international investment increases, there is no decisive feature of the debt at the national level. The main task of the state is to remove all obstacles in the legal framework in front of investments. Both fiscal policies and financial policies should be adjusted based on foreign capital investments. These investments must be compatible with the basic content of interest rates and exchange rate policies. In addition to the legal adjustments of the state for the international investments, the monetary policy of the central bank should be arranged in such a way as to prevent the financial transactions in front of the investments from being distressed.

Together with these three basic macroeconomic principles necessitated by the neoliberal paradigm, the state activities also play a crucial role in the construction of the neoliberal hegemony. One of this factor is related to the government expenditures. Although the mainstream propositions argue that the state is completely withdrawn from the economic activities and does not stand out in any way, the state is actually the forerunner of the legal structure of all the neoliberal facts. Although the state is devoted the task of public investment and infrastructure operations to private capital in the neoliberal paradigm, it continues to exist with all its power to create a suitable environment in economic and social systems in favor of profitability of the private capital. As Şişman (2011: 100) states that public expenditures should be directed towards public infrastructure which is called as direction. Because it is prescribed that the state will succeed by withdrawing from subsidiary and auxiliary investments, that is, withdrawing from state productive investment areas (Şişman, 2011: 100). In this case, the size and the position of social spending will be changed. Some of the social rights will be destroyed and government expenditures will be started to control by the private sector. In other words,

---

[41] Especially one of the most important examples of this case can be understood from the socio-economic outcomes of the Volcker shock emerged in 1979.

social spending will move from the control of state to the control of private sector in the neoliberal period.

Fifth, another crucial task of the state in the neoliberal era comes to the fore in the framework of the reforms of taxation. The main structure depends on the changes of the tax base and marginal tax rates. According to the neoliberal perspective, the tax base must be extended in favor of the private capital and marginal tax rates should be determined to take into account of the profitability of the capital. Put it differently, taxes on productive investments of the private capital should be reduced, but the consumption-based taxes taken indirectly should be increased. By doing so, the burden on the private capital will be transferred to the households through the indirect taxation. In addition to this, tax reforms are not being limited at the national level, but are also determined at the international level. In other words, the reduction of taxes on investments of foreign capital will bring about the further development of the financial sector. More foreign capital will invest in the financial sector of the country and will lead to the development of economic system.

As the sixth principle, the state should provide the opening of public resources to the capital under the privatization policies. The privatization strategy, in which the neoliberalism particularly focuses on, refers to the transfer of capital from the government sector under the assumption that resources will be used more efficiently by the private capital. The government sector should transfer all of its own state-owned enterprises and resources to the private sector. This will ensure that the growth rates will be much higher in parallel to the development of the economic system both as financially and socially. However, the critical issue is the employment policy that the private capital will follow in the framework of the profit maximization, in which the private capital may reduce the level of employment by using advanced technology in the production system.

As the seventh principle, another task of the government sector is to remove all barriers against the private capital. In short, this case can also be called as the deregulation of the economic system in both real and the financial sectors. The main goal of the deregulation policies is to organize ways to provide the perfectly competitive market structure in theoretical and practical contexts. By making the market structure more competitive, it is aimed to move away from a monopolistic market structure. However, large-scale capital is able to expropriate small-scale capital, depending on the equity level of capital. Therefore, in the neoliberal era, deregulation policies do not only apply to the real sector of the capital but also to the financial sector. Especially, in the financial transactions, it will be much more profitable for capital to flow into a country where it involves the most appropriate policies for its strategy.

As the eighth principle, in the trade regime and the financial sector, all obstacles in front of the capital must be removed on the basis of neoliberal policies. The obstacles on export and import should be removed as much as possible from the restrictions such as quotas and customs duties. The tariffs on imports must be reduced and the exchange rate should be determined in the free market system on behalf of the normal processing of the trade regime[42].

As the final principle, the legal basis of property rights must be prepared and guaranteed in order for the market to fully compete and to be able to identify the capital's presence both at the national and the international levels. The protection of property rights in the institutional framework for both the capital and individuals is one of the main purposes of neoliberal system.

---

[42] In the following sub-section 3.1.1, I will elaborate on this issue.

Therefore, ignoring of these property rights may lead to the emergence of crises in socio-economic framework.

All in all, these principles, including the macroeconomic structure, the government activities, trade regime, financial sector and the property rights, can be all regarded as the main policy tools of the neoliberal paradigm. In addition, changes in the socio-economic and cultural systems, resulting from technological developments, will cause neoliberal paradigm to change further and the related policies will be rearranged in the interests of the capital. However, as the main objective, neoliberalism will maintain its basic policy presumptions on the basis of the removal of all obstacles against the capital and the protection of the capital-oriented policies of state on the legal ground of property. Therefore, the changes in the trade regime and the financial sector should always be examined in both theoretical and practical considerations for a comprehensive understanding of the neoliberal paradigm in parallel to its main objectives.

3.1.1 Liberalization of Trade Regime

In the neoliberal period, developments in the structure of trade have been shaped in the context of neoliberal assumptions. What kind of trade orientation was to be made basically depended on the investment decisions of the private capital. The government has set policies that would increase the commercial opportunities for the private capital, rather than to determine the commercial practices. These policies cover many different factors, ranging from the abolition of trade protection to the legal regulations. For example, customs tariff and domestic industrial protection policies, which strictly regulated in the Keynesian period, have lost their importance in the neoliberal period.

Especially, in the Keynesian period, customs tariff and protectionism (e.g., for the domestic industry), which have been strictly regulated by the imposition of GATT and other types of policy tools of the Keynesian paradigm, have lost their importance in the neoliberal period. The fundamental issue of the Keynesian thought was to reach the full-employment level and the efficient use of resources in the production system. However, the neoliberal paradigm has promoted institutions, such as the WTO, to take a leading position in trade policies, which suggests that protectionism and tariffs must be reduced in favor of the market efficiency.

Related to this issue, according to the Karluk (2009: 4-5), the following factors for the case of an increase in international trade will be emerged: (1) the reductions in custom tariffs; (2) the comparative advantages; (3) specialization; (4) the social and the cultural preferences; (5) emerging of new habits (based on information and communication technologies); (6) the payment facilities and the development of the banking system; and (7) the other economic activities (e.g., the maintenance and repair of imported goods and services, increasing mobility of foreign capital, the projects which are undertaken in foreign countries, intra-firm trade of multinational corporations). In fact, these factors, which are listed by Karluk (2009: 4-5), include the main headlines of the liberalization process of the trade. According to Krugman and Obstfeld (2009: 4), the existence of international trade is also a sign of the gains from trade. This discourse is actually another expression of the necessity of the trade liberalization. The problems arising from the liberalization of trade are less than the gains achieved in general. Therefore, appropriate conditions for international trade in the social framework must be provided and the obstacles in front of the exchange of goods and services must be eliminated altogether.

Additionally, Krugman and Obstfeld (2009: 4) state that two countries can trade with each other in order to get mutual benefit even when one of them is more efficient than the other at producing both products, and when producers in the less efficient country can compete only by paying lower wages. Also, Krugman and Obstfeld (2009: 4) insert that trade benefits countries by allowing export goods whose production makes relatively heavy use of resources which are abundant locally while importing goods whose production makes heavy use of resources which are scarce locally. Finally, related to the migration and the financial conditions, Krugman and Obstfeld (2009: 4) state that international migration and international borrowing and lending are two major factors in forming of mutually beneficial trade.

These arguments reveal the dimension of neoliberal policies similar to what IMF staff has stated about trade liberalization. Krugman and Obstfeld (2009) also indicate that policies (for trade and investment) that will make the economic environment more liberal are necessary for sustained growth. Additionally, they state that trade liberalization will create conditions that will benefit poor people. As the IMF (2001) staff points on that making markets more liberal in countries are more beneficial than improving their access to other countries' markets. In case of industrial countries, the liberalization of agricultural markets forms the major benefit (IMF, 2001). However, the main benefit for developing countries comes from the liberalization of manufacturing and agriculture (IMF, 2001). On the other hand, the low-income countries gain most from the liberalization process in agricultural sector as in the developed countries because this sector has a relative importance in their economies comparing to other sectors (IMF, 2001).

The particular arguments and directions of IMF on this issue are based on a further liberalization of the international trade. Although neoliberal hegemony has accelerated liberalization in both developing and industrial countries, it has not been completed for all sectors in those countries. For instance, the developing countries have mostly comparative advantages on agricultural products and labor-intensive manufactures and services. In addition, industrial countries still apply for high protection on agricultural production. For instance, some of the major factors on protection can be ranged as follows: (1) tariff peaks; (2) tariff escalation; and (3) restrictive tariff quotas.

The theoretical framework behind the liberalization process of trade regime is mostly committed to the comparative advantage hypothesis of Ricardo. According to this hypothesis, each country should specialize in products in which the production of these products makes relatively heavy use of its most abundant and cheaper production factors (Screpanti, 2014: 20). In the absolute terms, these factors do not necessary to be lower compared to other nations (Screpanti, 2014: 20). Therefore, specialization provides a country to produce the goods in efficient scale compared to other countries and thus increase its exports and buy abroad the goods which is not efficient in producing locally (Screpanti, 2014: 20). All of these factors increase the scale of production, reduce prices, and raise global welfare (Screpanti, 2014: 20). The main discourse of this hypothesis is clear: *the liberalization process will increase the size of the production system at the international scale, support employment, provide mutual benefits to labor and capital and improve the welfare.*

In the neoliberal paradigm, the liberalization of trade is protected under the guidance of different types of institutions and agreements. For instance, some of these institutions can be listed as follows: (1) IMF; (2) WB; (3) WTO; (4) OECD; (5) Bank for International Settlements (BIS); (6) G-7; (7) G-20; (8) World Intellectual Property Organization (WIPO); and (9) European Commission.

The agreements made by these institutions are also as follows: (1) North American Free Trade Agreement (NAFTA); (2) United States Agency for International Agency (USAID); (3) TRIPS; (4) Agreement on Trade-Related Investment Measures (TRIMs); and (5) GATT. All these institutions and agreements were originally established and regulated in the neoliberal age in order to ensure the free movement of private capital all over the world. The pros and cons of the liberalization policies for trade regime, in terms of the neoclassical theory on trade, can be categorized as shown in Table 3.1.1.A. Additionally, some of the major policies adopted in this context, in relation to the trade regime, can be materialized as follows:

1. To ensure that international trade develops in a balanced structure. Therefore, to develop policies and solutions to the problems in order to reach full employment and higher growth rates.

2. To develop alternative solutions to the problems that may arise in the balance of payments.

3. To produce policies for the determination of the exchange rate in the free market system.

4. To provide the dependence on democracy, human rights and civil liberties on behalf of providing the liberalization in the trade regime.

5. To promote the policy of economic expansion and the support for socio-economic coordinated developments.

6. To ensure the implementation and supervision of multilateral trade agreements.

7. To provide settlement of commercial disputes.

8. To supervise national trade policies and domestic regulations against foreign investors.

9. To integrate the socio-economic processes of the developing countries with the multilateral trade system.

10. To provide technical and economic supports to developing and underdeveloped countries.

11. To provide consultancy services to developing and underdeveloped countries on trade.

12. To promote the elimination of the discriminatory behaviors in international trade relations, which provide significant reductions in customs tariffs and other barriers to trade.

13. To develop the multilateral trade system and to protect its core principles and to create free trade zones.

14. To provide the procedures and measures for the implementation of the intellectual property rights in trade, recognition of the intellectual property rights, provision of necessary protection and provision of necessary standards.

Table 3.1.1.A: Pros and Cons of Trade Liberalization

Advantages	Disadvantages
• Specialization in goods and services in which they have a comparative advantage	• The unbalance between different sectors
• Convergence between prices	• Structural and cyclical unemployment
• Lower prices	• Environmental crises
• Economies of scale	• The low development levels in infant industries
• Efficient allocation of traded goods	• Increase in sectoral discrimination
• Lower poverty rates	• Problems in balance of payments
• Increasing competition level	
• Stimulation of economic growth	
• Increase in the employment level	

3.1.2 Liberalization of Financial Sector[43]

The liberalization policies of the neoliberal system are two-sided. One of them is constructed on the liberalization of trade which was investigated in the previous section, and the other is the policies including the liberalization of financial sector which will be examined in detail in this section.

In the theoretical framework of the neoliberal paradigm, what is financial sector and how does it functions? Essentially, the financial system is an organization entity. In that sense, it facilitates the flows of funds towards the economic transactions, depending on different factors. Financial markets exert the major economic function of transferring funds from households, firms, and governments that have saved surplus funds by spending less than their income to those that have a shortage of funds (Mishkin, 2007: 23).

The major point that Mishkin (2007) tries to show is the providing of an interaction between the demand of economic agents who have a shortage of funds and the supply of economic agents who have an excess funds. These agents are economic units which play a crucial role in all economic activities and involves the households, firms, governments and the foreigners. Within the frame of the relationship among these agents, the principal savers/lender are households, but there are also other principles who have excess funds such as business enterprises, the government and foreigners (Mishkin, 2007: 23). On the other hand, the principle spenders/borrower are businesses and the government, but the other units such as households and foreigners can also be regarded as borrowers because of financing motives of their purchases (Mishkin, 2007: 23-24). In order to ease the transactions among these economic agents, there are different types of structures such as the subsidiary organizations and institutions and the legal and executive enterprises (Ağır, 2010: 2).

While one of the crucial feature of the financial sector is to provide the flows of funds between different kinds of economic agents, the other feature is to allow funds to redirect from people who lack productive investment opportunities to people who have excess surplus (Mishkin, 2007: 25). However, the main motive behind the increasing role of financial system depends

---

[43] In this section and the following sections, I mostly prefer to say "financial sector" rather than "financial markets" because the financial sector comprises both legal and illegal structures related to finance. However, I do not completely reject to use the term of "financial market", depending on the economic phenomena.

on the problems of occurring in the balance between savings and investments of economic agents. Therefore, it is possible to define the financial sector as an organization in which it provides necessary tools to economic agents by the construction of financial institutions and provides to meet these economic agents as debtor and creditor.

The neoliberal perspective argues that the liberalization process in the financial sector provides the efficient allocation of capital as in the case of trade liberalization. According to Mishkin (2007: 25), financial markets have a greater importance for producing an efficient allocation of capital because it promotes to an increase in production, and thus efficiency for an overall economy. Additionally, well-functioning financial markets also positively contribute to the development of well-being of consumers by providing sound structure for better purchases (Mishkin, 2007: 25).

There are two types of financing methods in the process of the financial sector: (1) the direct finance and (2) the indirect finance. In the direct finance, there is one-by-one relationship between borrowers and lenders in the financial markets (Mishkin, 2007: 24). The financial intermediation is not necessary for economic activities because there is no straightforward relationship between the economic agents. In this relationship, borrowers are almost placed as the major actor in the economic activities. They sell their shares or securities in the financial markets in order to increase the circulation and the liquidity of money. Additionally, they circumvent the high interest rates of financial intermediaries (e.g., banks). On the other hand, the indirect finance can be summarized as a relationship among economic agents who have an excess funds and those who have a lack of funds met by the financial intermediaries such as deposit institutions, contractual savings institutions, and investment enterprises. It involves medium and long-term capital market instruments such as stocks and bonds. The policies using by the financial intermediaries are called as the financial intermediation process and thus are the primary way for moving funds from lenders to borrowers (Mishkin, 2007: 35).

The important point is that these financing methods, which are used in the financial sector in parallel to the neoliberal policy framework, are actually applied to reduce transaction and information costs within market logic. Also, these methods basically tries to reduce the risks emerging due to financial transaction among individuals.

All in all, in the neoliberal framework, financial sector consists of different types of interconnected sub-markets. Essentially, they are categorized according to their characteristics. Therefore, these sub-markets can be classified under three basic categories as follows: (1) money and capital markets; (2) primary and secondary markets; and (3) formal and informal markets.

3.1.2.1 The Functions of the Financial Sector

There are several functions of a well-functioning financial sector in the neoliberal period. The implementation of these functions create positive effects on the reduction of the risks emerging in the capital flows and attract the foreign investments for financial markets in the international transactions. According to Levine (1997), some the basic functions of the financial sector can be classified as follows: (1) mobilization of funds; (2) risk management by diversification; (3) reduction of information costs; (4) reduction of monitorizing costs of managers; (5) easing the exchange of goods and services; and (6) reduction of financial intermediation costs.

3.1.2.1.1 Mobilization of Funds

In the neoliberal finance, financial sector is a leading sector which collects savings from economic agents and channels those savings for high return investments. Therefore, it may lead to an increase in the economic development. For instance, Ang states that the financial development can improve and empower the overall savings mobilization process and transfer financial resources to stimulate economic development (Ang, 2010: 2).

Additionally, in this neoclassical framework, it is assumed that the capital accumulation is provided in line with an increase in the economic development. As Levine (1997: 698-699) states that mobilization or alternatively pooling comprises of the agglomeration of capital from various savers for investment.

In addition to the capital accumulation process, financial system also provides risk diversification and the efficient allocation of resources through the mobilization of savings (Kar, Taş and Ağır, 2008: 197). Levine (1997: 699) points on that mobilization provides the creation of small scale instruments which increase opportunities for households to get diversified portfolios, invest in efficient scale firms, and to rise the scale of asset liquidity.

Furthermore, increase in the technological innovations and incentives are supposed to be a result of the mobilization of savings in the neoclassical finance. According to Levine (1997: 699), increase in the quality of savings mobilization can improve resource allocation and enhance technological innovation. All of these points are provided by the assistance of different types of financial intermediaries such as banks and insurance companies.

3.1.2.1.2 Risk Management through Diversification

In the neoclassical finance, the second function consists of the management of risks through the diversification process. In other words, financial system eases different types of risk management through the diversification of funds. Some of these risks can be listed as a credit risk, interest rate risk, inflation risk, exchange rate risk, reinvestment risk, refinancing risk, market risk, liquidity risk, political risk, margin risk, payment risk, off the balance sheet risk, dependency risk and institutional arrangement risk. According to Mishkin (2007: 36), the diversification method can help reduce the risk that investors may experience in the economic process. The major tool to do this is the risk-sharing. By using the risk-sharing method, investors can create or sell assets with risk features that individuals are comfortable with, and the financial intermediaries can use funds they get by selling these assets in order to purchase other types of assets which of them have far more risk comparing the former assets (Mishkin, 2007: 36).

Financial system offers an opportunity to reduce the investment risk and liquidity risks for investors (Ağır, 2010: 4). For instance, during the financial transactions, there may arise two different types of risks: (1) liquidity risk and (2) idiosyncratic risk (Levine, 1997: 691).

On the one hand, since liquidity is the ease and speed with which agents can transform assets into purchasing power at agreed prices, liquidity risk is emerged from ambiguities in the process of transformation of assets (Levine, 1997: 692). Furthermore, liquidity risk indicates both of the inconvertibility of assets into money and the disposition of value of assets below the current market value (Ağır, 2010: 4-5). On the other hand, the idiosyncratic risk is the private risk

which is generated from the ongoing situations in the economic process (Kar, Taş and Ağır, 2008: 194).

Furthermore, the capital markets and financial intermediaries may have an important role in the reduction of liquidity risks. Primarily, liquid capital markets are the markets in which financial instruments trade relatively cheap with each other and with the minimal ambiguity about the time and the place of trade (Kar, Taş and Ağır, 2008: 195). In this case, two aims can provide of staying away from liquidity risks. These aims can be listed as follows: (1) the minimization of information asymmetries and (2) the reduction of transaction costs. These two aims also lead to an increase in the development process of financial markets and institutions. For instance, banks, building societies, credit unions, brokers, insurance companies and pension funds can be shown as the most important financial intermediaries and institutions in this development process. As Mishkin (2007: 36) specifies that low transaction costs may create advantages for financial intermediaries by allowing them to share their risks at low costs, providing an extra profit from the spread between the returns the intermediaries get on risky assets and the payments the intermediaries make on the assets they have sold. Moreover, these financial intermediaries reduce risks of the long-term projects and reduce risks by providing and ensuring necessary funds for new investments (Ağır, 2010: 5).

Finally, risk diversification may stimulate the economic growth in parallel with the positive effect of technological progress. King and Levine (1993a, 1993b) express the same argument by stating that the diversification of portfolio in innovative projects reduce risks and therefore bolsters the level of investment, especially in the innovative projects. Hence, providing of risk diversification in the presence of sound financial system may positively increase the technological change and thereby may promote a higher economic growth (King and Levine, 1993a; 1993b). As Levine (1997: 694) states that the ability of financial system in providing of risk diversification services may affect long-run economic growth in the presence of altering resource allocation and the saving rates. Indeed, it means that there may be two-way interactions in the economic system of any country, depending on these conditions. The major determinant of one factor may be determined by that factor in different structures.

3.1.2.1.3 Reduction of Information and Transaction Costs

The neoclassical finance is also based on the aim of the reduction of information and transaction costs. For instance, according to Mishkin (2007: 35), the major problems for people who have excess funds to lend are transaction costs, the time and money spent in exerting financial transactions. However, savers may not have ability to evaluate the accurate conditions of economic activities in which they benefit from these conditions in the long-run. As Levine (1997: 694) points on that the time, capacity, or means to collect and process information on a large scale of enterprises, managers, and economic conditions may be limited for individual savers.

For instance, some of these costs can be listed as follows: (1) information costs; (2) bargaining costs; and (3) policing and enforcement costs. Information costs are worth-emphasizing among these three cost factors. In the presence of an unreliable information, individual savers mostly stay out of investing in economic activities (Levine, 1997: 694-695). In addition, high costs of information make new investments unattractive for savers. Therefore, high information costs may restrict capital from making highest value use (Levine, 1997: 695). In order to reduce these costs, financial intermediaries play a leading role in the economic system. For instance, in the

process of an emergence of the financial intermediaries, the costs of information acquisition has an important role (Diamond, 1984; Boyd and Prescott, 1985).

In this framework, the reduction of the costs of information acquisition may create new investment opportunities (Levine, 1997; Mishkin, 2007). Additionally, reduction of information costs may increase the scale of efficiency in the allocation of resources. As Levine (1997: 695) puts on that economizing on information acquisition costs eases the acquisition of information about investment opportunities and thus develops resource allocation.

Both of these acquisitions will be in line with the processes of the development in the financial sector. For instance, Ağır (2010: 5-6) notes that the development of financial sector provides the emergence of the following factors: (1) the technological innovation; (2) specialization and economic growth; (3) higher savings rates; (4) easing the gain for investment opportunities; and (5) enhancing the resource allocation by means of an increasing information about firms through lowering the costs of information and acquisition. Finally, besides the financial intermediaries, stock market may positively influence the acquisition of information and dissemination of firms in financial sector by way of enhancing the relationship between financial resources and the financial development (Levine, 1997: 695).

3.1.2.1.4 Reduction of Monitorizing Costs of Managers

The other characteristic of the neoclassical view on financial sector is based on the reduction of monitorizing costs of firm managers. As Levine (1997: 696) states that besides decreasing the level of costs of acquiring information ex ante, financial contracts, markets, and intermediaries may emerge to mitigate the information acquisition and enforcement costs of monitorizing firm managers and performing corporate control ex post.

One of the most important example about this case can be seen by focusing on the relationship between the owners of stocks and the firm managers. In that relationship, firm managers have a virtue of information against the owners of stocks. The virtue of information may create an impediment in the efficient allocation of resources for productive investments in the absence of a sufficient number of financial intermediaries and financial arrangements. Therefore, in the theoretical framework of the neoclassical finance, the financial system may be reduced to the solving the problem of the virtue of information by monitorizing the firm managers. And hence, monitorizing the firm managers provide of an efficient use of resources by allocating them into the productive areas. This allocation process of resources brings power to control the total credits which is taken from the financial intermediaries. By doing that, financial system may stimulate to an increase in the level of investment and thereby promote of an efficient allocation of savings (Levine, 1997: 696-698).

However, difficulty level of monitorizing firm managers may differ among different markets. For instance, Kar, Taş and Ağır (2008: 198) state that in the developed security markets, it is much easier to monitor firm managers. Therefore, it provides easier corporate control, management of administration and dismissal of underperforming managers from firms, depending on their evaluation score of managers. This is one of the most important threat type to take the control of corporations in which it may predispose executive aims to owners of stocks reflecting in efficient management (Levine, 1997: 696-698).

3.1.2.1.5 Easing the Exchange of Goods and Services

The fifth characteristic of the neoclassical finance leans over the importance of easing the exchange of goods and services. The financial system provides this condition by enabling creditors to funds faster and by lowering costs together with the introduction of new economic tools for the financial system of a country.

By using these economic tools in the financial transactions and relations, it is assumed that necessary resources for the development path of an economy will be provided by the efficient allocation of these resources in the process of an exchange of goods and services. Therefore, if these conditions are provided, the productivity gains will be increased and thereby an increase in the level of investment will be stimulated in the long-run. As Levine (1997: 701) notes that markets that promote exchange foster returns on productivity.

3.1.2.1.6 Reduction of Financial Intermediation Costs

The final characteristics of the neoclassical finance depends on the aim of the reduction of the costs of financial intermediation. It means that to provide a better financial relations, financial system requires the reduction of financial intermediation costs. Thus, it is expected to create cost advantage in the financial sector by means of reducing the costs to a lower levels, depending on the financial sector development. Creation of cost advantage will stimulate the increase in competition between the financial institutions and firms. This kind of competitive structure contributes to the reduction of costs by closing the spread between borrowing interest rate and lending interest rate. As Levine states that besides facilitating savings mobilization and thus widening the of set production technologies available to an economy, financial arrangements that lower transaction costs can stimulate specialization, technological innovation, and economic growth (Levine, 1997: 700).

3.2 Theoretical Foundation of Financial Liberalization

As within the liberalization of trade, the process of financial liberalization is also a crucial factor in an understanding of the neoliberal policy components after 1980 period. Similar to the liberalization of trade, financial liberalization also needs to be examined in more detail in terms of the neoliberal policies and their major principles in order to understand the complex and interrelated processes of the capitalist system. The main impulse in that framework is that the neoliberal paradigm gives great importance to the problems of finance, economic growth, the level of investment and employment, inflation rate, the change in the balance of payments, and the economic development. Indeed, besides the theoretical dimension of this subject, it is necessary to expose the basic factors of the problem about the practical dimension. Therefore, the issues that may be related to the financial sector will be considered as a special case. However, in this sub-section, rather than focusing on the critical approaches[44], the fundamental points of the neoclassical finance will be tried to be investigated in terms of how its defenders have defined it and what the assumptions are. Thus, in this framework, the results of the empirical examinations will be tried to be specified in parallel to the abstract assumptions of the topic.

The difference between the structure of finance in the Keynesian period and the structure of finance in the neoliberal period has been formed as a result of the problems emerged in the

---

[44] For more information on critical assumptions please see Özdemir (2015).

capital accumulation process which started in the 1960s. In particular, the Keynesian period refers to a financially repressed era for almost every developed and developing country groups. In this financially repressed period, price movements, which were to be determined by the market forces, were restricted through the legal authorities. The major factor behind this restriction was depended on the transfer needs of financial resources and assets of the public sector. For instance, related to the financial sector, there were three fundamental instruments in which this repression was depended on: (a) capital flows; (b) exchange rates; and (c) interest rates. While repression was basically applied to the interest rates and exchange rates, capital flows were also restricted in the economic system. In particular, interest rates and exchange rates have never been left to the hegemony of free market forces by the government sector. Conversely, the actual rates were determined below free market rates for each parameter. However, this case affected the interests of large scale capital groups in several economic activities, while small scale capital groups were also adversely affected by these market interventions of the government sector.

This fact shows that the centralization and concentration of the capital were proceeding in the Keynesian period as well. However, especially from the beginning of mid-1960s, the increase in inflation rates did not pursue in the economic structure compatible with the current low-interest rates and undervalued exchange rates. In other words, the macroeconomic stability of almost every repressed economy negatively affected with the increasing rates of inflation from the mid-1960s and then intensified in the early 1970s. While the necessary level of interest that curb the inflation rates were floating at negative rates, the domestic exchange rate was overvalued, which were created problems in the macroeconomic stability for long-run period by creating negative effects on the balance of payments. Basically, the problems occurred in that framework were depended on four major reasons: (1) the reduction in capital flows due to low rates of interest; (2) stagnant capital movements due to limitations in front of the foreign capital; (3) the increase in the price of imports due to overvalued exchange rates; and (4) the decrease in the level of productive investment and its negative impact on the economic growth due to insufficient level of capital.

These factors can be evaluated in much broad context by focusing on socio-economic and political structures. All these factors were basically affected both the current account and the capital account in the balance of payments. Additionally, these factors have also adumbrated the hegemony of the theoretical foundations of financial liberalization in the economic activities after the 1973 crisis. The financial liberalization process was a response to all these problems aroused in the socio-economic framework of the Keynesian era. The collapse of BW system and the stagflation problems of the economic structures of the 1970s were all led to accept the hegemony of the neoliberal paradigm in the socio-economic framework by the capital.

As stated above that the neoclassical finance theory provides an infrastructure for the financial liberalization approach. The foundation of this theory are essentially formed around the theoretical and empirical arguments of two basic studies done by McKinnon (1973) and Shaw (1973). The theoretical foundations of these two studies of McKinnon (1973) and Shaw (1973) depends on two different assumptions. On the one hand, the first assumption suggests that the financial liberalization would manage the efficient allocation of savings across the world economies. On the other hand, the second assumption, depending on the presence of the first assumption, states that the liberalization movements in finance would balance the rate of interest between the market economies. Therefore, the fruition of these two assumptions would provide of an increase in the scale of financial deepening in both micro and macro frameworks

and thereby would make the economic growth much stronger through the efficient allocation of resources, more specifically of the financial resources.

Williamson and Mahar (1998: 2) sort of six different dimensions of financial liberalization process as follows: (1) the elimination of all credit controls for free mobility of flows of financial assets; (2) the deregulation of interest rates in the market system; (3) the removal of all restrictions and obstacles on the banking system and the financial sector; (4) providing of a bank autonomy; (5) providing of private ownership of banks; and (6) liberalization of international capital flows in parallel with the abolition of credit controls.

The fundamental point in which the financial liberalization process is mostly related with is the change in the rate of interest. In the financial liberalization approach, the economic growth is negatively affected by the ceilings on interest rates. Especially, this theoretical assumption of the neoclassical thought is highly significant in the practical structure for developing economies. One of the major reason behind the reduction of the economic growth depends on the problems emerged in the achievement to the financial funds due to ceilings on interest rates. These ceilings on interest rates are not only affected the rate of economic growth but also leads to the contraction of the scale of financial sector. Due to the ceilings on interest rates, capital may follow different strategies than their previous strategies (e.g., in the Keynesian period) which did not profitable for both of real assets and financial returns.

Furthermore, ceilings to be applied on nominal interest rates may widen the gap between inflation and the real interest rates in the long-run. Therefore, the market interest rates may deviate from the equilibrium point and may become dominant in economic processes at very low or negative levels.

It is also possible to understand the changes in interest rates through savings. For instance, the low rates of interest may negatively affect the tendency towards savings, and thus savings rates may fall across the country in the long-run. However, although the low and negative rates of interest create unfavorable conditions for savings, they may increase the expenditures on consumption. The major problem, in this case, is the source of necessary resources for the compensation of increasing consumption expenditures.

For instance, the contraction of the amount of credit supply due to the reduction of savings rates is highly possible within the frame of the neoliberal paradigm. In such cases, although the self-financing methods are stood out as the leading strategy to solve the problems occurring in the aggregate economy, its long-term validity and efficiency are limited. The low rates of savings may create a negative effect on the financial intermediation units. It is possible that these institutions, in which the high level of profits is obtained from the financial transactions, may decide to cease their activities because of a stagnant feature of loan making in parallel to the low rates of saving. The realization of this possibility, on the other hand, will lead to a further squeeze in the credit supply.

The problems emerged in the credit supply and the rate of interest were also some of the major reasons behind the misallocation of resources. Indeed, it is possible to understand the dynamics of this misallocation of resources by considering the ongoing changes in the production systems. As a matter of fact, if there is a resource misallocation in the economic activities, the necessary amount of funds may not effectively channel into the productive investments, which leads to the emergence of credit rationing, government intervention, or political repression.

For instance, some of the major policy implications of the financial liberalization process can be sorted as follows:

1. To remove all restrictions and controls on both deposit and credit interest rates.

2. To remove the controls on exchange rates and to limit all kinds of government interventions to the economic system.

3. To provide access to the foreign financial institutions in the domestic financial sector and to remove all restrictions on free entry to the domestic markets.

4. To create ways for domestic citizens to trade in foreign financial markets.

5. To reduce tax rates on financial profits.

In addition to these conditions, internal and external liberalization processes and their related conditions must be included in to this analysis in order to create an efficient financial liberalization for socio-economic structure. On the one hand, in the case of internal financial liberalization, nominal interest rates are established by banks, not by the government sector. The fundamental reason for this determination of the nominal interest rates by private banks is the provision of interest rates in money markets, taking into account the economic conditions of aggregate demand and aggregate supply. The main priority for achieving this case basically depends on the removal of all ceilings on interest rates.

On the other hand, external financial liberalization depends on the following two conditions: (1) integration of the domestic financial system with the international financial system and (2) the determination of exchange rate in the free market system. These two conditions show that the free mobility of capital in the foreign markets is essential for achieving the goal of external financial liberalization. This also depends on the removal of the repression on the financial system which may in turn lead to the equalization of the factor incomes in an international framework.

The major assumptions about the reduction of income inequality for the defenders of financial liberalization basically depend on these two dimensions of financial liberalization, (i.e., the providing of both internal and external financial liberalization). In all the two dimensions show that the free mobility of capital and thereby the positive effect of the capital mobility on the conditions of aggregate demand and aggregate supply in the markets for international transactions will create a positive impact on the income shares of capital and labor. Additionally, the liberalization of financial sector across the world economies will lead to the emergence of new types of policy tools, institutions, and socio-economic structures in the long-run. Therefore, in the context of fully liberalized economic structures in finance, the policies will lead to an increase in the level of technological progress and thereby will create a positive effect on the economic growth in the real sector (e.g., on the basis of the investment, employment and production) and in the financial sector (e.g., on the basis of the amount of funds, capital flows, interest rates and exchange rates).

3.2.1 McKinnon-Shaw Hypothesis

The theoretical foundation of financial liberalization approach is essentially developed by the arguments prepared in the studies of McKinnon (1973) and Shaw (1973). These theoretical

studies, which are called as McKinnon-Shaw hypothesis, focus on the factors of financial liberalization process of the economic systems, within the frame of market forces in order to provide efficient allocation of scarce resources in the free market conditions. Particularly, this approach depends on the fact that the efficient allocation of resources will provide a higher level of development in productive investments. In this context, the financial liberalization process will lead to an emergence of the following two aims emerged in the economic system: (1) the providing of an increase in the rates of saving in parallel to the increase in rate of interest and thereby the achievement to the necessary amount of funds for further investments; and (2) the providing of a higher level of economic growth in the long-run.

Basically, the theoretical assumptions of McKinnon (1973) and Shaw (1973) constitute upon the socio-economic and political conditions of the developing countries. According to McKinnon (1973) and Shaw (1973), developing countries were mostly under the financial repression and therefore the problems of these countries were emerging due to this repression on economic activities. On that sense, McKinnon (1973) and Shaw (1973) call the markets in developing countries as financially repressed and thus pre-neoliberal policies are titled as the "Financial Repression Approach" (FRA). For instance, the major characteristics of the FRA can be listed as follows:

1. The limitation of deposit and credit interest rates.

2. The imposition of different required reserve ratios on deposits.

3. The restrictions of bank entries.

4. The implementation of selective credit policies.

5. The implementation of restrictions for both capital inflows and capital outflows.

The listed-above factors also reveal the basic structure of the FRA. In that sense, looking at the reasons behind the implementation of these policies, one can refer to the factors summarized by Roubini and Sala-i Martin (1992: 1). First, the government needs to impose anti-usury laws in order to intervene in free determination of interest rates. Second, there should be strict controls and regulations implementing in banking system so as to provide better control for the monetary authorities over the money supply. Third, the optimal allocation of savings and thus investments are provided more efficiently by governments rather than markets or private banks. Fourth, financial repression is needed for interest rates below market rates, which reduce servicing costs of government debts.

On the other hand, according to McKinnon and Mathieson (1981), the financially repressed economies can also be depicted by four major characteristics: (1) weakening of the link between domestic markets and foreign markets due to controls in the capital account; (2) the leading feature of monetary sector in the economic system relative to primary markets and thus its intermediary role between investors and savers; (3) the repression of the government sector to realize its desired expenditure level; and (4) the key role of low rates of interest in providing of credit subsidies. If sufficient amount of funds is not provided at the fixed price, the deficit in public financing will not be closed, which will then lead to an increase in the level of inflation that may negatively affect the purchasing power of the households.

All these conditions show that, in the McKinnon-Shaw hypothesis, where the details of the financial repression are examined, low-interest rates play a key role in the economic activities. While the low rates of interest negatively affect the productive investments due to lack of funds, they limit the flows of financial investments in the country due to their low returns. All these factors are prepared to show that the major reasons behind the reduction of economic growth depends on the low rates of interest. Therefore, according to McKinnon-Shaw hypothesis, the ceilings on interest rates should be removed and thus should be determined in the free market conditions.

In addition to the removal of ceilings on interest rates, another way to escape from low interest rates - low economic growth dilemma is to provide full liberalization in the socio-economic framework in line with the structural reforms in the financial system. Depending on the McKinnon-Shaw hypothesis, it is possible to argue that these structural reforms in the financial system will lead to an increase in interest rates and the savings rates and thereby the necessary amount of funds will be provided for new investments. As the level of investments increase employment and income levels, they will have positive effect on consumption expenditure, which will also stimulate the economic growth in the long-run. It means that the efficient allocation of scarce resources will be provided by the imposition of high rates of interest. Thus, the entrepreneurs will relocate their resources into the productive investments in parallel to the high rates of interests.

Each phase of these theoretical assumptions can be summarized as follows. First, high interest rates will increase the tendency to save and thereby to the average premiums and efficiency of savings. Second, deposits will become more profitable in terms of earnings. Third, this will bring about the fact that investments are channeled into productive investments. Fourth, the increase in the scale of productive investments will then increase the employment level in the labor markets which will increase the wage level by raising the expenditure level of consumption and decreasing the income inequality. Fifth, all these steps will lead to a further increase in the economic growth in the long-run.

According to McKinnon-Shaw hypothesis, the liberalization process of the interest rates does not only affect the economic growth but also provide the necessary qualification to obtain full information from the financial markets. If the necessary information is provided, the equilibrium point between saving and investment creates much more credible sources to the market players.

All in all, the removal of ceilings on interest rates will create positive results on economic growth and economic development as well as on the other socio-economic parameters. For instance, Fry (1997: 755) summarizes some of the negative effects of ceilings on interest rates on the economic development process as follows:

1. The gap between future consumption and the current consumption may widen in favor of the current consumption. Therefore, it may lead to a divergence of the optimal rates of savings.

2. The savers/lender may use their savings in high-return assets or unproductive investments.

3. The available credits are canalized into the capital-intensive investments. The use of credits is not preferable to labor-abundant investments which will then increase the level of employment.

4. Risky entrepreneurs who take credits from the loanable funds markets may tend to involve in low return investments.

All these factors listed by Fry (1997: 755) show that the major problem of the economic development does not depend on the lack of investments in the developing country groups. On the contrary, the problem is the lack of necessary funds for new investments. As Ağır (2010: 16) states that the basis of financial liberalization approach depends on the lack of savings problem rather than the lack of investments problem in developing countries. Hence, the promotive policies should be applied within the frame of new investments.

Furthermore, the infrastructure of the banking system has also undergone a significant change after the financial liberalization process. One of the basic issues in this change was the differentiation of the reserve requirement structure. Following the liberalization of the financial sector, the required ratio for reserves has decreased below their optimal levels and thus has reduced the costs of funds, which would provide the efficient functioning in the intermediation process of the banking sector.

The limits of the McKinnon-Shaw hypothesis are not only determined by the changes in the rates of interest. It states that these limits can be extended to fully or partially removal of controls in exchange markets, of the barriers in financial markets, of the inflexibility of labor markets and of the restrictions in agricultural product markets (Ağır, 2010: 16). In this context, according to Fry (1997: 755), the major elements of the McKinnon-Shaw hypothesis can be listed in four categories. First, a saving function is positively related to both the real deposit interest rate and real output growth rate. Second, an investment function is negatively related to the effective real loan rate of interest, but it is positively correlated with the growth rate. Third, the nominal interest rate holds the real rate below the equilibrium level which is administratively determined as fixed. Fourth, loanable funds are rationed inefficiently which is out of price mechanism.

Furthermore, Fry (1995: 454-460, quoted in Fry, 1997: 759) proposes five prerequisites for a sound implementation of financial liberalization. First, it needs adequate regulation as well as the supervision of commercial banks, which aiming minimal levels of accounting and legal infrastructure. Second, it necessitates a price stability. Third, it requires fiscal discipline for sustainable government borrowing and lending from domestic units and abroad to sustain exchange rate stability. Fourth, it needs competitive economic structure for banking system which aims profit-maximizing. Fifth, it stipulates an unaffected tax system which is not imposing discriminatory taxes on financial intermediation explicitly or implicitly.

Domestic capital is an important factor in the McKinnon-Shaw hypothesis as well as the foreign capital. In other words, it is a different definition of the need for liberalization to take place not in a single country or region but all over the world. Therefore, similar to the liberalization of interest rates regime, the exchange rate regime and the other determinants of the banking sector should be also fully liberalized in micro context and the capital account in the macro context. In this regard, McKinnon (1973, 1991) made a more detailed investigation than the investigation of Shaw (1973).

According to McKinnon (1973: 151), financially repressed economies of the Keynesian era and the several of the developing countries stood to curb inflation via tighter monetary and fiscal controls which resulted with mixed outcomes. Addressing to the analytical practices made for Chile, Brazil, Colombia, Pakistan and Argentina, McKinnon (1973: 151-154) argues that the main problem of these countries is the high rates of inflation and the stagnant growth in the economic activities. The policies that these countries would implement to reduce high inflation rates can be listed as follows: (a) readjusting exchange rates; (b) liberalizing trade regime; (c) allowing capital inflows along with debt rescheduling; (d) taking large inflows of foreign financial assistance; and (e) devaluating domestic currency against foreign currency.

Moreover, the liberalization policies should have been implemented against the government interventions such as ceilings on interest rates, high reserve requirements and directed credit programs, which limit the economic growth in the medium and long-run. However, many of the theoretical assumptions were ended up by the inconclusive evidence in the practical conditions for developing countries in contrast to what was McKinnon (1973) and Shaw (1973) was predicted and argued in their studies. For instance, some of the major reasons of these inconclusive evidences can be listed as follows: (a) the increasing level of risks of banking sector and of investors and thereby the exacerbation of the competition level in parallel to a sharp increase in the rates of real interest; (b) the rise in the speculative attacks due to high rates of interest; (c) a sharp increase in the unemployment rates; (d) the widening gap of income inequality and thereby the rate of poverty; and (e) the financially underdeveloped characteristics of the banking sector.

According to McKinnon (1973), the policy agenda to avoid such problems is that reforms to be implemented in the real sector should be in line with the financial sector such as the privatization of state enterprises which aims to guarantee the relative prices indicating the economic scarcities (Demetriades and Andrianova, 2003: 11). Furthermore, before these reforms, any kinds of price distortion should be prevented from the government interventions and the fiscal deficit and the high level of inflation should be reduced to their publicly optimal levels. Additionally, the necessary level of regulation and supervision for the banking sector should be applied to prevent the moral hazard problem emerging in economic activities. Finally, McKinnon (1991: 115) states about the internal financial liberalization that once a country bears a successful stabilization by liberalization program, where the profitability of the economy suddenly increases, then there is a final attempt by foreign savers to benefit from the current situation and make a further claims on the newly liberalized economy.

However, McKinnon and Pill (1996: 7) imply that when making reform and stabilization programs, countries are inclined excessive foreign borrowing that strongly demonstrate unsustainable. McKinnon and Pill (1996: 7) also express that the optimistic views about the success of reforms and of liberalization process are always created among domestic residents, foreign investors, and the policy authorities because banking system fail as efficient information conduits between lenders and borrowers. Additionally, McKinnon and Pill (1996: 7) note that sound economic performance and large foreign capital inflows support such optimism. Only later make the sustainability conditions bind so that the economy collapses into a recession, financial crisis, and capital flight (McKinnon and Pill, 1996: 7).

3.2.2 Financial Development-Economic Growth Hypothesis

In the post-1980 neoliberal period, the focal points of the financial sector have had a multi-faceted structure. Financialization is only one of these multi-faceted spheres. However, there

are other facets. For instance, the financial development and the economic growth are the other two important parameters in which many of the empirical studies have been focused on the relationship between these two indicators in parallel to an increasing scale of the liberalization of financial system. These two issues involve many sub-parameters related to the financial sector, such as from banking sector to the stock market. These parameters, which were particularly investigated by the advocates of the financial liberalization process, thus, has been the focus of much attention by the neoclassical paradigm both in theoretical and empirical levels.

Although the basic theoretical framework is based on the McKinnon-Shaw hypothesis, the methodological concept of the issues of the financial development and economic growth is found in the financial development model of Fry and Farhi (1979). In this model, two of the following major factors determine the way of economic growth: (1) saving and (2) investment. Similar to McKinnon (1973) and Shaw (1973), Fry (1997) argues that the pre-neoliberal period was based on the characteristics of economics in which they were financially repressed by the legal authorities. However, the common aspect of these financially repressed economies was depended on the adoption of both selective and sectoral credit policies.

For instance, Fry and Farhi (1979: 348) state that a selective credit policy is only effective when financial markets are kept segmented and repressed. While the implication of repression on financial sector led to the emergence of these policies, they were basically necessary to be implemented of the subsidied interest rates for primary sectors (Fry and Farhi, 1979: 348). As Fry, Goodhart and Almeida (1996: 30) point on this condition that selective credit policies need more repression in financial system, since financial channels would otherwise develop expressly for transferring subsidised credit to uses with highest private returns.

The financial development model is built upon the conditions within the frame of the problems emerging in all economic activities and thus its main objective is to answer the question that how to achieve long-term economic growth. In that sense, two conditions are necessary to achieve this goal: (1) removal of ceilings on interest rates and reaching optimal loan rates for subsidies and (2) the adjustment of selective and sectoral credit policies to be determined in the free market system. Essentially, the provision of these two conditions would bring about the efficient allocation of savings and investments. The prerequisite is the determination of interest rates in the free market conditions. If the restrictions on the interest rates do not abolish in the long-run, the macroeconomic parameters and thereby the economic growth would negatively be affected by the aggregate economic activities.

Fry (1997: 755) summarizes the outcomes that might arise as a result of interest rate ceilings in four categories as follows. First, if the interest rates are low enough, they create a bias in favor of current consumption instead of future consumption. Therefore, saving may reduce below the socially optimum level due to this bias. Second, low-yielding direct investment may become more attractive to be invest in by potential lenders instead of lending through depositing money in the banking system. Third, bank borrowers have a chance to get all the funds they need at low loan rates may invest in relatively capital-intensive projects. Fourth, the potential borrowers including entrepreneurs with low-yielding projects would not proceed to borrow at the higher market-clearing interest rate.

These four categories investigate the factors that negatively affect the financial development and long-run economic growth from the point of the neoclassical perspective. Therefore, the theoretical base coincides with the theoretical structure of McKinnon-Shaw hypothesis. Yet

another important factor that Fry and Farhi (1979) have added to the theoretical base of McKinnon-Shaw hypothesis on financial liberalization is the removal of loan rate ceilings in addition to the abolition of interest rate ceilings. As Fry and Farhi (1979: 351) state that when loan rate ceilings are binding in many conditions, they eliminate the possibility of charging differential risk premia. Fry and Farhi (1979: 195) also comment to that risk premia is not effective to charge when loan rate ceiling are binding and effective therefore financial institutions discourage from taking risks due to loan rate ceilings.

In addition to removing of ceilings on interest rates and the loan rates, the last factor that Fry and Farhi (1979) points on is the low institutional interest rates. Low institutional interest rates may cause to the inefficient allocation of the financial intermediation, especially within the frame of savings and investments. Therefore, high institutional interest rates would increase the average efficiency of investments and thereby encourage individuals to increase their savings tendencies. As Fry and Farhi (1979: 196) mention that the rise in real institutional interest rates makes some important outcomes such as falling in disintermediation, using of expertise so as to allocate more efficiently the larger volume of investible funds by the financial intermediaries.

These three main points (i.e., interest rates ceilings, loan rates ceilings and the institutional interest rates) point to the fundamental components in which the financial development model criticizes the previous economic structure. They are basically different from the policy suggestions of McKinnon-Shaw hypothesis within the frame of their own policy recommendation. However, the major contribution of this model to the financial liberalization approach is the inclusion of the components of long-run economic growth into the neoclassical paradigm pursuant to the analysis of savings and investments. In other words, the analysis of Fry and Farhi (1979) was complemented the theoretical arguments of McKinnon-Shaw hypothesis in the context of financial liberalization approach. Therefore, the further investigations based on these theoretical foundations were mostly developed on the examination of the empirical outcomes. Moreover, following these empirical outcomes, Fry and Farhi (1979) stimulated the further developments in the economic framework theoretically.

Figure 3.2.A: General Framework for the Financial Liberalization

3.3 Alternative Perspectives on the Financial Liberalization: Financialization

The fundamental criticism directed to the neoclassical finance and the policies implemented by the neoliberal framework after the post-1980 period in parallel to their attempts to transform the socio-economic and political structures is made in the context of the "financialization" term which is based on the investigation of socio-economic relations related to the financial sector.

The concept was originally committed to Phillips (1993) (Güngen, 2010). As Güngen (2010: 86) states that the financialization concept was first used by Kevin Phillips in 1993 to describe the growing importance of the financial realm in the USA and the power loss of the American economy floating in debt. Additionally, the growing importance of financialization concept in the socio-economic and historical contexts was started to become increasingly significant in the literature following the studies of Giovanni Arrighi [1994] (2010). According to Arrighi ([1994] 2010: 371), in the historical process, the financialization has always been the preface to the final crisis of the dominant regime of accumulation, that is, to its decadence and removal by a new regime even though it promotes its organizers to maintain their power in the world economy.

One major implication of Arrighi's study is to express that the concept of financialization has been transformed into a kind of variable to understand the changes in the behavior of households and individuals (Güngen, 2010: 86). Furthermore, the concept of financialization has been thus begun to become an element that explains the formation of investments both at national and international scales (Güngen, 2010: 86).

On a more general framework, Kozanoğlu (2011) focuses on the explanation of the concept of financialization on the basis of neoliberalism and globalization. According to Kozanoğlu (2011: 14), it is possible to mention about a consensus on the fact that financialization is the third step of a historical process that commenced with neoliberalism and continued with globalization can be of issue.

Within this definition, it is possible to argue that financialization may affect many of different points of the social realm. However, although the concept of financialization has a critical relationship both with the neoliberal paradigm and the liberalization process, the internal dynamics of this case should be inherently laid out and well researched for further investigations.

On that basis, two crucial research questions should be answered in order to understand the financialization concept. First, why do the investigations on financialization focus on the conceptual union idea and what are the general characteristics of this (if possible) conceptual union? Second, what are the factors that distinguish the financialization from this union?

In the context of these two basic hypothetical questions, the understanding of the concept of financialization as a whole would emerge as a result of the analyses around different definitions of its core qualities. These analyses would also lead to the understanding of the effects and dimensions of financialization upon the functioning of the capitalist production system.

Although the financialization is a concept created by Phillips, the roots of this concept could be found in different kinds of theoretical works done by Bernstein (1899), Hobson (1902), Kautsky (1902), Lenin [1916] (1996), Bukharin (1917), Luxembourg (1972), Marx [1976] (1982) and Hilferding [1981] (2006). Additionally, in the recent studies, it is possible to find implicit, explanatory and unconceptualized levels of this phenomenon in Tobin's (1965, 1997)

investigations. Moreover, there are also many other different kinds of approaches on financialization that act on the theoretical level (e.g., Monthly Review and the New Left). Therefore, all these approaches and historical conceptualizations are valuable in terms of an understanding of the different aspects of financialization and of an understanding of its current nature.

In this context, beginning with the inclusive studies would provide a critical contribution to the understanding of the general framework of the financialization concept. The extensive research of Epstein (2005a) on different implications of financialization could be considered as the most important step for inner investigations of this concept. Epstein (2005a: 3) focuses on the role of finance capital for the period beginning in the 1980s by discussing the changes in the world economy and also indicates that the changing socio-economic structure is characterized by three paradigm which are neoliberalism, globalization, and financialization. Basically, Epstein (2005a) builds up the definition and characteristics of his own concept of financialization by considering different aspects of the financialization framework formed in Krippner's (2004) investigation. According to Epstein (2005a: 3), there are five different assumptions can be made about the financialization. First, it refers to an increase in the concept of "shareholder value" as a way of corporate management. Second, it is the increasing dominance of capital market-based financial systems over bank-based financial systems. Third, depending on the theoretical arguments of Hilferding ([1981] 2006), it refers the increasing economic and political power of the rentier class. Fourth, it is the boom of financial relations and thereby financial transactions through the increasing financial instruments and tools. Fifth, in parallel to the definition of Krippner (2004: 14), the formation of the financialization concept has the existence of the method of capital accumulation derived from an increasing scale of financial sector rather than the increasing amount of trade and commodity production.

On the other hand, in another study of Krippner (2011: 4), the concept of financialization is referred to depending on the Arrighi's conceptualized limits on this topic as the profit making tendency in the economic activities to arise increasingly by way of financial channels rather than by way of productive activities. In this case, for further analyses, the concepts of finance and of the production are defined separately. However, in contrast to the conceptual context, these definitions on finance and production methods are not so much different than their methodological positions proposed in the concept of financialization.

All in all, the mentioned-above five different assumptions on financialization described, depending on the investigations of Krippner (2004), lead Epstein (2005a: 3) to argue the following methodological outcome in the definition of the financialization concept as the increasing role of financial motives, financial markets, financial actors and financial institutions in the process of the domestic and international economies.

According to Krippner (2005: 176), which complements the theoretical context of Epstein (2005a), it is also possible to examine the hypothetical inferences of financialization from two controversial issues: (a) the issue on the management of modern firms and/or institutions; and (b) the issue on the role of globalization in terms of the collapse of state autonomy.

Another pioneering role in the development of the concept of financialization is the Monthly Review approach, theoretically contributed by Henry Magdoff and Paul Sweezy. This approach should be considered in terms of its theoretical circumstances which starts before the neoliberal paradigm, depending on the historical process of the capitalist system. This is also important in terms of the formation of the theoretical infrastructure on the concept of financialization.

Although Monthly Review approach maintains to examine the pre-neoliberalism formation of the financialization, it also critically evaluates its methodological problems of this process. Although the approach critically investigates the pre-neoliberal period for the analyses of theoretical backgrounds of financialization, it can be seen that in some cases the effects of financialization was underestimated the developing character of finance and its role in the economy[45]. In general, according to Sweezy (1997) financialization can be defined as a shift from the center of gravity of the capitalism towards production to finance. In this context, the Monthly Review approach deals with the phenomenon of financialization in many different fields of the economic activities.

According to this macro perspective, Sweezy (1997) lists the three major characteristics of the financialization process which began with the 1974-75 crisis by focusing on the financial sector as follows: (1) the declining overall rate of growth; (2) the increasing dominance of monopolistic or oligopolistic multinational corporations in the world economy, and (3) the increasing scale of financialization of the capital accumulation process.

According to Foster (2010), financialization[46] can be defined as a shift of the center of gravity of the capitalist economy from production to finance in the long-run within the framework of the economic processes in which above listed three essential characteristics are dominant. This change in the capitalist system can be traced in many spheres of economic parameters such as increasing financial profits as a share of total profits, rising debt relative to GDP, the growth of finance, insurance, and real estate (FIRE) as a share of national income, the increase of exotic and opaque financial instruments, and the raising impact of financial bubbles (Foster, 2010).

The financialization issue is a broad concept. On the basis of the complexity of the financial sector, the financialization spreads into many points of the economic system. In this context, according to Lapavitsas (2010a), the financial system needs to be taken up by different point of views. This requirement can only be achieved by grasping the importance of the financialization trend. Lapavitsas (2010a) particularly argues that three fundamental trends should be emphasized in the socio-economic framework.

First, large companies were able to finance their investments from non-distributed profits, as well as to provide external financing, largely out of the open market. This brought them to be less dependent on the banking sector. They also had access to an independent economic source of financial transactions for the formation of their profits (Lapavitsas, 2010a).

Second, in relation to the first case, the banks have transformed their loans. They have renewed their balance sheets by directing the borrowable funds/credits to the individuals rather than to the firms. Moreover, they have turned to fees and commissions, mediating open financial markets, rather than get interest directly by lending. Thus, they have involved in traditional commercial banking activities and investment banking activities (Lapavitsas, 2010a).

Third, workers have drawn into the financial system. Decades of stagnation and/or reduction in the real wages of workers in DCs have led them to tend towards private channels mediated by banks and other financial institutions around the transformation of public retirement, housing, education, health and other fields. The behavioral change of individuals and households towards

---

[45] For further details please see Sweezy (1991).

[46] In this sense, the only distinguishing character of Foster's theoretical definition on financialization than Sweezy (1997) is his focus on a time factor in the historical context of the economic process.

83

borrowing and private financial gains has opened the way for them to be seized to housing bubbles while encouraging workers to borrow (Lapavitsas, 2010a).

These three major trends of Lapavitsas (2010a) played an important role in the development of the financialization concept developed by Fine (2010). Fine (2010: 18), in support of Lapavitsas's (2010a) arguments, notes that financialization has expanded the role of finance beyond the traditional to the personal and broader elements of economic and social reproduction.

Albo, Gindin, and Panitch (2010: 40-41) deals with financialization within the framework of economic crises and the internationalization process of capital. Albo, Gindin, and Panitch (2010) state that the process of internationalization of the capital and the emergence of economic crises cannot be addressed out of the national form of the state. The law of value and different forms of money are formed in the national context on behalf of the protection of the interests of capital and the property rights, even if the countries are treated as highly developed. The subordination of the capital on the national level increases in line with the increase in the process of financialization. This imposes as an external limit for the autonomous world market. Additionally, internalized relations within the state structure and national power structure have a whole set of political norms.

On the other hand, Glyn (2006: 50-51) focuses on the process of financialization in the framework of financial liberalization and communicational developments. These two phenomena encourage innovation in the economic activities and thus change the positions of different sectors in terms of their production systems. This qualitative development in the financial sector is influential on both aggregate demand and individual firm behavior. According to Glyn (2006), the growing role of the financial sector in the economy can be assessed in many ways by stating that the development of both consumer and mortgage credits under the epigram of "workers spend what they get", have saved the mass consumption from age-old budget constraint.

Additionally, Glyn (2006: 50-51) emphasizes the growing role of financial markets in the "new economy" boom of 1990s in the U.S economy. According to Glyn (2006), there are three major tools that increase the role of the financial sector by (1) raising their control on the firm managements; (2) creating downward pressures on the costs; and (3) maximizing the short-term profits. Furthermore, the development of the financial sector and the increase in the international scale of financial flows have also had a positive effect on savings. All these processes and the constraints and limitations to which the savings depend on have created an opportunity to the domestic economy to save its investments in the long-run. One of these processes led to an increase in the financial instruments in economic relations. They allow for the breakdown of the return and hedging of risk between hedge funds and other financial instruments. Moreover, this diversification also creates new opportunities for investors in terms of their profits emerged in the investment process. It provides additional earnings and earning opportunities beyond their profits provided by their current assets.

The investigations of Sweezy and Magdoff (1972) on the financial relations do not basically focus on the financialization concept[47]. However, the results of their theoretical arguments show that it is necessary to develop the financialization concept in the context of the financial

---

[47] For more information please see Sweezy and Magdoff (1987).

expansion and its growing power in the analyses of capital accumulation[48]. According to Sweezy and Magdoff (1972), the increasing power of financial sector is a major indicator of the monopolization tendency of the capitalist system. In other words, Sweezy and Magdoff (1972, quoted in Karaçimen, 2015: 92) point on that the increasing role of the finance basically depends on the rise of the monopoly capital. Additionally, Sweezy and Magdoff (1972) consider the increase in financial transactions and their power structures, which have an important role in capital accumulation and cyclical movements, as a "financial boom". According to Sweezy and Magdoff (1972: 13, quoted in Karaçimen, 2015: 92), with more and more new savings pools flowing only through the financial channels, the financial superstructure of the economy has greatly expanded and this has also led to an unprecedented increase in all kinds of speculative activity.

However, according to Dumenil and Levy (2004a), the financialization determines the neoliberal structural change that occurred after 1980s. Within this structural change, the financialization process depends on several factors such as the increasing scale of financial enterprises, the increasing integration of nonfinancial enterprises with financial operations, the holding of large shares of and other securities by households (Dumenil and Levy, 2004a: 82).

Dumenil and Levy (2004b) also examine the phenomenon of financialization on the basis of U.S. data, within the framework of reality or myth problem. The most direct way in the investigation of this problem is to focus on the examination of the growth in financial sectors, depending on the concept of financialization (Dumenil and Levy, 2004b: 110). Additionally, Dumenil and Levy (2004b) focus on the need to address to non-financial companies, such as those specifically addressed by Stockhammer (2004) and Orhangazi (2007), in the investigation process the financialization motives of economic agents. In this sense, the French and U.S.-based surveys, where non-financial firms are incorporated into the financialization trends in many different frameworks, show that this is not a myth but has its ambiguity in the methodological framework (Dumenil and Levy, 2004b: 118).

Similar to their previous investigations, Dumenil and Levy (2011) also evaluate the concept of financialization by expanding the phenomena of globalization and neoliberalism in a large perspective as an interaction with each other. Dumenil and Levy (2011) state that the globalization phenomenon also has an ambiguity in the methodological framework. Within this context, the financialization process can be evaluated in two cases. On the one hand, it can be defined as the focusing on the financial institutions and the innovative procedures of the financial relations; on the other hand, it can also be taken as an understanding of administrative criteria such as the creation of the value a shareholder ought to have (Dumenil and Levy, 2011: 35). In addition to these two definitions, comparable surplus rates and profit rates of the financial sector should be also included into the analysis. The boom in the components of financial management within the financial institutions and non-financial firms as well as the

---

[48] Karaçimen (2015: 91) also classifies different types of effects of financialization by focusing on several economic phenomena: (1) for an investigation of financialization in terms of macroeconomic framework and its effects on capital accumulation within the context of center countries please see Dumenil and Levy (2004b), Stockhammer (2004), Crotty (2005) and Orhangazi (2007); (2) for an investigation of the arguments of social accounting approach and its term of "coupon pool capitalism" please see Froud et al. (2001) and Ertürk and Solari (2007); (3) for an investigation of the arguments on the maximization of shareholder value please see Aglietta (2000) and Boyer (2000); (4) for more individualistic investigations of financial expansion please see Martin (2002) and Langley (2008); and (5) for an investigation of the structural change of capitalism in terms of financialization within the frame of banking sector development and increasing household debts please see Dos Santos (2009), Ergüneş (2009) and Lapavitsas (2009a, 2009b, 2010b).

extraordinary increase in revenues paid to financial managers should be included into these investigations.

Stockhammer's (2004) arguments on financialization are generally based on the examination of non-financial companies, as opposed to the financial firms. In Stockhammer's (2004) definition about the general framework of financialization, there is a trend from micro to the macro level economic activities. As a matter of fact, according to Stockhammer (2004: 721), the financialization is defined as the integration of non-financial businesses with financial markets and thereby the financial activities in an aggregate economy are investigated as the reflection of a shift in the firm's objectives and its motives and a rising impact of shareholder interests in the firm.

On the other hand, Orhangazi (2008: 5-6) investigates the financialization phenomenon both at micro and macro levels. First, in the macro-dimension, financialization can be regarded as an increasing volume and importance of financial markets, institutions and transactions in the economic activities. Second, in the micro-dimension, financialization can be used to identify the changing relationship between non-financial institutions and financial markets. The first of these changes is the increase in financial investments and the increase in financial revenues of non-financial firms, and the second is the increasing pressure on the financial market-oriented management of non-financial firms.

Especially in the micro dimension, Orhangazi (2007: 3) examines the factors affecting the financialization process, in which the changes occurring in the economic systems can be understood much better, in different categories. Within the framework of the changes in investments and the understanding of the effects of financialization on both the level of investment and more specifically the real sector, Orhangazi (2007: 3) states that the concept of financialization has four interconnected and broad dimensions, but also it has distinct feature due to the globalization process of financial markets, the rise of financial investment and incomes from such investment, the increasing significance of shareholder value in economic decisions, and the changing parameters in corporate governance.

Moreover, Orhangazi (2007: 3) points out that while the vast majority of studies in the field of financialization focuses on macroeconomic outcomes, the concept has also an important impact on economic parameters at the firm level. In this framework, the financialization is dealt with on behalf of defining the interrelated changes between the non-financial firms and financial markets (Orhangazi, 2007: 3).

On the other hand, Husson (2008) focuses on financialization within the frame of the creation of both profit and the value. According to Husson (2008), financial markets do not create new values but play a role in leaking from existing profits. If individuals have financial assets, they have the rights to get share from the surplus value that is produced as long as these rights are not used (Husson, 2008). Or alternatively, these rights remain virtual (Husson, 2008). However, when anyone who has any kind of financial assets realize that they subject to the law of value, the individual also realize that the real wealth cannot be distributed more and more than is produced (Husson, 2008). Therefore, the prices emerging in stock exchanges show the anticipated profits of companies, from which financial revenues are paid (Husson, 2008). However, in the entire history of the capitalist system, this process was not possible for it to last forever (Husson, 2008).

Dore (2002) also focuses on the institutional change in the post-1980 neoliberal period. In that sense, similar to the broad definition of Epstein (2005a) on financialization, Dore (2002) makes a detailed definitional framework by pointing out many different spheres of the aggregate economic context (Orhangazi, 2008). According to Dore (2002: 116-117), the financialization should be analyzed within the frame of the increasing hegemony of the financial sector in the sum total of economic framework, of financial controllers in corporate management, of financial assets and equities, of marketed securities, of the stock market with ups and downs as a major factor of business cycles.

On the other hand, Wade (2005) intends to explain the financialization by introducing more detailed factors within the framework of the three basic developmental parameters. In this framework, financialization can be defined as an increasing sovereignty of the financial economy on the real economy. These three basic characteristics of the financialization can be ranged as follows: (1) tightening of institutional interlock and normative congruence in the interests of wealth holders; (2) increasing redistribution of national income towards capital owners away from labor; and (3) redistribution of national income in favor of the richest 10% and 1% households.

In addition to all these definitions, Levitt (2008) calls this transformational process which occurred after the institutionalization of the 1960s and 1970s as "Great Financialization" within the frame of the arguments of Kenneth Galbraith ([1954] 2009). The origins of this definition can be tied to the moment of dissolution of the financial system of BW. Levitt (2008) also notes that the "Great Financialization" process captured a momentum in the 1980s but have been boomed since the mid-1990s.

All in all, the definitional context of financialization and its basic features, as described above, have led to the changes in the descriptive framework of the concept, depending on the changes in the economic activities. However, all these factors show that the concept of financialization cannot be generalized pursuant to a single definition. The phenomenon of financialization has multi-factorial and multi-dimensional characteristics. Moreover, it has different dimensions (in terms of development), depending on the socio-economic structure of each country. In addition to the investigation of the micro and macro dimensions of the financing, its interactions in the national and international factors should be also established as a separate sphere of the analysis.

PART 4

EMPIRICAL LITERATURE ON FINANCIAL LIBERALIZATION[49]

The mentioned-above McKinnon-Shaw hypothesis and Fry and Farhi's financial development model constitute the theoretical structure of the financial liberalization process. Empirical investigations for these theoretical frameworks include some of their major parameters used in their analyses to show that the neoclassical paradigm is compatible with the theoretical background. However, these empirical studies use multi-dimensional framework for different parameters rather than squeezing to a limited data structure. While some of these analyses are based on the investigation of the domestic financial sector, the others focus on the international factors. In that sense, the following sub-sections investigate the basic topics of financial liberalization approach such as savings, investments, banking sector development, stock market development, poverty, and income inequality, depending on different kinds of empirical studies. In the final sub-section, the empirical investigation on financial liberalization will be focused on much different case, which is related to the changes in the labor share of income. This final sub-section has a crucial importance than the previous sub-sections because it also deals with the critical approaches against the financial liberalization process by way of looking at the class dynamics between capital and labor.

Our examination begins with the arguments of Schumpeter (1934, [1943] 2003) about the analysis of the relationship between the financial development and economic growth. However, the major concerns on financial sector development and its relationship with the economic growth have mainly become a significant factor in the 1950s and 1960s in the economic system, depending on the analyses of Robinson (1952), Gerschenkron (1962), Patrick (1966) and Gurley and Shaw (1967). All of these analyses were basically using the case studies and very few simple econometric methods in order to understand the finance-growth nexus. Although they suggested so many different kinds of important implications in terms of this nexus, their empirical fundamentals were not so comprehensive for the analysis of finance-growth framework.

In the 1970s, the financial liberalization approach developed by McKinnon (1973) and Shaw (1973) led to an emergence of much comprehensive investigations for finance-growth nexus in the context of the neoclassical views. The investigation of growth-inducing effects were the basic issue in which these empirical studies focused on within the frame of finance-growth nexus. Most of the empirical outcomes of these approaches showed that the increase in the rates of interest would provide an increase in the volume of savings which would raise the volume of productive investments. Therefore, the increase in the level of investment would then raise the production level by an efficient allocation of resources. This efficiency would also provide a higher economic growth in the long-run. However, one deficiency of those approaches depends on the lack of empirical and econometric analyses in the context of sustained growth rates within the financial structure as a long-run phenomenon.

---

[49] In the following orthodox/mainstream empirical findings on financial liberalization on different economic parameters, many of them suggest that the expansion of financial sector by increasing scale of liberalization in finance may stimulate the economic growth or redistribute the income share more equally among individuals or economic agents (expect for the empirical investigations summarized in section 4.5). However, the empirical results of this dissertation find much different and negative outcomes rather than the financial liberalization arguments. For instance, increasing capital account openness, increasing scale of financial development or more open trade regimes do not provide a fair distribution between capital and labor, especially in the OECD and non-OECD countries, depending on several factors. For more information please see Part 6.

In the presence of finance-based macroeconomic models, the 1980s witnessed much more different analyses for the analysis of finance-growth nexus. All of these analyses took various forms within the micro and macro concepts. The following literature has mainly shaped around the endogenous growth models from the beginning of the 1990s. The questions related to the financial development process have incorporated within the endogenous growth analyses. Investigations in those analyses have tended towards to show reciprocal externalities between the financial sector and real sector. One side of these analyses provided empirical outcomes in favor of the views that finance promotes economic growth because of its uni-directional causality. However, the other part of the empirical analyses found that there was a bi-directional causality. Therefore, the policy conclusions of those analyses depended on the investigation of the sequencing process of the financial development.

All in all, the following sub-sections will show five different empirical sides of the topics of financial liberalization and its relationship with the economic growth. These topics comprise of early theoretical and empirical investigations on the finance-growth nexus; of empirical findings on finance and endogenous growth; of empirical findings on financial liberalization, savings, and investment; of empirical findings on the causality between banking sector development, stock market development, and economic growth; and of empirical findings on the effects of financial liberalization on poverty and income inequality, which is related to the distributional assumptions of the neoclassical finance. However, in the final sub-section, the empirical investigations about the financial liberalization process will be devoted to the examination of the changing role of income distribution, different from the neoclassical thoughts. Therefore, some of the basic critical approaches will be investigated in a different theoretical context by accepting the existence of classes and their changing roles in the capitalist system in terms of the relationship between capital and labor.

4.1 Earlier Models

The theoretical and empirical research on the relationship between finance and economic growth can be traced back to the Schumpeter's (1934, [1943] 2003) analyses. From the beginning of these analyses, the literature on finance and its relationship with the economic growth has developed by further studies. Therefore, the historical roots of this relationship should be analyzed before the investigation of the post-liberalization process of the financial sector in order to reach a comprehensive understanding of finance-growth nexus.

Essentially, the analyses of Schumpeter (1934, [1943] 2003) and his consecutive focused on the questions whether the financial markets have causal effects on the economic growth or whether the economic growth leads to the emergence of the financial system. Even though these analyses have provided an exclusive outlook for the evolution of the financial sector, the empirical side of these investigations would be lack from reaching much comprehensive outlooks.

Schumpeter (1934, [1943] 2003) is mostly known with his famous argument which is called the "Creative Destruction". According to this argument, there is a figure that plays a crucial role in the context of the emergence of the creative destruction in an innovative process. This figure is an entrepreneur, or alternatively, an innovator. The innovator seeks for new innovations. According to Schumpeter (1934, [1943] 2003), innovating entrepreneur has to find necessary amount of financial resources in order to involve in a new project. As Sak (1995: 10) points on that there the entrepreneurs have to obtain affirmation of the banks or capitalists in order to get support from the financial system. Therefore, Schumpeter (1934, [1943] 2003)

gives an important role to the banker as an economic agent in the economic activities. Thus, if banker acts against the innovator, the development phase of the economic system may be affected in a negative manner. On the contrary, any positive implication of the banker for further processes in an innovative context may positively affect the returns from the economic growth. Hence, there is a steady relationship between the development of the financial system and the economic growth within the frame of the banker who favors the innovative ingredients in the Schumpeterian framework.

Besides the positive implications of the banker on innovations, the banker is also situated between the owner of productive resources and the investors who pursue for making through the new production methods (Fry, 1995). Furthermore, the banker may probably be a crucial role in the determination of the dynamics for an increase in the level of economic development if there is no intervention by the central authority. In such a case, the banker delegates entrepreneurs for making of a new production methods. Hence, the banker already plays an active role in the process of economic growth in the Schumpeterian framework.

Although Schumpeter (1934, [1943] 2003) made an important implications for the development case of the financial system, Joan Robinson (1952) developed his arguments by looking at further components of the financial relations. The economic perspectives of Robinson (1952) on the existence of the nexus between finance and economic growth was not so much different than what was argued by Schumpeter (1934, [1943] 2003) and thus the development process of finance initiated by an entrepreneur should be dealt with a caution. According to Levine (1997: 688), this view indicates that economic development increases aggregate demand for particular types of financial settlements and therefore the financial system responds automatically to these increases. Actually, Robinson's perspectives on finance-growth nexus led to the emergence of analysis on the investigations of the difference between demand-following and supply-leading arguments in the financial activities.

The theoretical and empirical literature about the finance-growth nexus mostly grounded on one-way causality until the 1960s. The hypothesis depends on the fact that financial development followed from growth but the reverse case is not relevant (Eschenbach, 2004: 2). However, the 1960s testified new developments for this topic. For instance, the concept of "economic backwardness" which was pioneered by Gerschenkron (1962) created a new way of looking to the relationship between economic growth and financial development (e.g, especially for the banking sector). Eschenbach (2004: 2) states that according to this hypothesis, at the initial phase of industrialization process, country's degree of economic development determines the role of its banking sector. Although Gerschenkron (1962) did not purpose any measurement about the backwardness, the practical evidences showed that there was a strong effect of the economic development on the economies of European and the Balkan countries.

Gerschenkron (1962) also focused on the analysis of the importance of capital-intensive production system, the production of producer goods, efficient allocation of physical capital and human capital, the importance of productivity growth, the role of agriculture for infant industries, and the increase of production scale of enterprises.

Although Gerschenkron (1962) created a new way of looking to the relationship between finance and economic growth, the investigation of the causality between these two major parameters were developed by Patrick (1966) as a counter-argument to these previous studies. Patrick (1966) basically focused on the causal relationship between finance and economic

growth by identifying two extensive cases: (1) demand-following finance and (2) supply-leading finance.

On the one hand, Patrick (1966: 174) explicitly argues that the "demand-following finance" was based on the formation of modern and new financial institutions, their financial assets and liabilities, and related financial services is following an increasing degree of demand for these services by investors and savers in the real economy.

It shows that the financial system development was a result of the progress in economic conditions. In other words, economic development creates a demand for financial instruments, which is passively met by an increasing scale of financial sector (Eschenbach, 2004: 2). Additionally, these nascent financial services are transformed by the changes in objective opportunities and subjective responses (Patrick, 1966: 174-175).

The demand for financial services basically depends on the growth of real output. If the real national income increases, the enterprises/firms will be increased their demands as well for their external funds. Additionally, if there is a great divergence in growth rates of different sectors or industries, the demand for financial intermediation for lending sectors will be much higher in the sense of the financial services in the case of saving transfers (Patrick, 1966: 175). Furthermore, the financial sector plays a passive role in the process of economic growth in the context of demand-following financial practices (Patrick, 1966: 175).

On the other hand, Patrick (1966: 175) explains that the "supply-leading finance" was based on the formation of financial institutions and the supply of their financial assets, liabilities, and financial services before the demand-side claims (e.g., the demand of entrepreneurs in a newly developed sectors).

The financial intermediation process promotes economic growth by providing transfer of excess savings for new investments in the context of supply-leading finance. Therefore, it has two different functions in the economic system: (1) transferring resources from traditional sectors to modern sectors; and (2) promoting entrepreneurship in the modern sectors. However, this is not to say that supply-leading finance is a crucial factor for leading of self-sustained economic development (Patrick, 1966: 176). On the contrary, it has an important role at the beginning of the economic growth process. The major benefit of the supply-leading finance depends on the fact that it offers a variety of financial services and instruments (Patrick, 1966: 176). In the context of these views, the supply-leading pattern stimulates the economic growth first, and then the demand-following pattern takes over the control of the management of the economic activities. As Eschenbach (2004: 3) states that the arguments of Patrick (1966) shows that the supply-leading patterns have the dominant power in early stages of economic development but the demand-following process gradually gets the hegemony in latter periods.

Finally, Gurley and Shaw (1967) argue that the financial development is a result of a higher level of economic development. Their arguments have two dimensions. First, the financial development follows the economic development. Second, the financial intermediation provides an efficient allocation of savings and thereby transfers necessary funds to the new investment opportunities. As Gurley and Shaw (1967: 257) note that when countries increase their scale of wealth and income, their financial systems usually affect the range and the scale of financial assets, institutions, and markets in a positive manner. In other words, since the economic expansion elicits more needs for financial assets and services, the main motivation of the financial system builds on providing of those requirements. Alternatively, it means that

financial system plays a passive role in this process. The main mechanisms of finance depends on the development process of aggregate demand in parallel to the development of the economic conditions.

Moreover, according to Gurley and Shaw (1967), the division of labor is a crucial factor in the process of financial development as a part of real growth. First of all, the division of labor in the real production system contains the factors related to the borrowing and lending. Secondly, saving-investment nexus is an important case between financial activities and the division of labor. Third, the growth of financial assets is stimulated by the division of labor both for their quantity and their variety. Therefore, as Gurley and Shaw (1967: 260) note that specialization leads to a further increase in income level and the scale of stock of both real and financial wealth through the use of productive factors. The level of financial development in that process may be affected by several factors such as the instability in the rates of growth level of output, inflation rate, historical movements, the change in laws and the courts.

Furthermore, Gurley and Shaw (1967) suggest some alternative methods for the mobilization of the economic surplus among different sectors. Essentially, these methods may widen to a large extent, but Gurley and Shaw (1967) classify them into two groups as internal finance and external finance. On the one hand, internal finance comprises of self-finance and taxation. On the other hand, external finance includes the debt-asset system and foreign aid. First, Gurley and Shaw (1967: 261) state that in self-finance, savings are prepared for the investors' disposal by adjusting the effective prices on commodity, factor markets and foreign exchange markets. Second, the taxation method directly uses taxes and indirectly uses nonmarket alternatives to transfer savings to the state for either governmental or private investment (Gurley and Shaw, 1967: 261). Third, Gurley and Shaw (1967: 261) imply that the debt-asset system is used for the mobilization of domestic savings. Finally, the external debt is meant that the foreign aid is needed for further financial activities, and more specifically for the health of the financial sector.

4.2 Finance and Endogenous Growth

The literature on finance and endogenous growth have different kinds of technical and empirical structure. Hence, in this sub-section, the following empirical findings on the relationship between finance and endogenous growth will be focused on in detail. These empirical findings can be listed as follows: Greenwood and Jovanovic (1990), Levine (1991), Pagano (1993), King and Levine (1993a), Bencivenga, Smith and Starr (1995), Arestis and Demetriades (1997), Rajan and Zingales (1998), and Shan and Jianhong (2006). Additionally, further two sub-sections about the relationship between finance and economic growth will focus on the investigation of the effects of financial liberalization on banking sector development and stock market development.

Greenwood and Jovanovic (1990) construct a model in which financial intermediation and the rate of growth are determined endogenously. The model focuses on two paradigms. On the one hand, it tests two-way causal relationship between financial intermediation and economic growth in coherence to the perspectives of Goldsmith (1969), McKinnon (1973) and Shaw (1973) on economic development. On the other hand, it investigates the relationship between income distribution and the development of economy by taking into account of Kuznets hypothesis. In the context of these two paradigms, Greenwood and Jovanovic (1990: 1078) results that economic growth increase the level of investment in organizational capital, which in turn stimulates further growth.

In the model, developed by Greenwood and Jovanovic (1990), institutional factors are given endogenously in order to test their effects on trade activities of the economic system. According to Greenwood and Jovanovic (1990), there are two ways to promote an increase in the trade regime. First, financial intermediaries may provide profitable use of resources by collecting and analyzing resources for productive investments opportunities for investors. Second, trade organizations may create necessary conditions for pooling of the risks. As Greenwood and Jovanovic (1990: 1078) mention that if the investment is done by way of intermediated structures, the financial returns to the individuals will be both higher and much safer. Therefore, all of these financial intermediaries transfer their resources into the efficient and productive use of economic means, which in turn increase the level of investments and thereby the economic growth.

The results of the empirical analysis of Greenwood and Jovanovic (1990) can be listed as follows. First, there is an inextricable link between finance and growth. Economic growth provides necessary resources to the development of the financial system of a given country. Furthermore, the developed financial sector in turn yields a higher economic growth by making investments more efficient. Second, in an infant period of economic development, the growth rates will be low due to an unorganized structure of exchange between goods and services. However, financial sector and thus economic growth become more active and steady coupled with an increase in the aggregate income level and thereby the income inequality between poor and rich become wider through the globalization of the economic era. However, the full development period of the financial structure will smooth the inequality level and will then attain an equal distribution of income among individuals by providing a higher economic growth.

Levine (1991) investigates the relationship between endogenous growth and stock market. The major purpose behind this investigations is to analyze the effects of financial assets trading and tax policy on the economic growth. Essentially, the research begins with the construction of endogenous growth model in which the stock markets may affect the steady state level of growth by allocating risks and altering investment incentives. According to Levine (1991: 1446), the only way to achieve steady state per capita growth depends on the decisions of agents for making investment that yield high rates of human capital accumulation and technological development.

Additionally, there are different kinds of factors which create externalities (e.g., including both positive and negative) related to the physical capital in the development process of human capital. If the infant capital firms are removed from the economic development process, it leads to the reduction of human capital accumulation in terms of an existing level of employees in the economy (Levine, 1991: 1446). Thus, the economic growth is negatively affected because of its strong correlation with the human capital development.

Besides the economic growth and human development parameters, Levine (1991: 1446) adds two more factors into the model which elicit the examination of financial contacts: (1) liquidity risk and (2) productivity risk. However, Levine (1991: 1447) does not include any parameter related to the economic restrictions on trading patterns into the analysis. According to Levine (1991), stock markets may help agents in order to cope with the liquidity risks. The risk level reduces the equilibrium point while the welfare of the country raises of it. Additionally, tax imposition into stock market transactions and policy suggestions retard efficient allocation of resources and thus increase the fraction of firm capital which is removed prematurely (Levine, 1991: 1447-1448).

Furthermore, any imposition of taxes on consumption, income, corporate and capital gains, negatively affect the rate of human capital accumulation and per capita output growth. Hence, both of these kinds of risks create incentives in favor of the development of stock markets. This development process in stock markets can affect economic growth in two ways. First, the increase in the efficiency of firms in the presence of stock markets is occurred by removing the premature withdrawal of capital from firms (Levine, 1991: 1453). Second, if the scale of resources devoted to firms increases, the stock markets can in turn positively affect the economic growth (Levine, 1991: 1453). In addition to these two factors, tax policy may change the growth rate by affecting investment incentives.

In the light of this information, the outcomes of Levine's (1991) analysis can be listed as follows. First, economic growth realizes only if there is a sufficient amount of capital in the economic system. It provides the development of human capital and the progress in technology for the production process. Efficient allocation of resources and of financial arrangements accelerate the steady state growth rate per capita output through the removal of premature capital from firms and the encouragement of investments. Second, stock markets are developed in order to help agents due to the emergence of the possibility of productivity risk and liquidity risk. Thus, increasing the rate of diversification against the idiosyncratic firm shocks, raising the fraction of resource allocated to firms, and eliminating premature capital liquidity stimulate the economic growth. Finally, taxing policies of financial system retards per capita growth rates.

Pagano (1993) stresses on the investigation of the financial development parameters and their relationship with the economic growth. According to Pagano (1993), there are different kinds of channels in which they affect the relationship between financial development and economic growth. The economic growth is basically determined by the $g=A\phi s-\delta$ equation within the frame of endogenous growth models. As Pagano (1993: 614-615) states that the parameter ϕ can be raised which shows the proportion of saving devotes to investment, the parameter A can be increased which denotes the social marginal productivity of capital, and the parameter s can be influenced which denotes the private saving rate, through the changes in the economic growth parameters.

Some of major features of this equation can be listed as follows. First, the transfer of savings to the firms will foster the level of investment and thereby the efficiency of those investments. Second, financial intermediation provides the allocation of capital for new investments where the return of marginal product of capital are very high. Also, financial intermediaries affect A [the social marginal productivity of capital] by collecting information and then analyzing them in the social context. They also affect A by promoting individuals to invest in risky investments by way of risk diversification methods. For instance, banks can repress idiosyncratic liquidity shocks. Third, the financial intermediation can affect private saving rates, s. However, the results for this relationship is not clear. In this case, Pagano (1993: 616-617) notes that the households get much stronger insurance against endowment shocks and much reliable diversification of rate-of-return by developing the capital markets, while consumer credit is acquired more easily and cheaply.

Furthermore, the financial development narrows the difference between borrowing rate and lending rate. Although the effects of these factors on savings are positive, their relationship with the economic growth is ambiguous. For instance, according to Pagano (1993: 621), the saving rate and thus the growth rate may be negatively affected by the ameliorations in risk-sharing and in the household credit markets. Pagano (1993: 621) also indicates that financial development can be affected by public policies and further points out that as a term it is too

generic. To measure its effect on economic growth, the particular financial markets should be concerned rather than focusing on all sector (Pagano, 1993: 621).

King and Levine (1993a) investigate the relationship between financial development and economic growth, in which the theoretical background and its assumptions are consistent with the Schumpeterian framework. Essentially, King and Levine (1993a: 717-718) focus on the answer to the following hypothetical question whether there is a robust and significant relationship between the higher levels of financial development and faster current and future rates of economic growth, physical capital accumulation, and progress in economic efficiency.

King and Levine (1993a) make cross-country analysis using data for 80 countries over the 1960-1989 period in order to test this correlation. There are four major indicators for measuring the financial development in the analysis both of which are provided the examination of services presented by financial intermediaries. First one is the ratio of liquid liabilities of the financial system to GDP which is used for measuring the financial depth. The second one is the ratio of deposit money bank domestic assets to deposit money bank domestic assets plus central bank domestic assets, which infers the importance of the relationship between deposit bank and the central bank in the allocation of domestic credit. The third one is the credit issued to non-financial private firms divided by total credit. The last one is the credit issued to non-financial private firms divided by GDP. The latter two parameters are used to calculate the domestic asset distribution among individuals.

King and Levine (1993a) state that the financial system gives much higher priority to the private sector than the government or state enterprises to use available funds. In this framework, King and Levine (1993a) find two sets of results for an investigation of the relationship between financial development and current and future economic growth. The first set of results shows that there is a strong relationship between financial development and growth parameters for a contemporaneous economic growth over the 1960-1989 period. In other words, this initial result indicates that high level of financial development leads to an increase in economic growth, physical capital accumulation, and economic efficiency. The second set also provides similar results in which the financial development parameter has a positive effect on future rates of long-run growth, physical capital accumulation, and economic efficiency improvements. There is a strong correlation between all parameters used in the analysis both for two sets of results. As King and Levine (1993a: 179) mention that in the next 10 to 30 years, the predetermined component of financial development can be used as a robust indicator for long-run economic growth. In other words, King and Levine (1993a) find that there is a strong and robust relationship between these mentioned-above parameters by taking into account of both financial development and growth indicators, as suggested by Schumpeter (1934, [1943] 2003).

Bencivenga, Smith and Starr (1995) stress on the importance of the transaction costs in the financial markets and then make an analysis to identify the effects of these costs on the equilibrium choice of capital production technology and on the equilibrium rate of economic growth. The basic idea behind this analysis depends on the fact that increasing scale of technical efficiency in the financial markets can have ample effects on the transaction costs related to the productivity of physical capital, and also, by implication, to the rate of real economic growth. Thus, a great majority of literature about this topic have tried to show that there is a close relationship between finance and economic development (or its rate of growth).

Bencivenga, Smith and Starr (1995) basically focus on understanding the nature of that relationship, depending on the reducing conditions of transaction costs, within the frame of an

almost same theoretical background of the literature. First and foremost, the Hicksian framework, which suggest that there is a strong relationship between the financial sector and the industrial revolution in England and thereby the technical innovations in illiquid capital investment, contributes too much to their analysis, especially in the context of the analysis path of that relationship. In addition to the use of overlapping generations (OLG) model in the production process in order to allow for endogenous growth, Bencivenga, Smith and Starr (1995) focus on different technology structures in order to convert the current output into future capital. Essentially, two factors change the composition of those technologies: (1) the productivity period and (2) the gestation period (Bencivenga, Smith and Starr, 1995: 155).

Since the long-period use of technologies in capital production are necessary to the possession of capital-in-process (CIP) be directed by way of a sequence of owners in secondary markets, Bencivenga, Smith and Starr (1995: 155) posit the support of financial market trading securities for their analytical framework. In such a case, transaction costs become a major point of economic mechanisms as a key factor in estimating the liquidity of markets. For instance, according to Bencivenga, Smith and Starr (1995: 155), in liquid markets, the transactions costs are low but in illiquid markets the transactions costs are very high.

In addition to the effects of these factors on equilibrium choice of capital production technology and on the rate of growth, Bencivenga, Smith and Starr (1995: 155) introduce the factor identifying the role of the liquidity of capital resale markets in order to analyze their effects on the equilibrium rate of return on savings and on the volume of activity in secondary capital markets. The aggregate economy is equilibrated under the conditions of a unique and non-trivial constant growth rate in their model.

All in all, the results can be listed for the analysis of Bencivenga, Smith and Starr (1995) are as follows. First, the reduction of transaction costs may have an effect on the rate of growth in two ways: (1) the change in the rate of transaction costs or the employment of long-gestation capital production technologies and (2) the change in real return on savings. A possible consequence of the reduction in transaction costs is the provision of an employment of longer maturity capital investments. Second, the results show that the reduction in transaction costs may create a tendency towards a reliance on the transaction in capital resale markets.

The main impetus behind this tendency depends on the fact that there is no involvement in new capital investments but the purchase of existing CIP in secondary capital markets. Therefore, the composition of total savings is expanded towards more liquid assets and then the real growth rate reduces in the long-run. In other words, if the effects of reduction in the transaction costs in capital resale markets are greater than the level of reduction in new capital investment, efficiency improvements in the financial markets become growth-reducing. Investments for the long-term projects will reduce at the expense of liquid market transactions. The main boost for an increase in the economic growth depends on the reduction of transaction costs of financial markets.

Arestis and Demetriades (1997) investigate the empirical evidence for the relationship between financial development and economic growth. The research discusses two major problems emerging in the analysis of finance and growth. On the one hand, Arestis and Demetriades (1997) argue that time-series estimation gives much stronger results than the cross-country regression in terms of the investigation of the finance-growth nexus as well as the correlations of parameters related to the economic growth. As Arestis and Demetriades (1997: 796) point out that the initial and primitive nature of results show that they may not significantly represent

the accurate individual country circumstances such that the institutional structure of the financial system and policy framework, and the degree of governance effectiveness.

On the other hand, Arestis and Demetriades (1997) question the straightforwardness of the similar types of policy applications for developing countries within the frame of financial reforms. Essentially, there are two major tenets in which Arestis and Demetriades (1997) try to revise and prove that the implementation of financial reforms and of the liberalization process of financial sector are right steps for the group of developing countries. According to Arestis and Demetriades (1997), issuing the same types of policies for different countries which have a different socio-economic structures, create unfavorable effects for both macroeconomic stability and the future growth rates. As Arestis and Demetriades (1997: 790) stress that implementation of the same policy framework of financial liberalization had a destabilising effect on the economic activities which was abandoned in the selected country groups.

Moreover, Arestis and Demetriades (1997) analyze the finance-growth nexus by looking at two major countries, namely USA and Germany, and employing quarterly data for the period between 1979(1) and 1991(4) in case of time-series estimation method. The following three parameters have a common use in the estimation process for these two developed countries: (1) the logarithm of real GDP per capita; (2) the stock market capitalization ratio; and (3) the index of stock market volatility. However, the last variable will be changed in the estimation period. The logarithm of the ratio of M_2 to nominal GDP will be used for Germany and the logarithm of the ratio of domestic bank credit to nominal GDP will be used for the United States. Since there is a lack of detection of cointegration in the case of United States, the last variable is used in a different concept (i.e., for measuring the level of development of the banking system in the United States).

The results of the model can be listed as follows. First, there is a uni-directional causality from financial development to real GDP for the case of Germany. The stock market volatility has negative impact on output and therefore the only way that stock market capitalization can affect real GDP is through the banking system. Second, there is no straightforward evidence that financial development positively affect the real GDP for the case of United States. Third, the real GDP positively affects both of the banking system and the capital market development in the United States. Hence, Arestis and Demetriades (1997: 790) suggest that time-series analysis is more reliable than the analysis of cross-country regression because it may provide much accurate views for the relationship between financial development and real output.

Finally, Arestis and Demetriades (1997) analyze the direct effects of financial repression in South Korea and therefore incorporate five types of variables and set the vector autoregressions (VAR) length to two years by using time-series methods. The parameters can be listed as follows: (1) the logarithm of the ratio of bank deposits to nominal GDP; (2) the logarithm of real GDP per capita; (3) the ex-ante real deposit rate of interest; (4) the logarithm of capital stock per head; and (5) a summary measure of financial repression. The empirical results show that there is a positive effect of financial repression index on financial development in the first case. However, the real interest rate has minimal effect on financial development. These results are actually indicated the consistency of the monopoly banking models. Second, capital stock is an important factor for the determination of long-run economic growth. Third, there is a negative effect of real interest rate on output. In the context of all results, since they may somewhat contradict with the traditional views and agreements on financial liberalization, Arestis and Demetriades (1997: 796) note that although financial repression in South Korea

may have a positive effect on financial development, this case cannot be generalized for further investigations.

Rajan and Zingales (1998) focus on the investigation of the causality between financial development and economic growth by looking at the theoretical mechanisms of that causality analyzed by Arestis and Demetriades (1997). Essentially, Rajan and Zingales (1998) determine the way of causality by examining the costs of external financing resources of firms. The hypothesis of the study depends on the fact that banks can reduce the costs emerged as a result of an existence of moral hazard and adverse selection in the aggregate economy. Thus, the development of industrial sector will be supported much more with a higher development level of financial system, depending on the external finance. Rajan and Zingales (1998: 579) state that (similar to the Schumpeterian arguments) the economic growth can be affected indirectly by the changes in the level of financial development and thereby challenge the current ones. Therefore, related to that analysis, the changes in the level of financial development has a direct and significant impact on the rate of economic growth, at least partly, by reducing the costs of external finance to financially dependent firms (Rajan and Zingales, 1998: 584). However, Rajan and Zingales (1998) also indicate that the financial sector as one of the major determinant of economic growth is not the only factor. Although the analyses should use the other factors, several sectors in the industry should be supported by secure banking system so as to realize their profitable investment opportunities.

The empirical study of Rajan and Zingales (1998) is based on the investigation of transnational and cross-sectional evidences. Rajan and Zingales (1998) create a criterion revealing the necessity of external finance sectors by taking into account of several technological determinations and thus analyze whether the sectors depend strongly on external finance growth in the countries having a well-developed financial system. As Rajan and Zingales (1998: 584) mention that if there is a well-functioning and well-developed economic markets in a certain country, it denotes a source of the existence of comparative advantage for that country in industries having their dependent structure to the external finance. In the case of a less developed financial system, the costs will favor incumbent firms to the detriment of the new candidates. Therefore, Rajan and Zingales (1998: 584) note that the level of financial development can be assumed as a factor influencing the size composition and concentration of an industry.

Finally, Shan and Jianhong (2006) investigate the causality between financial development and economic growth by using Granger causality test for China. Additionally, Shan and Jianhong (2006) examine the impact of financial development on economic growth by using vector autoregressive (VAR) model. In the context of these analyses, Shan and Jianhong (2006) try to show whether the development in finance is necessary for making high growth rates in developing countries.

Depending on this case, the results are striking. First, Shan and Jianhong (2006: 213) state that the contribution from labor is the primary determinant in affecting the economic growth in which the financial development is regarded as the second force. For instance, making reforms and changes in Chinese financial system may provide a positive environment and significant resource channels for credits to the economy which lead to the contribution to GDP growth in China (Shan and Jianhong, 2006: 213). However, there is also another way in which economic growth may provide a solid credit base for the development of finance in China. This condition means that there is a two-way causality between financial development and the economic growth in China. Second, trade patterns stimulate the growth of GDP but the credit system is

not a good channel for an increase in the level of investment. Third, the labor force is the most important determinant when it is compared with the financial factors affecting economic growth in China. Finally, the financial development parameter is not the most important factor in the increase of GDP growth but it has a contributing effect on the economic activities (Shan and Jianhong, 2006: 214).

4.2.1 Banking Sector Development and Economic Growth

In this sub-section, the major focus will be specifically on the investigation of the banking sector development and the economic growth in addition to the empirical examinations on financial development and the endogenous growth models. This investigation provides understanding of the financial development in the context of the financial sector. In general, in the neoclassical framework of finance, the financial development mostly stimulates the increase in GDP growth. However, does this phenomenon is always the case in each economic mechanism? In other words, does the development process of financial relations and transactions always affect the growth of GDP in a positive manner? If it is affected, so how much and which channels? Are there any deficiencies? This sub-section will investigate these kinds of questions and their relevant answers. In that sense, the following empirical findings on the relationship between banking sector development and economic growth will be focused on in detailed: Jung (1986), King and Levine (1993b), Demetriades and Luintel (1996), Rousseau and Wachtel (2001) and Deidda and Fattouh (2002).

Jung (1986) investigates the causal relationship between financial development, specifically in the banking sector, and economic growth by using Granger's causality test for 56 countries' annual data that consist of which 19 countries are developed. Particularly, Jung (1986) follows the technical analysis of Patrick (1966) which examines the direction of causality by focusing on the investigation of the existence of causality and its temporal behavior in an international era. Instead of using traditional parameters for the measurement of financial transactions, Jung (1986) uses two alternative measures for financial development in the pattern of a simple and uni-directional causality: (1) the currency ratio (M1); and (2) the monetization ratio (M2).

On the one hand, the empirical results of the first measure show that there is a negative relationship between M1 and economic growth, especially at the early stages of economic development. According to Jung (1986: 336), if the existence for more diversification is provided for financial assets and liabilities, it stimulates more transactions which is carried out in the form of noncurrency.

On the other hand, the empirical results of the second measure (M2 to GDP/or Gross National Product [GNP]), Jung (1986: 336) states that the monetization variable indicates the real size of the financial sector of a growing economy. If the financial sector grows faster than the real sector, it will be expected that the M2 to GDP or GNP ratio will increase over time.

All in all, the results can be summarized for that analysis are as follows. First, using both of the simple and uni-directional concepts for two alternative measures, Jung (1986) finds that LDCs are more prone to supply-leading causality patterns than demand-following patterns. In that sense, Jung (1986) validates the analytical results of Patrick (1966) and his hypothesis within the framework of the importance of financial development in LDCs. Second, temporal causality pattern gives ambiguous results for the analysis of financial development process. On the one hand, the causal direction for LDCs is characterized from financial development to economic growth in the case of M1 indicator alone. However, the opposite case is true for both simple

and uni-directional causality pattern in terms of DCs. On the other hand, there is no distinction between DCs and LDCs in terms of temporal causality pattern in the presence of the use of M2 to GDP/GNP parameter for empirical framework. Finally, LDCs having high growth rates are more prone to supply-leading pattern when M1 is used as proxy for financial development parameter in comparison to average growth rates for DCs. In other words, the currency variable has a strong effect on sample countries having high growth rates but the monetization variable gives moderate support for sample countries having low growth rates. As Jung (1986: 344) explains that although the monetization variable has not a direct causal pattern among LDCs, it is coherent with the Patrick hypothesis.

King and Levine (1993b) develop an endogenous growth model in order to analyze the tripartite relationship between finance, entrepreneurship, and economic growth. The analytical foundations of the research are developed by taking into account of the insights of Frank Knight (1951) and Schumpeter (1934, [1943] 2003). King and Levine (1993b) combine the role of entrepreneurs, which is initiated by Knightian approach, by way of two vital reasoning developed by Schumpeter (1934, [1943] 2003). First, innovations are done by a search for temporary monopoly profits. Second, financial institutions play a key role in the evaluation and financing processes of entrepreneurs in their innovative projects and the production process of new products to market (King and Levine, 1993b: 514). King and Levine (1993b) also support the Schumpeterian framework for the sense that finance and innovations are the major driving forces for the economic growth. The financial system influences on investment decisions either by evaluating forward-looking entrepreneurs or funding the best innovators.

In this case, financial innovations affect the level of productivity in a positive manner which are led by entrepreneurs in four ways. First, investment projects are selected depending to their future promises on economic progress. Second, the financial system gathers and then mobilizes necessary funds for most productive fields. Third, the financial system reduces uncertainty and thereby creates new ways to reach an expected return on transactions by diversifying risks. Fourth, the financial system creates new methods by stimulating new innovations and eliminating the old ones.

In the context of these four major factors, King and Levine (1993b) point out that highly developed financial system combined with a better institutional framework stimulates higher level of economic growth in parallel to the development in the productivity level. In other words, King and Levine (1993b) assert that there is a positive and robust relationship between financial parameters and productivity level, capital accumulation, the level of investment, and economic growth.

Similar to their previous parameters used in the initial analysis, King and Levine (1993b) also use the same variables for approximately 80 countries over the 1960-1989 period. Additionally, King and Levine (1993b) present much stronger results than the previous estimation outcomes of their analysis in the case of cross-country regressions, case studies, and the policy reforms. Regressions are based on pooled time-series and cross-sectional data in their model. Thus, King and Levine (1993b) confirm the results which are presented in the first regression that a further progress in financial system fosters productivity increase and thereby the economic growth in per capita output. Furthermore, government policies in favor of the development process of the financial system have positive causal effects on long-run economic growth. However, the results also show that any obstacle on financial system development such as financial sector taxes, deposit rate ceilings, and high reserve requirements may have adverse effects on innovative activities and thereby economic growth in the long-run.

Demetriades and Luintel (1996) investigate the effects of banking sector controls in financial deepening and the relationship between financial deepening and economic growth. The research interest depends on the fact that financial development may be affected by interest rate ceilings and banking sector controls. However, the major relationship among these factors are interpreted in a different condition in comparison with the ways of analysis of McKinnon-Shaw hypothesis on the effects of interest rate. In this sense, the analyses and the reflections of Courakis (1984) and Stiglitz (1994) are much viable for their analytical framework. On the one hand, individual banks may have monopolistic lending behavior due to an increasing scale of asymmetric information (Demetriades and Luintel, 1996: 359). On the other hand, the financial deepening is affected by banking sector policies in the presence of changing influences on market structure (Demetriades and Luintel, 1996: 359).

Furthermore, the analysis shows that banks may attitude in favor of non-interest methods in order to affect the volume of deposits. Related to this argument, Demetriades and Luintel (1996) focus on the Indian case over the 1961-1991 period. There are three different scopes in their estimation process: (1) the use of measurement for the banking sector controls; (2) the use of Vector Error Correction Methods (VECM); and (3) the use of weak exogeneity tests. In this sense, the banking sector controls are tested by three different variables: (1) interest rate controls; (2) reserve and liquidity requirements; and (3) directed credit programs.

The results can range for the analysis of Demetriades and Luintel (1996) are as follows. First, financial development is negatively affected by the imposition of controls on banking sector activities in India. This result is also exhibited a robust estimation output in parallel to the results obtained by the endogenous growth models. Second, ceilings on interest rates have positive effects on financial development in India in contrast to the economic structures where the negative impacts of interest rate ceilings are dominant in financial transactions and economic growth process. Finally, financial development and economic growth are jointly determined and thus there is a bi-directional causality between these two parameters.

Rousseau and Wachtel (2001) focus on the analysis of the tripartite relationship between finance, growth, and inflation nexus for 84 countries over the 1960-1995 period. In their analysis, Rousseau and Wachtel (2001) use five-year average data for all sample countries. The main objective of their analysis is to answer two major questions whether inflation inhibits economic growth directly and/or indirectly through the negative impact on financial sector development and whether the financial sector development leads to a higher growth rate when inflation is held constant. The model includes several indicators: (1) GDP growth; (2) the log of the initial secondary school enrollment rate; (3) inflation rate; (4) M3 [all deposit type assets] to GDP; (5) M3-M1 (the simple currency ratio) / GDP; and (6) total credit to GDP. M3 plays another critical role for the measurement of intermediary activity and (M3-M1) variable shows the currency and transaction deposits. The last parameter comprises of the overall level of financial intermediation in case.

According to Rousseau and Wachtel (2001), there are two types of channels between inflation and the economic growth. On the one hand, the first channel focuses on the short-run Phillips curve which indicates that there is a positive relationship between inflation and economic growth. On the other hand, the second channel focuses on the long-run Phillips curve which indicates that there is a negative relationship between inflation and economic growth. Depending on these two separate cases, Rousseau and Wachtel (2001) stress on the negative effect of long-run Phillips curve on inflation and thereby envisage two types of effects which create negative impacts on economic growth in the long-run. Both of these two effects comprise

of direct and indirect factors through the financial sector. First, direct effects include high transaction costs and information costs to achieve high rates of economic growth. The major problem related to these costs depends on the fact that it may lead to the emergence of distortions in the economic development process. Second, indirect effects can create negative impacts on economic growth through the financial sector. For instance, high rates of inflation may promote holding more liquid assets by individuals rather than long-term and safety assets. If more liquid assets have risky factors in their transactions, the situation may lead to economic booms and busts which may in turn end with fierce economic crises or economic depressions for long time period.

In the context of these information, the results of the analysis can be summarized as follows. First, inflation distorts economic growth either as direct ways or indirect ways. However, direct effects are not so important because it may disappear when inflation is moderate. In some cases, indirect effects are strong through its effects on financial depth even if the inflation rate is stable. Second, the robust and steady effects of financial depth on economic growth is not affected by the changes in the inflation rate. However, it should be noted that the effect of financial depth is weak when the inflation rate is high.

Finally, Deidda and Fattouh (2002) investigate the relationship between financial depth and economic development by using simple OLG model with risk averse agents and costly financial transactions. According to Deidda and Fattouh (2002: 339), the growth effect of financial development is not obvious at the initial levels of development, but it turns to be a positive as development proceeds. Furthermore, Deidda and Fattouh (2002) use King and Levine's (1993a; 1993b) data set by applying a threshold regression model and find that the relationship between the financial depth and economic growth is positively and strongly efficient for high-income countries but not for low-income countries. Additionally, financial intermediation creates positive growth effects for economic activities. As Deidda and Fattouh (2002: 344) state that the initially rich countries are much closer to grow slowly after controlling for the initial level of investment in human capital. The high rates of initial secondary school enrollment need a faster subsequent growth and the high levels of financial development need to a high rates of economic growth (Deidda and Fattouh, 2002: 344).

4.2.2 Stock Market Development and Economic Growth

In addition to the banking sector development, the other major research field is related to the stock market development which is a major source to understand the ways in which the profits are emerged in the capitalist system. Although the investigations on this topic are mostly based on the reflections of the neoclassical framework, especially for empirical analyses, it may differ in different economic conditions in terms of the financial sector development. Some of these theoretical and empirical studies can be listed as follows: Levine and Zervos (1998); Arestis, Demetriades and Luintel (2001); Kaminsky and Schmukler (2003); Naceur and Ghazouani (2007); and Antonios (2010).

Levine and Zervos (1998) examine the tripartite relationship between stock market liquidity, banking sector development, and long-run economic growth. Essentially, Levine and Zervos (1998) focus on the investigation of the analytical question whether stock market and banking sector have strong and positive relationship with contemporaneous and future rate of economic growth, capital accumulation, private saving rates and productivity increases. In order to answer that analytical question, Levine and Zervos (1998) use cross-sectional data for 49 countries over the 1976-1993 period. The main aim of this analysis is to show empirically that the theoretical

discussions for the relationship between stock market development and the long-run economic growth are robust.

The analysis basically depends on two measures. On the one hand, there is a stock market liquidity which is measured by the value of stock trading relative to the size of the market and the aggregate economic measurements, respectively. On the other hand, there is a banking sector development which is measured by bank loans to private enterprises divided by GDP.

The results of the analysis can be listed as follows. First, Levine and Zervos (1998) find a positive and significant correlation between stock market liquidity predicted for long-run economic growth, productivity, and capital accumulation even after controlling for several factors such as initial income, political stability, the initial investment in education, openness to trade, stability in macroeconomics, fiscal policy and the prospective nature of stock prices. Second, positive and significant correlation among variables is also robust for the estimation results of the banking sector development. In other words, banking sector development is a robust indicator for the investigation of long-run economic growth, capital accumulation, and productivity growth. Finally, Levine and Zervos (1998) argue that there is no viable link for other types of stock market parameters on long-run economic growth. For instance, volatility, market size, and international capital market integration do not robustly related to the economic growth, capital accumulation, and productivity improvements. Additionally, the evidence is not obvious in which stock market liquidity, international capital markets integration, or stock return volatility reduce private savings rate or distort economic growth. In consequence, all of these empirical results lead Levine and Zervos (1998) to state that there is a robust and positive relationship between financial development and economic growth which is strongly affected either by stock market development or banking sector development.

Arestis, Demetriades and Luintel (2001) focus on the effects of stock market development on economic growth. In order to test this effect, the research is based on to conduct time-series method using available data for five major DCs covering the 1968-1998 period: (a) the United States; (b) United Kingdom; (c) Germany; (d) France; and (e) Japan. Arestis, Demetriades and Luintel (2001) use time-series method rather than using cross-sectional method because it gives much stronger results for an investigation of the causality issue and endogeneity problem. Additionally, time-series method provides a release from the limitations of cross-sectional method and thereby reveals disguised results and provides important data for an analysis of finance-growth nexus. Arestis, Demetriades and Luintel (2001) state that the major findings of this analysis provide crucial assumptions for further debates on capital market-based and bank-based financial systems. However, the following results are indirectly robust for countries which are less-developed. Within the context of early theoretical assumptions and empirical findings on the relationship between stock market development and economic growth, Arestis, Demetriades and Luintel (2001) use the same concept for five sample countries in their analysis.

On the one hand, the empirical outcomes show that there are both positive and negative aspects of stock markets. First, stock markets encourage specialization, acquisition, and dissemination of information. In addition, stock markets reduce the cost of savings mobilization and thereby enhance the corporate control. Second, there is an increase in stock market liquidity and that increase may make financial assets trading less risky for investments and may provide an easy access to capital markets.

On the other hand, there are also negative aspects of the stock markets. First, increase in stock market liquidity may lead to an increase in the returns of investments and thereby may reduce

savings through income and substitution effects. Second, the emergence of uncertain conditions in savings is possible in the economic system. Third, liquidity may create "euphoria" and "myopia" for new investments and thereby may negatively affect corporate governance. Finally, stock markets may promote price volatility which distorts efficient allocation of investments.

Moreover, Arestis, Demetriades and Luintel (2001) note that banks play an important role in the economic growth process as well as the stock markets. As Arestis, Demetriades and Luintel (2001: 19) state that the substitution between stock markets and banks are the major sources for corporate finance because a firm may issue new equity in case of its borrowing needs which is equal to the banking system decline. In order to test this relationship, Arestis, Demetriades and Luintel use (2001) four kinds of variables such as (1) the output which is measured by the logarithm of real GDP, (2) the stock market development which is measured by the logarithm of the stock market capitalization ratio (the ratio of stock market value to GDP), (3) the banking system development which is measured by the logarithm of the ratio of domestic bank credit to nominal GDP, and (4) the stock market volatility.

The results of the analysis of Arestis, Demetriades and Luintel (2001) can be summarized as follows. First, the effects of banking system on economic growth are robust even though stock markets have positive impacts on the same factor. Second, stock markets and banks have positive effects on growth of output for the case of France, Germany, and Japan. Third, the relationship between financial development and economic growth is statistically weak for the case of United States and United Kingdom. The causality is ranged from economic growth to financial development in those countries. Fourth, the bank-based financial system has a higher positive impact on the long-term economic growth than the capital market-based financial system. Fifth, stock market volatility has negative effects on economic growth in Japan, France, and the United Kingdom but it is insignificant for Germany. Finally, the main hypothesis of the research does not coherent with their argument in which Arestis, Demetriades and Luintel (2001: 19) state stock market price volatility may reflect efficient functioning of stock markets.

Kaminsky and Schmukler (2003) analyze both short-run and long-run effects of financial liberalization of capital markets in order to implement much strong understanding of financial liberalization and to analyze the relationship between liberalization process and economic crises. The analysis covers 28 mature and emerging countries over the 1973-1999 period and presents an extensive chronology for the liberalization process of those countries. Kaminsky and Schmukler (2003) focus on this extensive analysis so as to understand the dynamics of the liberalization process of the financial sector in detail. Additionally, Kaminsky and Schmukler (2003) focus on this analysis because financial liberalization is not an uninterrupted process and therefore subjects to different types of restrictions over time, especially for emerging economies.

In the consideration of these issues for several regions, the pattern of financial liberalization differs in many different economic conditions. For instance, Kaminsky and Schmukler (2003: 24) point on that the primary way for developed countries in the liberalization process is to open stock markets and for developing countries is to open their domestic financial sector. Moreover, Kaminsky and Schmukler (2003) also apply some major algorithms which are organized in detail so as to understand business cycles and to identify the booms and busts in stock markets. Since there are counter arguments whether to show that these markets are efficient, the empirical structure is based on testing of the null hypothesis whether it is random walk. By

doing so, the research aims to understand the changes of booms and busts emerging with the financial liberalization process.

The results of the analysis give striking facts on that related issue. First, according to Kaminsky and Schmukler (2003: 24), there is no any intensification in booms and busts in the stock markets following the financial liberalization in the long-run. However, the short-run mechanisms may exhibit unfavorable results for world markets, especially for emerging markets. These mechanisms show that the effects of the short-run changes, depending on several reasons across mature and emerging markets. In other words, the results of the analysis show that the financial liberalization induces strict economic cycles in the short-run. Despite the excessive financial cycles in parallel to the financial liberalization process of emerging markets in the short-run, the mature markets set out different attitudes. As Kaminsky and Schmukler (2003: 24) express that the liberalization of the economic components are beneficial both in the long-run and the short-run for mature markets having larger bull markets but less effective bear markets in the following process of deregulation.

The reasons behind those differences emerged in mature markets can be found in the changing structure of banking sector, stock markets, institutional framework or legal authorities. Finally, Kaminsky and Schmukler (2003) analyze the effects of the quality of institutions and the laws which govern the functioning of the financial system on financial cycles. According to Kaminsky and Schmukler (2003), the mature markets are already adopted developed institutional framework and laws for better functioning of the financial system. However, Kaminsky and Schmukler (2003) also add that the dynamics of institutions and laws should be changed in a positive manner in emerging markets. Therefore, Kaminsky and Schmukler (2003: 24) note that financial cycles are became less important when the quality of institutions develops and also warn that the liberalization process is not proceeded by the reforms in institutional framework.

Naceur and Ghazouani (2007) investigate the tripartite relationship between stock markets, banking sector and economic growth for the Middle East and North Africa (MENA) region. Essentially, Naceur and Ghazouani (2007) establish their empirical research on 11 MENA countries by using unbalanced panel data over the 1979-2003 period and use dynamic panel model with the generalized method of moments (GMM) estimators for econometric analyses.

The empirical research is based on MENA region for two reasons. First, there is a very few studies that have been focused to analyze this region; and second, the region countries have different sizes and structures in their financial systems which of them embarked after mid-1980s in comprehensive financial reforms (Naceur and Ghazouani, 2007: 298).

The primary concern for this analysis is to test whether economic growth is positively affected by the progress in stock markets and banking sector after controlling for the effects of economic growth determinants. There are several functions of variables in the growth regression for banks and stock markets. Regarding this matter, Naceur and Ghazouani (2007: 299) note that the predictions that theory provides are not reliable about whether the banks and stock markets are substitutes, complements or whether depends on growth-inducing factors.

Some of major results can be listed for this empirical study as follows. First, the far-reaching development in finance is not significant and it is also unfavorable for economic growth of MENA region in the context of the GMM estimation after controlling for other macroeconomic variables. According to Naceur and Ghazouani (2007), this striking fact is the result of the lack

of development of financial system in the MENA region. The underdeveloped structure of the financial system, therefore, distorts the economic growth of MENA countries and thereby affects the quality of the relations between finance and the economic growth. Second, the improvements in the performance of the financial system should be provided in order to achieve strong and robust nexus between finance and economic growth. The major way to obtain this strong and robust nexus for finance and economic growth depends on providing of efficiency in the allocation of credits by three ways: (1) the privatization of national banks; (2) the strengthening of credit regulations; and (3) stimulating the competition in the banking sector. In addition to these three ways, the regulatory infrastructure should be well-developed and the volatility of stock prices should be reduced so as to achieve the positive impact of stock markets on economic growth in MENA region. Therefore, in the context of those results, Naceur and Ghazouani (2007: 297) state that contrary to the MENA region countries, the countries from other regions having the same level of financial development such as Africa, Eastern Europe and Latin America should primarily develop their financial systems in order to circumvent from the negative effects of the financial markets.

Finally, Antonios (2010) investigates the causal relationship between stock market development, bank lending, and economic growth for Germany over the 1965-2007 period by using annual data. The analysis depends on VECM. The Granger causality is also used for testing the causal relationship among several related estimators. Vector model consists of three variables: (1) the general stock market index which is used as a proxy for the stock market development; (2) the economic growth; and (3) the bank lending. Rather than to use logarithmic model, Antonios (2010) focuses on linear type model. The findings of the analysis are clear-cut. For instance, Antonios (2010: 8) states that the results of the Granger causality tests show that there is a uni-directional causality between stock market development and economic growth, and the direction is from stock market development to economic growth.

4.3 Financial Liberalization, Savings, and Investment

So far, we have examined the empirical side of the multi-faceted relationship between economic growth and the financial sector, which are two of the critical parameters in the neoclassical approach. However, in this sub-section, the main focus will be based on the investigation of the effects of finance on some major macroeconomic parameters rather than the economic growth. Essentially, the neoclassical view on financial sector does not separate financial transactions from the economic developments while pursuing the development in the real economy. On the contrary, it pioneers the analyses based on the causality relationship between these two sectors. However, in many cases, the real sector developments are used for these purposes, as one of the core purposes of the neoclassical framework is to make profits from the financial sector and to do so in a manner different from the real sector profit-making mechanisms. Therefore, the macroeconomic variables do not be using separately from the finance-related macro variables in the empirical analyses of the real sector which do not result in robust and significant outcomes. Particularly, in the post-financial liberalization process, the major impacts of the financial sector variables in the economic structure is not separated from the real sector.

Therefore, the main aim of this sub-section will be based on the examination of the effects of financial liberalization on two major parameters, namely the savings and investments, which deeply influence the economic activities. However, this does not totally mean that these two variables are the only ones in the process of financial liberalization. On the contrary, the analytical context may be examined in much different dimension and also with different parameters. For this reason, the empirical studies to be discussed below will focus on the

analyses of both financial liberalization and the use of variables related to the real sector. Some of these studies can be listed as follows: Boskin (1978), Fry (1978), Tybout (1983), DeMelo and Tybout (1986), Gupta (1987), Gelb (1989), Laumas (1990), Bayoumi (1993), Voridis (1993), Bandiera et al. (2000) and Obamuyi (2009).

Boskin (1978) investigates the effects of interest rates on savings. The research basically takes into account of the effects of monetary policy both in the short-run and the long-run. According to Boskin (1978), interest elasticity of saving rates has a crucial factor in the investigation of a wide range of issues related to the economic policies and therefore should not be neglected in the process of the analysis. The research context also rejects the traditional assumption based on the Keynesian approach which specify that savings are perfectly interest inelastic and thus the relationship between savings and the interest rates can be ignored. According to Boskin (1978), regarding these types of traditional aspects may be costly and unfavorable for using policies in the economic activities.

In order to investigate this assumption whether it is significant or not significant, Boskin (1978) uses U.S. time-series data for the period from 1929 to 1969. In addition to these major parameters including interest rates and savings, Boskin (1978) also introduces some other instrumental variables for an empirical analysis such as tax burden.

The initial results of the analysis basically show that there is a strong relationship between private saving and the real after-tax rate of return. As Boskin (1978: 4) states that the changes in the real after-tax rate of return have highly significant effect on private saving. In other words, the empirical outcomes of Boskin (1978) are very close to what Denison Law argues that saving rate is insensitive to the changes in tax system or the changes in real after-tax rate of return to capital and thus denies the traditional arguments.

The empirical evidence shows that both income and substitution interest elasticities of the private saving fluctuates between 0.3 and 0.4. In other words, it shows that the problems emerged in the level of income, welfare, and the distributional practices are strongly affected by the changes in the tax system. Additionally, depending on the estimation results of the Harrod-neutral constant elasticity of substitution (CES) production function, Boskin (1978: 5) argues that the policies like switching from an income tax to a consumption tax leads to an increase in income level substantially. Additionally, it reduces huge amount of deadweight loss to society arising from the distortion of the consumption-saving choice and thus redistribute income from capital to labor (Boskin, 1978: 5).

The empirical results show that any changes in tax policies (e.g. from income tax to consumption tax) affect incomes of individuals positively and thus redistribute those incomes toward labor to the detriment of capital. In that sense, there are two reasons behind this case for why income tax of capital negatively affects the national saving rate and the return of capital for labor. First, it reduces the after-tax rate of return on capital. Second, it transfers available resources from private sector to public sector. Additionally, these conditions increase the deadweight loss to society and thereby break up the choices between the behaviors of consumption and of saving. According to Boskin (1978: 5), if saving is positively affected by the positive changes in the rate of return and/or the public propensity to save is less than the private property to save, capital accumulation process is negatively affected by the income tax and thus the wage/rental ratio and/or the level of income reduces.

Following these information, the conclusion part of this empirical study includes three different cases. First, the relationship between private saving and interest rate is significant and robust in all of the specifications. Second, imposing a tax on capital income distorts the economic conditions. Third, making reforms in favor of tax system rather than using income tax will be much more effective for overall welfare, incomes of individuals, and distributional factors.

For instance, Boskin (1978) argues that the integration of corporate and personal income tax system or the changes in tax policies (e.g., from income tax to consumption tax) will positively affect the economic transactions in contrast to the tax treatment to the capital income in the United States. The major reason behind the emergence of welfare reduction depends on the imposition of income tax on capital due to the distortions in choices of individuals between consumption and saving. However, the estimation results of the empirical analysis show that changes in the tax policies of income and/ consumption or the integration of both personal and corporate taxes raises the overall income level and transfer a large amount of capital income to the labor income in the long-run. In all these processes, the monetary policies are very efficient in distributional patterns and the creation of income policies both in the short-run and the long-run.

The empirical analysis of Fry (1978) finds several similar results to Boskin's (1978) analysis by using pooled time-series data for seven Asian LDCs – Burma (1962-69), India (1962-72), Korea (1962-72), Malaysia (1963-72), Philippines (1962-72), Singapore (1965-72) and Taiwan (1962-72) – over the 1962-1972 period. Essentially, the results of the analysis produce that there is a strong and positive relationship between financial conditions and the saving and economic growth. The empirical evidence basically shows that the development of financial system increases the level of savings and thereby the growth rates by allocating funds for productive investments within the frame of liberalization process of finance.

Fry (1978) argues that the interest rate ceilings distort economic conditions, discourages financial institutions from risk-taking, and restrains the risk premia, depending on the assumptions of McKinnon-Shaw hypothesis. Additionally, in the context of these three facts, nonprice rationing of investable must be provided (Fry, 1978: 465). Since saving is a function of the real interest rates, all types of ceilings on interests (especially on deposit interests) should be removed (Fry, 1978). If the necessary conditions hold for this case, the following steps occur respectively: (1) the level of savings and investments increase; (2) the low yielding investments ration out; (3) average efficiency of investments increase; and (4) the level of income rises in the long-run. Thus, saving and investment will be equalized in their optimal level and the economic growth stimulates in the long-run by relaxing constraints on financial transactions.

In the context of the empirical investigations for seven Asian LDCs, Fry (1978) indicates that the mentioned-above factors are robust and significant for each sample countries. The empirical results show that domestic saving and economic growth in the Asian LDCs are positively affected by the changes in the real rate of interest (Fry, 1978: 474). Furthermore, Fry (1978) evaluate all of these arguments by taking into account of the assumptions of McKinnon's complementarity hypothesis (which argues that the investment is self-financed) and Shaw's debt-intermediation view (which states that non-institutional markets invariably appear when there is no available institutional credit; in other words, the investment is not self-financed). However, the estimations through the demand-for-money do not provide robust results for McKinnon's complementarity hypothesis in Fry's (1978) analysis.

Tybout (1983) conducts a firm-level analysis by using different types of concepts in microeconomic framework. The analysis investigates the Colombian manufacturing investment patterns over the 1973-76 period. Since the research is based on a firm-level analysis, Tybout (1983) classifies firms as their sizes. The empirical results particularly show that financial market fragmentation plays an important role in manufacturing investment patterns in Colombia. Additionally, the discussion on credit rationing issue is led within the case of extensive financial market interventions. According to Tybout (1983), there are two major factors for the relationship between credit rationing and investment: (1) cost effect and (2) liquidity effect. On the one hand, such firms are probed that their opportunity costs of growth is likely to increased; on the other hand, some of them may improve their investments in the changing conditions of earning shocks in the presence of economic downturns (Tybout, 1983: 599).

The results of the analysis can be summarized as follows. First, there is a fractionation through credit channels across groups in case of their investment behaviors in Colombia. Second, earning shocks may differ in terms of the firm sizes. These shocks are important for small firms but not for large firms. This is the case for all firms in that context because the large ones have a great power to realize their expected level of investments. However, the small firms are not able to reach their expected level of investments because of different types of reasons such as lack of resources and inefficient allocation of resources. Third, the internal funds creation is a way to stimulate productive investments for small firms. If small firms are capital intensive, this condition becomes more important. Fourth, Tybout (1983: 606) indicates that the changes in the volume or allocation of savings of the returns of small firm capital formation is not affected by the changes in the economic activities in the presence of quantity constraints at controlled prices. Finally, large firms are relatively favorable in comparison with the small firms, in the context of credit requirements. Large firms are more independent from their earnings for future investment plans. However, small firms are subjected to earning shocks. Therefore, there are differences in investments within the frame of efficiency at the firm-level analysis for Colombia.

DeMelo and Tybout (1986) examine the effects of financial liberalization on savings and investments for Uruguay over the 1962-1983 period. In this time period, the economic conditions of Uruguay experienced structural shifts, especially for the saving-investment behavior in parallel to the financial reforms. However, these structural shifts were not functioning as expected for the assumptions of financial liberalization.

The results of the analysis provide several pieces of evidence for an understanding of the interest rate-saving nexus and the investment-interest rate nexus. The whole period from 1962 to 1983 is investigated in two parts as follows: (1) the pre-reform period from 1962 to 1973 and (2) the post-reform period from 1974 to 1983. The distinction between these two periods also yields important details about the behavior of the saving rates and interest rates. Although there are upward movements in saving rates in parallel to the implementation of the financial reforms in 1973, the empirical outcomes exhibit different structures in contrast to the major assumptions of financial liberalization, in which there is a positive, albeit weak, effects of real interest rate on savings rates (DeMelo and Tybout, 1986: 570).

Gupta (1987) makes an analysis on the test of the validity of precise hypotheses which are basically focused on the effects of financial intermediation and the interest rate on aggregate savings. The analysis includes 22 Asian and Latin American countries in total over the 1967-1976 period and uses pooled time-series and cross-sectional data. Additionally, the theoretical

foundations of the analysis are based on the investigation of two types of schools of thought which are "repressionists" covering the studies of McKinnon (1973) and Shaw (1973), and the "structuralists" covering the study of Goldsmith (1969). In the context of both income effect and substitution effect, Gupta (1987) states that the theoretical insights of the repressionists school are not strong except one argument that the negative income effect is dominated by the positive substitution effect in developing countries (Gupta, 1987: 303).

Furthermore, Gupta (1987: 303) is aware that the financial structuralists assert that the savings are directly and positively affected from the financial intermediation quite apart from the effects of interest rates. Within the framework of the assumptions of these two schools of thought and the difficulty to analyze the direct relationship between financial intermediation and the interest rate bidding on savings, due to lack of available data, Gupta (1987) tends more on indirect ways in order to test the effects of factors related to the savings rates.

The results of the analysis introduce different kinds of analytical assumptions, depending on the critical approaches towards repressionists and structuralists. First, the hypotheses should be regarded on the structure of error term if the models are based on pooled time-series and cross-sectional data. Second, the selected sample countries from Asian and Latin American regions differ in some points in terms of the effects of several variables. Third, the outcomes of the estimation exhibit robust and strong results through income growth as a determinant of aggregate savings. Fourth, it is not obvious that the arguments of either the repressionists or structuralists are totally sufficient for an understanding of economic conditions. Finally, the effects of uncertainty and the unanticipated inflation for sample groups of countries are different.

Gelb (1989) examines the relationship between interest rates, financial depth, resource mobilization, and investment as well as the other indicators such as the efficiency of investment, inflation and the growth rate using a cross-section regressions for 34 sample countries over the 1965-1985 period. Similar to the analysis methods of DeMelo and Tybout (1986), Gelb (1989) divides whole period into two parts: (a) 1965-1973 and (b) 1974-1985. In the analysis process, the breaking point for two periods is the crisis year of the capitalist system indicating a large global fall in the ratio of incremental output to investment.

The results can be summarized for the analysis of Gelb (1989) as follows. First, interest rates reduce below the value of dollar in developing countries though they are capital-scarce countries. Especially, this case becomes a crucial factor in the economic relations among countries after the breaking point year. According to Gelb (1989: 28), this result shows a critical problem of mispricing financial savings. Second, there is a positive relationship between real interest rate and growth rate. This relationship basically depends on the efficiency effects which is measured by the incremental output-capital ratio. It shows that the interest rates have positive effects on economic growth by way of quality change. Third, the causality relation between these factors may extend from growth rates and efficiency of higher return assets to interest rates within the frame of financialization of savings in the pre-period. However, the second stage of the sample period shows that the causality becomes reversing from interest rates to growth rates. Fourth, explanations through the variations in growth rates among sample countries lose usefulness in the economic relations, depending on the case of the analysis of the relationship between interest rate and economic growth. Finally, although the estimation outputs show that there is a positive relationship between stock markets and growth, it needs further examinations. As Gelb (1989: 28) states that increases in stock prices is not primarily affected by the repression of interest rates. All in all, in the context of those results, Gelb (1989)

does not fully support the liberalization of financial system, but also draws the line to a repressed financial system at least.

Laumas (1990) investigates the role of financial liberalization for India in order to understand its changing economic activities such that from barter to modern capitalist structure over the 1954-1975 period. Since the mechanisms of a barter economy is mainly common for several underdeveloped countries, the changing economic structures from barter to modern economy may stimulate to an increase in the capital accumulation. In other words, the changing form of money in those economies will provide a higher efficiency in the production system and thus the efficient allocation of production factors. These movements will then increase the total income in an economy which then benefit the capital formation for production process. Additionally, the development path in the modern forms of economic relations will provide for the formation of monetized capital and thereby the development of credit and banking system. Finally, the development of credit and the banking system will ensue an increase in the saving rates and the level of investment which will in turn lead to a higher rate of economic growth.

In the context of the mechanisms that is mentioned-above, Laumas (1990) focuses on two empirical questions whether the money is complementarity with physical capital in the demand for money function and whether the money is complementary with physical capital in investment function, depending on the assumptions through the repressed capital market and the complementarity hypothesis of McKinnon (1973). Although the complementarity hypothesis of McKinnon (1973) have important impacts on this study, Laumas (1990) analyzes those questions within a different functional form than the McKinnon's complementarity hypothesis. The analysis depends on two functions. On the one hand, there is a demand for money function with time deposits $[(TD/P)^d = L(Y, (I/Y)^p, d-p^*)]$ and the investment function $[(I/Y)^p = f(r, d-p^*, p^*, (I/Y)^G)]$. For the demand for money function, $(TD/P)^d$, Y describes the real monetized income, $(I/Y)^p$ describes the aggregate private investment to monetized income ratio, and $(d-p^*)$ describes the real rate of interest on savings deposits. For the investment function, $(I/Y)^p$, r is the average real rate of return to physical capital, p^* is the expected rate of inflation, and $(I/Y)^G$ is the aggregate government investment to monetized income ratio.

The results for these two functions can be listed as follows. First, for the demand for money function, the empirical results validates the arguments of McKinnon's complementarity hypothesis. The demand for real time deposits is positively related with Y, $(I/Y)^p$ and $(d-p^*)$. Second, for an investment function, the aggregate private investment to monetized income for the private sector is positively related with r, $d-p^*$ and p^*, however, it is negatively related with $(I/Y)^G$.

Within the frame of these results, Laumas (1990) also makes some policy recommendations for the development of socio-economic conditions of India. First, the Indian authorities should let the determination of the real interest rates in the free market conditions because the empirical evidence shows that there is a positive relationship between TD and $(d-p^*)$. Second, the Indian authorities should provide that the real return rates for business investment are high and stable for long-run. Third, the Reserve Bank of India should regard the importance of investment financing in the determination of money supply. Fourth, the price level should stay constant so as to make monetized sector strong. Finally, the competition between public and private sectors should be arranged in favor of the private sector but also considering the investments in the public sector. All of these different kinds of empirical evidences show that Laumas (1990) supports the liberalization process which exhibits that there is a positive and a strong relationship between monetization, financial liberalization, and the economic growth.

Bayoumi (1993) examines the effects of financial deregulation on personal savings in the United Kingdom over the 1971-1988 period. The major motivation behind this analysis depends on the idea that the financial intermediation is limited in the financially repressed economies and therefore young consumers are not allowed to be a debtor and they are unable to finance their economic activities in financially liberalized economies and thereby young consumers are able to use credits so as to smooth their consumption patterns. In this case, liberalization of the financial system leads to the emergence of two kinds of effects in the household sector. On the one hand, there is a temporary effect on the attitudes of older people constrained due to different reasons when they are young. On the other hand, there is a permanent effect which leads to a change in consumption patterns as to be an unconstrained. However, the temporary effect increases the consumption level for short-term but decreases it over time. It depends on the reason that the older consumers who have previously constrained to reach available credits, do not be affected by the changes in consumption level as long as the financial deregulation becomes available for economic conditions. As Bayoumi (1993: 1434) states that this effect gradually reduces when the consumers (who are constrained by the credits) are left from the economy activity, and there is an equilibrium between the overall level of consumption and its original level.

However, any increase in the consumption level of individuals in line with the temporary effect will be the result of the increase both in the real interest rates and the current account balance. In other words, this result can be interpreted as an exogenous short-run fall in savings due to the financial deregulation process. Furthermore, for the case of permanent effect, the level of savings of young consumers will be much depended to the changes in wealth, real income, demography, and the real interest rates. In this sense, the overall results can be ranged for this analysis are as follows. First, the equilibrium level of savings reduces with the deregulation process in finance in the United Kingdom during the 1980s. Second, financial deregulation causes savings to be more sensitive to several changes such as wealth, real income, demography, and real interest rates.

Voridis (1993) focuses on the effects of credit conditions on private fixed investment expenditures of Greek economy over the 1963-1985 period. This period is also called as "financially repressed" for Greece. In order to understand the dynamics of this financially repressed years, Voridis (1993) uses three kinds of models in order to analyze the investment function for Greece: (a) the Hall-Jorgenson (1971) model; (b) the Blejer-Khan (1984) model; and (c) the Sundararajan-Thakur (1980) model. The distinct dynamics of each theoretical model presents different results within the frame of the analysis for the effects of credit conditions.

The results can be listed for the analysis of Voridis (1993) as follows. First, the private fixed investment increases in parallel to the increase in domestic credits providing to the private sector in Greece. Second, there is a positive relationship between the user cost of capital and the private investment. For instance, if the inflation rate increases, it may negatively affect the real bank interest rate as a part of user costs. This mechanism will also end up with the reduction in the level of private investment. Finally, the causal relationship between private investment and the volume of debt service payments is ambiguous.

These three major outcomes of the empirical evidence show that there is a robust and significant effect of financial deregulation on economic relations between individuals, firms, and also countries. However, even if there are positive implications on financial deregulation in parallel to the results of the empirical analysis, Voridis (1993: 282) approach them cautiously by showing major mechanisms because financial liberalization may have a negative impact on

fiscal revenues and therefore on public investment programmes. Therefore, Voridis (1993) asserts that the payoffs and the effects of financial deregulation depend on the market structure of banking sector.

Bandiera et al. (2000) examine the effects of financial reforms on total savings. The analysis of this study is based on 25-year time-series index of financial liberalization including 8-sample developing countries such as Chile, Ghana, Indonesia, Korea, Malaysia, Mexico, Turkey, and Zimbabwe. The research shows that the effects of financial liberalization on savings can be based on several factors and thus the inner structure can change along with the change the composition of these factors. The real interest rates, as one of the most crucial indicators for savings, are far from to be clear, depending to the financial reforms. For instance, substitution effect can negatively affect the rate of savings. Additionally, there may be differences in savings for short-term and long-term effects. Finally, the issue of financial liberalization does not rush out after the 1980s but it goes beyond many years ago together with several socio-economic factors.

In this context of the liberalization process of the financial sector, the implementation of current reforms through this process have many different dimensions related to socio-political and economic conditions such as credit allocation, interest rates, capital account openness, prudential regulation, and bank ownership in which reform process is not monotonic. Therefore, the analytical framework consists of different types of parameters so as to understand the dynamics of financial reforms on savings.

The variables used in the analysis include many dimensions from real sector to financial sector. As a dependent variable, the (unadjusted) private saving rate is regressed as a function of the natural log of real per capita, the real interest rate, financial liberalization index, inflation rate, and the government saving rate. Within the frame of the modeling of that relationship, the results can be listed for this analysis as follows.

First, there is no credible interest rate effect on savings rate. However, Bandiera et al. (2000: 257) state that only when the data is pooled and there is an equality for countries' long-run coefficients, the effect of interest rate on saving has positive and significant. Second, the effects of financial reforms on savings are not self-evident. For example, the long-run effects of reforms are positive for Korea and Mexico, negative for Ghana and Turkey, and insignificant for remaining countries when the saving function is separately considered for each sample. Third, the empirical results show that the consumption is very sensitive to changes in income level, depending on using of augmented Euler equation. Fourth, the negative effect of removing of borrowing constraints can be evaluated as the major reason behind the negative average value as a case of the effects of financial liberalization process on savings. Finally, the dynamics of financial liberalization can create different outcomes for each country due to changing patterns in monetary policies. This case also negatively affects these predictions on financial liberalization per se. In consequence, all of these empirical evidences show that the current conditions indicate negative forms on savings following the financial reforms.

Finally, Obamuyi (2009) investigates the reasons and the facts of the relationship between interest rates and economic growth for Nigeria. The research depends on the annual data for time-series analysis over the 1970-2006 period. It is based on the use of co-integration and error correction model in order to analyze both short-run and long-run dynamics of the annual data for the sample period.

Each time period gives interesting analytical results. First, there is a robust and significant relationship between lending interest rates and economic growth. If the lending rate is high, it negatively affects the economic growth of Nigeria. Hence, the lending rate should be lowered in order to achieve higher rates of economic growth. Second, there is a unique and long-run relationship between interest rates and economic growth. It means that the interest rates have a crucial impact on economic growth in Nigeria. Even if the conditions are accurate in that sense, Obamuyi (2009: 98) states that the optimal conditions for economic goals in the presence of the deregulation of interest rates may not be achieved in the case of Nigeria if the other factors negatively affect the level of investment are not tackled.

The empirical outcomes also imply that the relationship between interest rates and economic growth is not based on automatic mechanisms of the economic system. Therefore, Obamuyi (2009: 98) asserts that the relationship between investment and growth in Nigeria may not provide optimal benefits from interest rate reforms. Additionally, the government factor should be taken into account as a device which implements financial policies in favor of pro-investment rate of interest and the other factors in order to eliminate the problems emerging in economic relations. However, according to Obamuyi (2009), the general conclusion of these empirical facts depends on the fact that there is a positive evidence for the relationship between interest rates and the economic growth for Nigeria over the 1970-2006 period.

4.4 Financial Liberalization, Poverty, and Income Inequality

The theoretical framework of neoclassical economics has significantly influenced the infrastructure of distributional practices for income and wealth among individuals following the post-financial liberalization period. The marginality factor is the basis of both the capital and the income of the labor force (e.g., marginal product of labor (MP_L) and marginal product of capital (MP_K)). The marginality case has a multi-dimensional structure within the framework of having both micro and macro components. However, neoclassical economics is separated from the other schools of thought because of the ignorance of the class phenomenon in social movements and therefore it incorporates different production factors into its theoretical framework. At the point where MP_L and MP_K are equal to each other, neoclassical economics, which argues that the total amount of production factors will have a maximum revenue, pioneers in this theoretical framework of the assumptions about the income of finance and state politics.

As a matter of fact, issues such as income distribution and poverty are interpreted in this neoclassical framework in which liberalization and deregulation policies are accepted as fundamental. In other words, distributional problems arise due to the inefficient characteristics of MP_L and MP_K; obstacles or restrictions on economic activities among individuals; or the state interventions to the economic activities. According to the neoclassical thought, the solution of these problems basically depends on the implementation of policies such as liberalization, deregulation, and privatization both in finance and in the real sector. The existence of free market conditions is especially necessary for the proper use of these policies. For this reason, all obstacles in front of the capital and labor mobility must be removed and the free enterprise must be fully opened in the context of neoclassical paradigm. Additionally, innovation should be supported and technological trends should be accelerated in the production system for long-run period. According to the neoclassical paradigm, distributional issues and

poverty problems can only be resolved, depending on making of such economic developments in the capitalist system[50].

However, following the socio-economic changes due to capitalist crises intensified from the mid-1990s and increasing inequality in income distribution between capital and labor all over the world economies, neoclassical paradigm made different analyses on these problems without questioning their theoretical background. Especially, many of these analyses and researches related to these problems have been undertaken to consolidate the position of neoclassical economics, led by institutions such as IMF and WB. According to the results of these practical and analytical investigations, the main problem is not due to neoclassical politics but, on the contrary, to misinterpretation of policies by policy-makers which are applied in socio-economic activities. In this sub-section, the following studies on poverty and income inequality will be examined: Dollar and Kraay (2002); Klasen (2003); Arestis and Caner (2004); and Kraay (2006).

In general, these empirical analyses, on which the financial system is a major component of their theoretical framework, indicate that economic and social problems arise due to the fact that the implementation of neoliberal policies are not basically wrong in itself but they are incorrectly applied by policy-makers. Economic growth, which is regarded as the basic dynamic of the neoclassical framework, is a major motive that must be achieved for these investigations. Therefore, the solution of the problems arising due to income inequality and poverty must be necessary for the stimulation of higher economic growth rates. In other words, the achievement of higher economic growth rates is also the crucial tool for the solution of distributional problems and the reduction of poverty. Therefore, economic growth is an important parameter in the search for such issues and is an indispensable parameter especially in empirical research.

Dollar and Kraay (2002) investigate the factors affecting the average income of the poor. Essentially, empirical findings show that the average income of the poor (the poorest fifth of society) rises one-for-one in parallel to an increase in the average incomes. Dollar and Kraay (2002) examine the empirical accuracy of the relationship between average total income growth and the average income growth of the poor by using the sample of 92 countries. This accuracy proceeds across regions and income levels both in moderate times and crisis period of the economic structure.

Moreover, Dollar and Kraay (2002) focus on the analysis of the impacts of policies and institutions on average total incomes in order to understand the dynamics of those impacts whether they positively or negatively affect the average income of the poor. Such variables which are influential on those effects can be ranged as follows: (1) openness to international trade; (2) macroeconomic stability; (3) the size of government; (4) financial development; and (5) the strengths of property rights and the rule of law.

According to Dollar and Kraay (2002: 196) the empirical evidence is not strong for the policies and institutions in which they are systematically affected the income share of poorest quintile in the context of mentioned-above parameters. However, smaller the government size and lower the inflation rate disproportionally benefit the poor even if the empirical evidence is not strong and robust. Moreover, the distributional effects of those policies and the institutional improvements in favor of the poor are very close to zero. In other words, they do not lead to the emergence of any positive changes in the distribution of income between poor and rich.

---

[50] For a detailed theoretical investigation of the neoclassical paradigm please see section 5.2.4.

Additionally, Dollar and Kraay (2002) examine the impacts of economic integration on income inequality by using trade volume, tariff rates, and the index of capital controls. The results show that on average, increasing scale of economic integration has a positive impact on the poorest quintile of the society (Dollar and Kraay, 2002: 198).

Although these variables are influential for the changes in the average total income of society and thereby the average income of the poor, there are also other factors which of them may have an important effect on the determination of the impacts of the share of income of the poorest in society. Dollar and Kraay (2002) use four potential factors associated with the income share of the poorest: (1) primary educational attainment; (2) public spending on health and education; (3) labor productivity in agriculture; and (4) legal democratic institutions. However, the results of the empirical analysis show that there is no any positive systematic effect of those variables on the share of income of the poorest.

Dollar and Kraay (2002) also aim to show that the increase in average total income of society positively affects the average income of the poor one-for-one as well as the income of the other strands of society. However, those empirical results should cautiously be regarded because the growth parameter has a limited effect on the development path of the poorest in society and therefore the distributional effects should be investigated in detail (Dollar and Kraay, 2002: 198). Dollar and Kraay (2002) also favor the arguments that the growth-enhancing policies should be accompanied by the strategies due to provide the reduction in poverty. However, the results of the analysis do not imply that the income share of the poorest quintile is constant over time (Dollar and Kraay, 2002: 219). In other words, there is a little cross-country evidence that the mix of growth-oriented policies may benefit different segments of the society, especially the poorest in society thought the economic integration improve the conditions of the poorest quintile of the society (Dollar and Kraay, 2002: 219).

Klasen (2003) works on a broad and informative survey to understand the dynamics of pro-poor growth. The main motive behind this research is to promote an available debate on pro-poor growth strategies by focusing on a comprehensive policy structure which provide new agenda towards that issues and problems which affect the basis of those policies in making of them. According to Klasen (2003: 84), the policy agenda of the inequality reduction and the limits of activist state policies for supporting the pro-poor growth is not stable and thus urgently needs to be analyzed. Since the poorest population has the worst uneven distribution of income in each segment of the economic system, the strategies aiming to the reduction of poverty should be considered both categories of the distribution of economic growth such as sectoral, regional, and functional.

Klasen (2003) discourses on two ways so as to change the economic growth structure in favor of pro-poor. These two ways consist of direct and indirect methods. On the one hand, in a direct way, economic growth benefits the poorest society by focusing on the sectors or regions where the poor lives and must use the factors of production in order to maintain their basic needs to survive. Additionally, Klasen (2003: 68) states that the economic growth can be pro-poor and thus reduces poverty only when the sectors employ the poorest quintile of society and must use the factors of production they possess. However, the direct way also carries its own problems. Although it is more reliable for an increase in standards of living of the poor and for the reduction in poverty, it may create critical results by carrying risks to the detriment of the poor in economic depressions, recessions, crises, and high volatilities of markets.

On the other hand, in an indirect way, growth benefits the poor by using the public redistributive policies such as taxes, transfers, and government spending. For instance, if the growth is designed to involve the progressive taxation and proper government policies, the future conditions of the poor will be much well-developed for economic transactions. In addition to taxation and the use of government policies, transfer payments to poor through the safety nets will positively affect the conditions of the poorest segment in total economic structure. Furthermore, the economic growth will enhance the redistributive policies in favor of the poor. The positive effects of redistributive policies may also create fiscal resources following an increase in economic growth. They may stimulate new productive investments and thus may widen the range and capacity of assets of the poor by increasing employment level and the efficient usage of factors of production.

Arestis and Caner (2004) construct a model for the functions that affect the interaction between financial liberalization and poverty. The functions of the model is divided into three parts as (1) the economic growth; (2) the financial crises; and (3) the ways to access for credits and financial services. However, their theoretical model does not offer any empirical evidences but rather depends on the assumptions from the related literature about the same topic.

Essentially, Arestis and Caner (2004) argue that these three functions have important effects on economic growth in parallel to the liberalization process of finance. Therefore, each function in the model should be examined by different methods in detail. Although Arestis and Caner (2004) do not support the neoliberal policies in favor of financial repression if the financial liberalization process is fulfilled without providing stability in macroeconomic structure and establishing sound institutions and policies though it leads to an economic expansion, it may stimulate the formation of devastating crises and increasing economic inequality (Arestis and Caner, 2004: 23).

According to Arestis and Caner (2004), there should be used a mild regulation and supervision by the policies of the government in contrast to the implementation of the full liberalization of financial institutions. Without any control on financial markets, economic agents may take excessive risks. These risks may also create bubbles in financial markets which result in severe economic crises. As Arestis and Caner (2004: 23) indicate that the economic burden of the crises is much higher for the poor than the rich. In order to alleviate the poverty and to reduce the costs against the poor, Arestis and Caner (2004) suggest a mechanism in favor of the creation of access to consumption smoothing. For instance, there should be an appropriate lending opportunities which should be oriented for small-scale borrowers in order to provide an access this consumption smoothing process. Additionally, according to Arestis and Caner (2004), the education, safety nets, and the basic health services should be prepared for different segments of society by imposing appropriate legal structures and policies.

Finally, Kraay (2006) investigates the potential sources of pro-poor growth in his research. In contrast to the relative poverty measures of inequality in the analysis of Dollar and Kraay (2002), Kraay (2006) adopts an absolute poverty measure. Depending on the inner structure of that absolute poverty measure, the poverty measure of the interest should be fallen in order to achieve expected growth rates for pro-poor gains in the economic framework. The sources of pro-poor growth can be classified as "a high growth rate of average incomes", "a high sensitivity of poverty to growth in average incomes" and "a poverty-reducing pattern of growth in relative incomes" (Kraay, 2006: 199). Kraay (2006) uses these three sources, depending on the standard decomposition methods for a large sample of developing countries over the 1980s and 1990s.

The results can be summarized for the analysis as follows. First, most of the variation in poverty level depends on the growth in average incomes from medium to long-term. Second, the correlations between the growth and other several indicators are not robust and significant such as the institutional quality, openness to international trade, and the size of government. Third, the relationship between economic growth and distributional factors is not significant. All in all, Kraay (2006: 199) states that the outcomes emphasize the importance of growth in average incomes for poverty reduction. However, the growth in average income is not completely sufficient for the reduction of poverty (Kraay, 2006). In order to consolidate this reduction of poverty, Kraay (2006) focuses on policy package which favors the pro-poor growth including the protection of poverty rights, sound macroeconomic policies, and the openness to international trade.

In addition to those analytical determinations, Kraay (2006) dwells on the case studies and micro-level studies for the investigation of factors of poverty-reducing distributional change. The results of this analysis give similar results to Dollar and Kraay (2002). First, these two studies indicate that there is a great importance of an increase in growth of average incomes for both relative and absolute poverty reductions. Second, both of these empirical analyses find that there is a little evidence towards the effects of determinants of growth and the patterns of distributional change in incomes. However, these two different areas can be divided into two parts. First, Kraay (2006) focuses on the absolute poverty measures but Dollar and Kraay (2002) depends on the relative poverty measures. Second, Kraay (2006) evaluates measures for distributional change in poverty but Dollar and Kraay (2002) offer only a summary statistics in this case. All in all, the results are so close to each other in a general framework for the socio-economic understandings.

4.5 Financial Liberalization and the Labor Share of Income

From the very beginning of Industrial Revolution to the current period, there are many different kinds of studies focusing on income distribution both in theoretical and empirical level in parallel to an increasing scale of production and technological developments. However, in the context of techno-scientific innovations, the increases in financial development and activities and also the diversification of trade regimes, depending on the informational upgrading all over the world economies, have crucially transformed the inner structure of income distribution. Therefore, the differentiations and the fluctuations in the distribution of income and wealth have been needed to examine different conditions of the social system and the research methods in both theoretical and empirical frameworks. Especially, the globalization facts of the post-1980 period and the financialization of economic processes have a critical impact on the changing labor share of income accruing from the aggregate national income and the changing rules of distribution between capital and labor. In this sense, the changing institutional conditions and socio-economic components about the labor share of income may be generalized to many different spheres affecting the income distribution among classes. In other words, the share of income depends on several socio-economic parameters such as globalization of capital, liberalization of capital account and trade regimes, technological innovations, financialization, and the economic crises.

In particular, the financial liberalization process has been required the globalization of capital in the neoliberal period all over the world following the post-1980s. The globalization dynamics have been affected by the growth and distributional issues both in micro and the macro levels. For instance, related to the changing distributional issues, Harrison (2005: 2) focuses on the answer to the following theoretical question, "…how has globalization affected the relative

share of income going to capital and labor?". The empirical investigation shows that the shares of capital and labor were not constant over time contrary to what the neoclassical paradigm argues. The shares between capital and labor have been fluctuated over time due to the changes in factor endowments and government spending as well as in the traditional parameters of globalization such as trade shares, exchange rate crises, movements in foreign investment, and capital controls. For instance, the rising shares of trade and exchange rate crises reduced the share of income accruing to labor while capital controls and government spending increased the labor's share. However, the missing point in Harrison's study is the deficiency of the analysis of the increasing impact of technological innovations on income distribution in parallel to the globalization of capital, which reduces the robustness of the empirical evidence.

Depending on this case, Guscina (2006) examines the economic framework by dividing the period into two parts as pre-1985 and the post-1985 in order to understand the dynamics of the globalization of capital within the frame of the changes in information and technology (IT). The major factors affecting the pre-1985 period depended on the productivity gains which was also boosting the profits of the capital. However, in the post-globalization era, the fundamental changes in the labor share of income have been equally driven by enhances in the level of productivity and in the degree of trade openness (Guscina, 2006: 16). These results are also developed by the analytical outcomes of Jaumotte, Lall and Papageorgiou (2008). According to Jaumotte, Lall and Papageorgiou (2008: 16), the increasing level of income inequality across developed and developing countries over the past two decades was mostly affected by the changes in the technological progress. However, contrary to the empirical outcomes of Guscina (2006), these results show that the increasing openness to trade offsets the negative impact of the technological progress on the labor share of income.

Additionally, IMF (2007) staff indicates that there is a joint and mutual relationship between the globalization of capital and labor and therefore investigates the effects of these two parameters on the labor share of income. In that sense, the theoretical model of the IMF (2007: 171-173) shows that the changes in the trade price have small effects on the labor's share. The major reason of this poor impact depends on the empirical fact that the decline of export prices limit the negative effects of import prices on the labor share of income. In addition to the effects of trade prices, there are also other factors related to the globalization and trade such as the intensity of offshoring, the share of immigrants in the domestic labor force, the share of ICTs capital in total capital, and the parameters on labor market policies.

The outcomes depending on these factors also support Jaumotte and Tytell's (2007) analysis for the same period which examines the effects of an in the integration of world markets on demand and supply of labors in parallel to the liberalization process of financial sector and trade regime. Similar to the hypothetical results of Jaumotte, Lall and Papageorgiou (2008), the empirical outcomes show that the technological progress, especially in the information and communication sectors, had statistically significant but a negative impact on the labor share of income. Particularly, these new innovations in technology also had negative effects on labor's share in sectors requiring unskilled workers on the basis of the globalization indicators.

However, the long-run effects of globalization on labor's share are regarded as short-term for the nexus between globalization and income inequality in the research of Diwan (2001). According to Diwan (2001), the major relationship between globalization and income inequality depends on the changing impacts of short-lived distributional conflicts rather than long-term harsh contradictions among classes. Even if these impacts are short-term or long-term, the major problem coincides the fundamental hypothetical question of Rodrik (2002)

based on the income distribution: "Globalization for Whom?". In responding to this question, it is important to note that many different factors are intertwined which means that the analysis of the globalization of capital or labor is needed to account for several parameters affecting on the capital accumulation in the neoliberal era[51]

In this respect, the liberalization of the trade regime and the financial system in parallel to the globalization of capital and labor is another research field of investigation that supports this discourse of Sweezy (1997) in terms of analysis. The neoliberal policies supported in the socio-economic framework since the early 1980s have spread throughout the whole social segment from the beginning of 1990s almost exacerbated in developing and emerging economies. The fundamental elements in this neoliberal transformation of the world economies can be understood by looking at the following changes in the conditions of the labor markets together with the liberalization movements in trade and capital account. Within this framework, there are increases in competition in searching for jobs due to a rise in the level of immigration which causes to rise in the supply of laborers competing for low-wage jobs (Bluestone, 1995). This case, as stated by Fülberth (2011: 265), also means that there is an increase in the internationalization of the production methods which result in an increase and the expansion of the exchange of international goods and services. The complement of this increasing transaction in the economic and social contexts, on the other hand, is possible with the emergence liberalization policies in capital account and trade regime. Thus, the deregulation of labor markets is the third channel of the liberalization policies of the neoliberal paradigm including the attacks to the labor unions and the social rights of workers (Stanford, 2008: 48).

For instance, related to the implementing policies for the deregulation process in the labor markets, Jayadev (2007) focuses on the flow of capital in the context of the changes in the degree of capital account openness and thereby investigates the reciprocal relationship between financial openness and the labor share of income in aggregate national income. In parallel to the deregulation of labor markets and the internationalization of labor mobility, there is a negative correlation between these two parameters which depend on the fact that the increase in the degree of openness in capital account alters the conditions of bargaining power in favor of capital, not for labor, both at firm-level and the economy-wide level.

The similar econometric evidence in which the financial openness has a negative effect on the wage shares can be found in the research of Stockhammer (2009). According to this research, which is based on OECD countries, the functional income distribution has declined in the last three decades against the workers. Since the 1981, the falling rate of the income share was almost 10 percentage points in the Euro Area. One of the most important details of the reduction in the labor's share was the negative impact of the openness (globalization) on income distribution between capital and labor. However, instead of the openness measurement, the increasing level of union density had significant, direct and positive effects on the wage shares of workers. In hypothetical average country analysis, the economic contribution was strongly affected by the globalization of financial markets; however, it had negative (even if not consistent) effects on the wage share of almost all sample selected countries in OECD region.

In the context of this research outcomes, Stockhammer (2010a) also points out that three distinct economic factors, driven by financial liberalization, may have an impact on the income polarization: (1) increasing rentiers income (see also Dumenil and Levy, 2001; Power, Epstein

---

[51] For instance, Sweezy (1997) rightfully states that "…globalization is not itself a driving force. It remains what it has been throughout the period we think of as modern history: the always expansive and often explosive capital accumulation process".

and Abrena, 2003; Jayadev and Epstein, 2007); (2) rising income shares of the financial sector (see also Foster, 2006; Foster, 2007; Foster, 2008b; Foster and McChesney, 2009; Foster, 2010; Lapavitsas and Mendieta-Muñoz, 2016); and (3) the changes in the power balance between capital and labor (ILO, 2008; Yeldan, 2009). All of these phenomena has been directly affected the income disparity in different economic activities.

However, the distributional structure following the increasing scale of financial globalization all over the world economies can also be affected by several parameters such as exchange rate crises, volatility in capital flows, and the international imbalances in the exchange rates of currencies. For instance, Epstein (2005b) and Reinhart and Reinhart (2008) empirically show that sudden stops in capital inflows may possibly have ample but negative effects on the economic activities of nations which result in exchange rate crises, in particular for emerging and developing countries. Additionally, financial globalization may allow for economies to give a huge amount of current account deficits/surpluses resulting in the meltdown of their reserves in case of any financial and/or real economic crises.

However, as it was mentioned-above, while the one side of the openness measurement is related to the financial sector, the other side is included the openness in trade regime. The direct and indirect effects of the liberalization of trade regimes on income distribution can be classified depending on several factors such as the increasing unbalance between different sectors, increase in sectoral discrimination, the low development levels in infant industries, problems occurring in balance of payments, and the environmental issues.

According to Crinò and Epifani (2014), these factors are basically emerged due to trade imbalances between North and South economies which result in the exacerbation of the wage inequality worldwide. For instance, contrary to the deficits in trade account, trade surplus may affect the wage disparity in three ways: (1) an increase (reduction) in the average skill intensity of exports; (2) an increase (reduction) in the relative demand for skills; and (3) an increase (reduction) in the skill premium across the world economies.

These factors are also reminded the following question asked by Milanovic and Squire (2005): "Does tariff liberalization increase wage inequality?". In that sense, although there is a little evidence for the estimation in which the tariff reduction is correlated with the increase in inter-occupational wage inequality. The causality from tariff reduction to increase in wage inequality among different industries, especially in high-trade union density countries, are much stronger. It shows that the wage polarization between poor and rich countries are essentially affected by the changes in the limit of trade union power measurements in trade relations.

This outcome is also approved by Goldberg and Pavcnik (2004) in the developed country cases. Trade liberalization has a negative effect on the industry wage premiums in sectors where the tariffs are reduced largely, deepening by the fact that the labor market rigidities, or alternatively, dissipation of industry rents limit labor mobility across sectors in both short-run and long-run. Additionally, industry wages are not highly correlated with the reforms (e.g. liberalization or globalization of trade regimes) in trade. Similar kinds of outcomes can be obtained by the hypotheses made by large-panel data analyses in microeconomic, country-based contexts in order to understand the relationship between trade liberalization and the labor share of income (e.g., Galiani and Sanguinetti, 2003; Ferreira, Leite and Wai-Poi, 2007; Ghazali, 2011; Macor, Perticarari and Beltrán, 2011; Ahsan and Mitra, 2014; Kamal, Lovely and Mitra, 2015).

For instance, lack of efficient collective bargaining power, a high amount of important materials using in production, imbalances in the protection of some sectors under the guidance of state enterprises, skill-based inequalities in different sectors, the effects of import penetration and the export effects on wage polarization depending on education level are some of the crucial factors behind the changing shares of wages in favor of capital income based on the developing country cases. However, it should be regarded that these factors have different effects in different time periods within the frame of the transformation impulses which are exposed in domestic and international spheres. Therefore, it is possible to argue that the time factors affecting on distributional relations are included in technological innovations in this manner. Therefore, the studies on the investigation of the relationship between trade liberalization and the labor's share should be also considered the changes in technological innovations on trade regimes (e.g., Esquivel and Rodriquez-López, 2003; Kehoe et al., 2008; Xu and Ouyang, 2015).

In addition to those different paradigms and estimation methods related to the income distribution based on the investigation of income distribution between capital and labor, there are also other study cases investigating the trends in the labor share of income over the neoclassical period both at country-specific and economy-wide levels (e.g., Bentolila and Saint-Paul, 2003; Boggio, Dall'Aglio and Magnani, 2010; Guerriero, 2012; Elsby, Hobijn and Şahin, 2013). In that sense, the changes in the distributional dynamics depending on the capitalist transformation in socio-economic and political framework through the neoliberal perspectives all over the world economies, in particular, in developed and developing economies, have created different kinds of estimation methods related to the labor share of income. The fundamental points of those methods of measurements depend on their dynamic structures of the economic and social systems of countries. It shows that each country may develop its own estimation method so as to understand the fluctuations in the share of income between capital and labor. However, this does not mean that the common method for the measurement towards the labor share of income does not possible to establish for all country groups. Instead, the determination of the reasons under certain conditions peculiar to the related period may lead to the emergence of the common method for the estimation of the labor's share. This is only possible with the comprehensive analysis of the components of labor share under the existing socio-economic and political structure and the conditions of the related period.

The average effects of each factor affecting the income share between capital and labor and also the socio-economic and political structure may change among different economies. Therefore, the conditions may need much focus on different kinds of components subject to the conditions of each country. For instance, Guerriero (2012) investigates these kinds of parameters heavily effective on the changes in income shares. According to this investigation, Guerriero (2012) categorizes different estimation methods for labor's share by focusing on a large-scale panel data analysis for both high, medium, and low levels of economies. Indeed, all types of estimation methods shows that the labor share of income accruing in the aggregate national income has several sources and components and thus exhibit an appropriate theoretical and analytical frameworks for micro-level, firm-level and macro-level analyses. In each estimation method, the labor share of income shows a declining trend over the neoliberal period. Even if the empirical methods benefit from macro-level and micro-level components, each of them incorporates their own features, depending on the theoretical framework of the estimation method (e.g., Ryan, 1996; Wolff and Zacharias, 2007).

By taking into consideration of this phenomenon, Krueger (1999: 10) approaches the differences in the estimation methods of the labor share of income both in conceptual and practical frameworks and therefore states that "…labor and capital no longer divide so neatly

into mutually exclusive categories". This argument is also meant that the class-based analyses, or alternatively the functional income distribution estimations, have different kinds of economic and social dimensions, especially in the context of the distributional issues between capital and labor. Qualifying the labor share of income to one type structural framework or the effects of specific factors may create biased assumptions in class-based analyses.

In parallel to these methodological arguments of Kruger (1999), Elsby, Hobijn and Şahin (2013) focus on the determinants and the implications of the decline in the labor share of income for the U.S. economy in comparison with the periods covering the pre-1980s and post-1980s. This difference between two periods is also important to understand the changes in the economic paradigm stimulated by the factors affecting on the labor's share. According to the empirical outcomes, Elsby, Hobijn and Şahin (2013) note that the labor share of income in the U.S. economy has started to decline after 1980s period, depending on the following five different factors: (1) the understatement of the labor share of income of the self-employed workers; (2) the substantial movements in the labor shares within industries; (3) substitution of capital for (unskilled) labor; (4) the decline in unionization; and (5) the offshoring of the labor.

These outcomes based on the U.S. economy is somewhat similar to the empirical study of Bentolila and Saint-Paul (2003) which evaluates the conditions of labor's share in OECD countries over the 1973-2003 period for 13 industries and 12 countries. Bentolila and Saint-Paul (2003) show that the labor's share significantly reduced in that period due to changes in the capital-output ratio. The distributional issues are shifted by the factors such as the price of imported materials or capital-augmenting technological progress. The distinction between the marginal product of labor and the real wage level are increased to higher levels due to changing conditions in adjustment costs and the union wage bargaining.

The factors affecting the labor share of income and the micro-and the macro-level analyses have been investigated empirically in further studies and thus have been referred to various kinds of parameters based on the economic crises (e.g., Onaran, 2007; Stockhammer, 2010b), and the privatization and the barriers to trade (Azmat, Manning and Reenen, 2012). However, either in the economic framework or in the capital-based socio-economic context, the labor share of income has been significantly reduced in the post-1980 period almost in each developed and developing economy.

PART 5

RELATION BETWEEN INCOME DISTRIBUTION AND
THE LABOR SHARE OF INCOME

This section introduces the theoretical background of the empirical analysis. Essentially, the research will be focused on different sides of the theoretical infrastructure and thus will be discussed different arguments about these theoretical frameworks. The major idea for an understanding of these theoretical underpinnings depends on the fact that they will help us to get different aspects of the expected outcomes of the empirical analysis which will be done in the following part. The major issue to be addressed within this framework is the study of a distinctive field where the theoretical analyses of the neoclassical paradigm are largely bounded to a limited perspective: *the distribution of income*. Therefore, this subject contains multi-dimensional and multi-factorial parameters in its theoretical basis which have been used in several empirical investigations.

The framework showed up to this part was about the investigation of the socio-economic processes prior to the adoption of neoclassical paradigm and the examinations of the ways in which neoclassical economics was oriented in the social context. It was also based on an examination of the policies adopted by the neoclassical paradigm in order to strengthen its position in each step of the socio-economic process at national, regional, and international levels. The empirical researches, which have been carried out in this process, have been applied within the framework of both macro- and micro-based variables of the neoclassical economics. However, most of these researches focused on income distribution have been basically examined at the personal level and therefore they have been classified based on the assumptions of the neoclassical paradigm. The problem that this section deals with is to uncover the arguments of neoclassical paradigm for the income distribution. Therefore, the major issue that needs to be addressed is to investigate the following empirical question: "Does the theoretical framework of the neoclassical thought correspond to the practical applications about the income distribution?". Additionally, "If the practical outcomes are not robust, what are possible solutions for this problem?".

These and similar kinds of questions to focus on in the empirical analysis will show the major points in which the thesis is particularly focused on. Therefore, multi-dimensional perspectives and arguments on the analysis of income distribution will be critically evaluated before the empirical investigation by way of looking at several economic thoughts. The basic motive behind the evaluation of different perspectives on income distribution depends on the investigation of different types of measures about the income inequality. In other words, the initial point of this investigation will be based on different perspectives about the measures of the income distribution. In this sense, the analysis may reveal distinct arguments between the neoclassical paradigm and other schools of thought on income distribution and income inequality in the theoretical framework. Second, the research will be based on the comparison of the method that is used in the empirical analysis with other methods within the frame of their theoretical and epistemological backgrounds (e.g., classical economics, Marxian framework, Keynesian framework, and the neoclassical framework). These theoretical and epistemological investigations are important for understanding of the pros and cons of different perspectives and arguments about the income distribution. These different frameworks are also important to be focused on in order to understand the foundations of major parameters using in the analysis of income distribution. The following sub-section will be devoted to the investigation of these major parameters which will be used in the empirical analysis of income distribution. The major

problem is to show which framework is much relevant for our method in the empirical analysis and also to understand the distinctive pattern of our method from the methods constructed by different schools of thought in the context of theoretical and epistemological basis and thereby to deal with different measurement methods with some stylized facts. Additionally, the research will focus on to the analysis of intertemporal changes of these perspectives throughout different countries and regions. In the final section, some of the major factors will be dealt with which of them critically affect the labor share of income, and more specifically the changing pattern of income distribution in the neoliberal period. Some of these factors can be listed as follows: (a) skill-biased technological change; (b) globalization; (c) labor market and product market policies; and (d) the privatization practices of the state-owned enterprises. However, in the first case, the research begins with the analysis of some of the basic approaches related to the distribution of income.

5.1 Basic Approaches for Explaining the Distribution of Income

In the course of the development process of the capitalist system, it is possible to introduce three kinds of approaches for an understanding of the economic activities which are related to the income distribution: (1) personal income distribution; (2) functional income distribution; and (3) class-based income distribution. Although these three approaches have different internal structures, some of their major aspects have common characteristics with each other. For instance, in the distinction of the functional and class-based perspectives for distributional analysis, the class-based distribution structure can be evaluated within the case of functional distribution. This assessment may not, in general, create any problems, but on the theoretical basis, it constitutes a large distinction in terms of the premises of the assumptions. However, on the basis of these distinctions, all of these approaches are not considered on the same framework because class-based analysis on income distribution has a distinctive theoretical integrity in itself.

First of all, the personal income distribution is measured by the distribution of income to the income level of households following the integration of all incomes accrued by individuals and the households. In this sense, this method ignores the characteristics of different groups of society and thereby discusses the society as a homogenous entity. Therefore, it provides an inaccurate analytical framework. As BSB (2015: 107) states that classes that face conflicting positions disappear in a "personalized" distribution of income. The major problem is that households in different classes are ignored in their social positions and are assessed at the homogenous income levels. This kind of theoretical framework contains the following problem: the ignorance of the reasons for the socio-economic changes of social segments and different classes, depending on the changes in the structure of income distribution. Hence, this does not give accurate outcomes for the analysis either at the theoretical level or at the empirical level. In other words, it conceals the dynamics behind the social conditions emerged as a result of the distributional differentiations in income distribution, and therefore, it ignores the reasons of these differentiations in income distribution. The only important case of this method is to show the changes in income level and the differentiations among different households. This phenomenon is actually an expression of a changing economic structure. The Keynesian method for the functional income distribution has differed with the neoclassical method of personal income distribution following the triumph of the neoclassical paradigm in the determination of socio-economic and political phenomena. As Guerriero (2012: 3) states that the research interest about this topic has been eased by a differentiation in focus from classes

to individuals and by the argument that factor shares are constant over time and across space[52]. However, it is worth mentioning that the studies on the explanations of such parameters related to the income distribution have been one of the major topics of the political economy in the process of capitalist development. For instance, instead of the personal-based perspectives of neoclassical paradigm, the Ricardian arguments based on the factor shares can provide much far-reaching information on the distributional issues:

> "The produce of the earth – all that is derived from its surface by the united application of labour, machinery, and capital, is divided among three classes of the community, namely, the proprietor of the land, the owner of the stock or capital necessary for its cultivation, and the labourers by whose industry it is cultivated".

> (Ricardo, [1911] 2004: 1)

However, it is not possible to coincide to this kind of class-based arguments in the theoretical framework of personal income distribution initiated by the neoclassical paradigm. Therefore, the differentiations in different social classes are not included in the personal-based distributional analysis.

On the other hand, the methods for the measurement through personal income distribution are theoretically depended on different studies and thereby they are not evaluated in one method. One side of these methods focus on the investigation of the income levels of households, but the other side tries to explain the distributional facts with the constant parameters by favoring the capital and labor as a factor of production and ignoring the class-based phenomena. In these studies, the economic and social factors are never investigated about the redistributive practices of income among households. The causes of distributional conflicts are not examined. For these two approaches, the Gini coefficient can be shown as the first and as the second approach, the Cobb-Douglas production function can be considered.

In general, the Gini coefficient is a coefficient that measures whether the distribution of national income is equal in a country. For this coefficient which is ranged between 0 and 1, the higher values indicate much higher income inequalities among individuals. The low values, on the other hand, shows that each person in the society convergences to the same level of income. However, this method does not provide accurate analytical outcomes about the inequalities between classes as it was mentioned-above. As BSB (2015: 107) states that the crisis which increasingly affects the urban economies (namely industry and services) increase the unemployment; reduces the wage shares by collapsing the unionization; erodes the retired incomes in the face of inflation; disrupts the relative positions of labor class. On the other hand, if the agricultural incomes at the bottom are not affected at the same level from these negative conditions, the Gini coefficient may decrease and thereby the impression of improvement of income distribution may arise (BSB, 2015: 108). This case may conceal the fact that there is an increase in class and social imbalances between sectors even though the inequality level decrease in the context of the Gini coefficient.

In addition to the Gini coefficient, the second indicator in the determination of the personal income distribution is the Cobb-Douglas production function. Although this second indicator focuses on two agents of production, labor, and capital, different from the methodological context of Gini coefficient, it diverges from the class-based explanations due to its theoretical

---

[52] Please also see Gottschalk and Smeeding (1997), Goldfarb and Leonard (2005).

dependence to the neoclassical paradigm. Additionally, it principally rejects the distributional facts and dynamics by approaching the share of income among these agents as constant[53]. However, within the frame of the rejection of this basic principle, it does not fully focus on the same methodological and theoretical assumptions about the distributional analysis. On the contrary, it benefits from other kinds of assumptions and theoretical hypotheses of different schools of thought.

In addition to the ignorance of the inner contradictions of social strata and classes in the context of the methodological framework of the Gini coefficient and the acceptance of constancy in income distribution among economic agents by the Cobb-Douglas production function in principle, BSB (2015: 108) shows two further deficiencies of these methodological and theoretical frameworks as follows: (1) they are far from comparable among each other in one country over time horizon / in different countries in the same time period because of the differences in samples and methods; and (2) they mostly hide the real inequality level of incomes, depending on the announced indicator values because of noninclusive characteristics of the samples of high incomes. Also, Schultz (1998: 308) points to the fact that it should be used four different parameters in measuring of both personal income distribution and the welfare for all countries as follows: [1] "the population size"; [2] "the income level"; [3] "the interhousehold distribution of income", and [4] "the intrahousehold distribution of welfare".

Besides the personal income distribution method, the second method is called as the functional income distribution. The major distinctive feature of functional income distribution is the determination method of the factors in terms of their roles in the production system. However, this case is determined within the frame of factor shares and thus it ignores the class-based entities in several points. Hence, some basic points of functional income distribution converge to the theoretical structure of personal income distribution due to its ignorance of the information of class dynamics.

Basically, the functional income distribution includes the division of total incomes to the production factors which of them play a key role in the production system. This distributive mechanism incorporates four major components: (1) the capital owner; (2) labor; (3) rentier; and (4) entrepreneur. In functional income distribution, thus, the capital-owners earn interests, workers get wages, land-owners accrue rents and entrepreneurs gain profits from the production. One of the most important consequences of the functional income distribution is the intertwinement of the incomes of these four factors in both the production mechanism and the process of the capitalist development. For instance, in the context of the production system, the capital-owner may acquire rents from the agricultural production as well as profits from new kinds of innovations. Furthermore, as a worker may have its own work, her /his incomes may gain multi-dimensional characteristics. Therefore, these income categories which are classified into four dimensions, in theory, may contain many different dimensions in practice. In that sense, it may be extended to many broad concepts from real sector to the financial sector. Therefore, a class-based examination of the functional income distribution will yield far more significant outcomes in terms of examining the changes in social positions and social strata in the production system[54]. As Giovannoni (2010: 2) states that "the *functional* income distribution

---

[53] Although the constancy of the income shares would be rejected in the neoclassical paradigm, it would not be evaluated in the class-based framework. On the contrary, the income shares are regarded in the logic of pure economic objects such as lands and capital. Thus they lose their social characteristics. In other words, the class antagonisms are rejected.

[54] The evaluation of economic units as factors do not provide a comprehensive analysis in an understanding of the relationships among social classes. Therefore, the social parameters should be regarded in each distribution analysis in order to discover the class-based parameters of the distributional dynamics.

makes the distinction between the shares of types of income used for different spending purposes, while the *personal* distribution of income is a measure of inequality of a specific type of income". Also, Giovannoni (2010: 2) expresses that the functional income distribution shows how much of income accruing to labor there is to share, while the personal income distribution indicates how equally labor income is distributed among different individuals.

In this sense, the major indicator for the determination of income distribution is the power relations among the economic agents in the production, depending on the class-based contradictions. Therefore, these power relations among economic agents become the most important factor in the determination of incomes of different classes accruing from the production process. Hence, this context may differ from the fundamental neoclassical thought which is "wages should be equal to the marginal product of labor", theoretically and epistemologically.

In a class-based analysis, there is no fixed / static production process. Distributional issues can be confronted with different conditions in a continuous production system. Additionally, these conditions do not only depend on the production system, they also include all factors of social phenomena. The improvements in living standards and the developmental innovations in social conditions create a dynamic and positive impact on income distribution by forming the production system. Especially, the physical conditions of working class have crucial determinants in social categories. For example, the level of unemployment has a critical structure that affects all phenomena in the analyses of the class-based income distribution. In the sectors or countries where the unemployment rate is high, the power of income share gains of the capitalist class from the aggregate income is also high. One of the most important reasons of this depends on the fact that the increasing rate of unemployment may have a negative power on the bargaining power of labor against the capitalists and may also create a rupture in the union of the working class. It may create a downward pressure in the creation of a positive consciousness in favor of being a union as a class because it always promotes more competition among workers.

Indeed, the emergence of this rupture in working class creates a positive impact in favor of the capital in the income distribution for a long-run. The competition among workers prevents to the providing of a union. Furthermore, the increasing rate of unemployment decreases the bargaining power of labor against the capital because it creates a "reserve army of labor" as Marx ([1976] 1982) intelligently stated in his theoretical framework relating to the process of the capital. It causes primarily to the downward pressure on the wages on behalf of capital which may readily adjust the costs of production both in short-run and the long-run. This situation which leads up to the emergence of cheap labor and flexible labor markets adversely affects the income distribution of the working class. At the same time, the capital may determine new strategies to prevent organizations that provide workers' social needs (e.g., unionization and freely use of legal rights) and their unity within the production process in order to consolidate their socio-economic position on the basis of the changing power relations.

In addition to these, the multidimensional relationship between capital and the state is also another crucial factor in power relations in the determination of income distribution. As BSB (2015: 106) states that the state may intervene the class-based income distribution by changing the rules surrounding the distributional relations and by means of income/wealth transfer facilities, namely by means of redistribution mechanisms. In that sense, the state can intervene to the production system directly and to the taxation and labor market legislation indirectly. Moreover, it creates opportunities for the capital to gain an international competitive advantage

(e.g., the removing of the restrictions on exchange rates, interest rates, and capital flows as well as on the trade regimes). In this case, related to the labor market, the other advantage that the international competition creates a positive effect on the capital is an increasing mobility of capital among countries both for financial resources and the physical products.

However, this increasing scale of mobility for the economic activities is mostly regulated by the international institutions and structures rather than the domestic ones. Hence, the increasing flexibility of labor market by the regulations in upper structure and the institutional arrangements, depending on the international factors creates new advantages for the benefits of capital, within the frame of income distribution not only at micro level but also in a macro framework. Especially the fully establishment of the labor mobility in all capitalist fractions shows that the competition among working class is extended to international levels by disposing of its domestic characteristics. Thus, the capital may transform indirect gains from free capital movement and flexible exchange rates into direct gains by the provision of labor mobility.

One of the most important pillars of this case depends on the fact that there will be a collapse of the domestic unity among workers by means of an increasing liberalization movements in both goods, financial and labor markets in the international sphere. Thus, the restriction of countries' demands for cheap labor transforms their production systems in the direction of capitalist components. Therefore, the results of this transformation in countries will be much severe competition among workers at the domestic level. Furthermore, the qualified working conditions become unqualified in many sectors and in the economic units in the neoliberal era in parallel to the increasing rate of technological progress. Therefore, the qualified labor force, in many cases, may transfer to the unqualified works along with the competitive pressures in order to balance their living standards. In these unqualified working conditions, the descriptions on jobs may be drawn in different directions in comparison to the jobs descriptions of the labors in qualified works, and therefore, this differentiation may reveal ambiguous cases for the definitions of what is "qualified" working conditions. In the context of these complex descriptions on jobs and the quality measures, the rules of distribution of income may easily evolve into the interests of classes having power on social and economic relations.

Moreover, these power relations are no longer determined at the national level but are also differentiated by the interactions as a result of the changes in the international sphere. The theoretical and epistemological background of the neoclassical paradigm thus plays a crucial role in the determination of these conditions. The fundamental rules on income distribution are interpreted in a specific pattern in which the acts of the socio-economic agents are ignored within the frame of a complex structure. And therefore, naturally, the neoclassical paradigm depending on these conditions find many relevant empirical tools to their methodological aims in personal income distribution than the functional or class-based income distribution measurements. This methodological context contrasts with the statement of the BSB because according to BSB (2005: 106), it orients to determination of the class income shares and analysis within the distribution relations shaped by the economic class struggle among the socioeconomic actors in different and opposing position within a capitalist society.

5.2 Theoretical and Epistemological Backgrounds of Income Distribution

The development momentum of the capitalist mode of production has been significant impact on the formation and diversification of the assumptions of different schools of economic thought related to the income distribution. From the beginning of the capitalist system, the determinants and dynamics of income distribution have been investigated by different

theoretical paradigms. Additionally, from the mercantilist doctrine to the evolution of the neoliberal paradigm, many different types of perspectives have been changed and renewed in order to understand the inner structure of the income distribution. Essentially, several types of analysis on distributional practices, which of them can be generalized in four major frameworks, provides comprehensive understanding about the reasons for the economic evolution of the income inequality. In the following sub-sections, these four different frameworks on the distribution of income which will be examined in theoretical basis. These four different frameworks can be classified as follows: (1) Classical framework; (2) Marxian framework; (3) Keynesian framework; and (4) Neoclassical framework.

First, in the classical framework, the theoretical assumptions of that period will be investigated based on the arguments of Smith (2012) and Ricardo ([1911] 2004) so as to understand the distributional changes of income. In this framework, the fundamental phenomenon will be based on the determination of the production costs and the exchange-value of the products within the frame of the consideration of "value" concept. The major reason for focusing on the concept of value depends on the fact that the factors of production such as capital, labor, and land are analyzed in case of value theory. Therefore, this theoretical survey will concisely enlighten the ways that the income distribution is changed among factors of production and thereby the reasons behind the major components of value theories of Smith (2012) and Ricardo ([1911] 2004). As Kazgan (2009: 74) states that Smith is the source of the labor-value theory at the center of Marxist theory as well as the "cost of production theory" developed by neoclassical economic theory. Furthermore, the classification of society, having three social classes and focusing separately on wages, profit and technological progress by Ricardo, are all important for an understanding of the ways of changing patterns of income distribution in the classical period. For this reason, in later periods, it will be much easier to distinguish which aspects of the theoretical infrastructure created by Smith (2012) and Ricardo ([1911] 2004) differ in terms of income distribution by different economic thoughts. Consequently, the major aim will be the investigation of the characteristics of the value theory and thereby its position in the analysis of the distribution of aggregate income among social classes.

In the capitalist mode of production, another framework for the examination of the distributional facts is called the Marxian framework. It grounds on completely different structure relative to other frameworks and economic thoughts both at theoretical and epistemological levels. The main aim of Marx ([1976] 1982) is to examine the capitalist mode of production and the conditions of the production and exchange of goods and services. Similar to Smith (2012), the division of labor for Marx ([1976] 1982) is very crucial in the development process of the productive forces. These productive forces will become, on the other hand, more conflicted with each other as a result of the dialectical progress of the division of labor based on the capitalist production power. This contradiction will be the major determinant on the issue of distribution of total income and wealth obtaining from the total production in the context of both power relations between labor and capital and the development path of the technology. Therefore, the labor and means of production which are called by Marx as the "productive forces" and thereby the necessity to produce more for higher profit rates will have a crucial role in the development process of division of labor in the capitalist system. In this sense, the means of production such as labor, capital, and land in parallel to the technological progress will consistently be developed in a dialectical process. The core of the capitalist system depends on this dynamic structure. Hence, it causes to the differentiations in the distribution of income based on the power relations of production system, depending on the impacts of the productive forces and the productive structure.

On the other hand, the Keynesian framework emerged as a result of the structural problems occurred in the capitalist system by criticizing the arguments of the classical theory. Within this critical process, the harmonizing assumptions on income distribution and income inequality have created the major theoretical components of the Keynesian framework. However, as Dünhaupt (2013: 9) states that since Keynes himself never focused explicitly on the analysis of the topic of income distribution, the investigational process on income distribution and inequality problems will be based on other studies which of them depend on the theoretical ingredients of the Keynesian framework. For instance, in this paradigm, the major focus will be based on the investigation of the reasons about the distributional relations between profit and wages in effect of the multi-dimensional dynamics of investment and output. Moreover, depending on the extended version of the Kaldorian (1956) analysis on income distribution, the theoretical arguments of Pasinetti (1962) will be investigated to understand the distributional effects of labor savings on wages and profits and thereby the national income. These two fundamental analyses on distributional relations and patterns will provide critical basis to understand the major theoretical factors of the Keynesian framework coupled with several other components from different researches about the income distribution and inequality.

Finally, the neoclassical paradigm is another school of thought in which the structure of income distribution is examined at the theoretical level. Unlike the labor-value theory developed by the classical and Marxian frameworks, the neoclassical thought develops the subjective value theory, which is constructed on the use-value. The essence of value is explained in terms of the "utility" principle. The major aim of economic units depends on the maximization of their utilities obtaining by a higher consumption level. For this reason, they must be active in the production process as producers of the goods and services. Each economic unit has its own income equal to the value of goods and services produced in the production system. This equality condition is determined by the law of margin which plays an important role in order to get maximum utility from the economic process. The neoclassical paradigm is based on the principle of "declining marginal utility" of the theory of subjective value theory which means that the product consumed by the individual will get a lower utility from an additional unit of it. The point where the marginal productivity of these individuals is equal to their incomes denotes the equilibrium point at which maximum utility will be obtained. At each level of production outside of this equilibrium point, the utilities of economic agents will be either less or more at optimal levels based on the given economic conditions. In addition, a perfectly competitive market structure is required for maximizing utility at the theoretical level. The formal definition is based on the obligation of all economic and social units to have a completely free market structure. In the context of all these information, Section 5.2.4 will attempt to summarize the major theoretical researches on income distribution which start from the marginal revolution of the neoclassical thought. Hence, the arguments that constitute the basic structure of the income distribution of three fundamental theorists of the marginal revolution (namely, Jevons, [1957] (1965), Menger [1976] (2007), and Walras [1954] (2010)), which constitute the theoretical background of the neoclassical ideas of thought, will primarily be addressed in the framework. Additionally, based on the theoretical arguments of the marginal approach, the neoclassical paradigm will focus on prominent studies in the theory of distribution. In this sense, the further theoretical researches on income distribution such that Clark [1899] (1908), Edgeworth (1904), Marshall [1890] (1920), and Wicksell [1954] (1970), will be examined in order to get a comprehensive understanding of the neoclassical perspectives on distributional patterns.

5.2.1 Classical Framework

The fundamental framework on income distribution and inequality in case of the classical model basically depends on the political economy investigations of Smith (2012) and Ricardo ([1911] 2004), which of them are based on the understanding of the changes in the behavior of individual and the structure of contesting classes. In the development process of the capitalist economic system, the classical approach attempted to focus on almost every scientific issues together with the subjects on distributional dynamics. In other words, the classical model attended to investigate the economic mechanisms along with different kinds of parameters covering different types of subjects. Therefore, the theoretical underpinning needs to the accordance of each ingredient for its analytical methods. It covers a wide range of analytical framework from the investigation of the political economy to the examination of the sources of the economic development and growth. Additionally, the source of value and profit, the functions of money and its role in economic activities, the effect of money on market structure, and the investigation of the inner dynamics of competition are all other fields that the classical framework focused.

On the other hand, in the analysis of the inner structure of the income distribution, the ways that classics have been analyzed the concept of value[55] were so much important. Both for Smith (2012) and Ricardo ([1911] 2004), the value is divided into two categories as follows: (1) the use-value and (2) the exchange-value. However, the importance given to these two value categories differs for Smith (2012) and Ricardo ([1911] 2004). For instance, the use-value is much important for Smith in the context of his theoretical background. According to Smith (2012: 32), the water is the most useful component for human being, but the value of its exchange is very low. On the contrary, the use of a diamond is very scarce but its value of exchange is very high in parallel to a very great quantity of other goods (Smith, 2012: 32).

In that sense, Ricardo ([1911] 2004) mentions that the use-value is strictly necessary for an exchange of products within the frame of the examples on water, air, and gold based on Smith's diamond-water paradox. However, Ricardo ([1911] 2004: 5) also shows that the use-value is not a criterion for exchange-value. Essentially, the use-value is described as the utility and the exchange-value is described as the price in the theoretical context of Smith and Ricardo. Together with these two types of value analyses, both Smith (2012) and Ricardo ([1911] 2004) deal with the ways of making of market prices and thereby determine the sources of equilibrium prices of different goods and services. Therefore, the analysis of the exchange-value is more important than the use-value. All in all, the utility is treated as a thing obtaining as a result of the exchange of goods and services among economic agents.

According to classical theory, the prices are divided into two concepts before the formation of equilibrium price, depending on time factor. On the one hand, there are market prices which depend on the short-term mechanisms. On the other hand, there is a natural price which depends on the long-term mechanisms. The natural prices is equal to the equilibrium prices. The market prices are fluctuated in the context of the conditions of competition and the several effects of markets. These prices are basically determined by the rules of supply and demand. Additionally, the supply and demand are affected by the preferences of individuals, the problems emerging in economic activities, and the factors arising from the incidental movements.

---

[55] Although Smith and Ricardo are the pioneers in the formation of the classical value theory, it should be also regarded the contributions of Malthus, Senior, Say and Bentham (especially in the development of value at two different theoretical levels as labor and utility).

For example, if the demand for goods and services is higher than the supply, the market prices tend to rise, and conversely, if demand for goods and services is lower than the supply, the market prices tend to reduce. On the other hand, the natural prices are formed based on the costs emerged in the production process. According to Smith (2012), the natural prices are the sum of the fundamental costs of production inputs including labor, capital, and rent. Additionally, according to Ricardo ([1911] 2004), the costs of these three inputs are critically important in the formation of the natural prices; however, there is much need to focus on other factors which depend on the theoretical framework related to the fact that the marginal costs determine the equilibrium prices in the case of rent theory. Indeed, Smith (2012) did not cover this theoretical understanding in detail.

Essentially, the theoretical underpinning of the determination of wage, profit, and rent can be found within the Ricardian framework. While rent is determined by the marginal costs, the wage level is determined as a result of the formation of wage funds for labors which are reserved for the consumption of labors. Finally, the profit is comprised interest, risk premium, and the wages of managers. Actually, there is no distinction between entrepreneurs and capitalists in the classical paradigm[56] (Kazgan, 2009: 74). In other words, the profit is regarded as the interests. This framework can be found in the investigation of the changes in profit rates of Ricardo's ([1911] (2004): 64) study because it remains as the major factor in the determination of the cause of the permanent variations in the rate of profit and the rate of interest.

Following the determination of two fundamental sources of the value which are the use-value and the exchange-value, Smith (2012) and Ricardo ([1911] 2004) lean to the basic factor behind the prices: *labor*. Both Smith (2012) and Ricardo ([1911] 2004) note that the labor is the only source of the determination of the exchange-value. As Smith (2012: 40) points on that the labor is thus the only universal and accurate measure of value, or alternatively that the only standard which is the unit measure the other different commodities can be measured at all times, and at all places.

Moreover, Smith (2012: 34) writes that the value of any commodity is equal to the quantity of labor for all people who exchange it for other commodities. Therefore, according to Smith (2012: 34), the real measure of the exchangeable value of all commodities depends on the labor. Furthermore, Ricardo ([1911] 2004) focuses on the same issue. According to Ricardo ([1911] 2004: 5), if any commodity is exchanged for the other commodity, the value of this commodity basically depends on the relative quantity of labor which is equal to the value for its production.

The classical framework depends on these theoretical ingredients about the income distribution and inequality. In other words, these assumptions show that it is not possible to determine the rules of distribution among economic agents without describing the value. Therefore, the distributional issues cannot be understood without analyzing the components of the production costs and the dynamics of the prices. Although Smith (2012) constitutes a theoretical structure on the basis of the production inputs for the investigation of the distribution of income, the major examination on this topic can be essentially found in the study of Ricardo ([1911] 2004).

The fundamental components of the value theory of Ricardo ([1911] 2004) are found in his rent theory. The quality of lands and the law of diminishing marginal returns are all formed the major topics of the value theory. The rent theory of Ricardo comprises of two separate cases: (1) extensive margin (i.e., the use of low return lands) and (2) intensive margin (i.e., the

---

[56] Except for Say [1821] (1971).

diminishing returns arising from the use of more labor and capital on the same land) (Savaş, 2007b: 319).

According to Ricardo ([1911] 2004: 33), the rent is the portion that depends on earth produce which is paid to the landlord for the most important factor: "the use of the original and indestructible powers of the soil". However, the rent should be evaluated different from the incomes of the precious inputs obtaining from land and the expenditures for products (Ricardo ([1911] 2004: 34). This difference also determines the distinctive point where the rent diverges from wages and profits in practice.

For instance, in an infant periods of accommodation and production system of any country, the plentiful and prosperous lands were abundant. The abundance of land was substantially necessary for almost all population living in this country. Additionally, the cultivation of a small part of the land would be enough for the maintenance of the population. Therefore, the land might be cultivated with the own capital of the individual who will use it. In other words, the rent was not a matter of fact for this land[57] (Ricardo, [1911] 2004: 34).

However, the less qualified lands would be opened for the cultivation because of both population increases and the differences of lands in terms of their quantity and quality. The introducing of these low-quality lands for new cultivations was also necessitated the payoff of the rents. Therefore, the rent was initiated for the payoff for the highest quality lands. On the other hand, the amount of the rent was depended to the differences of quality among lands and thereby the production power of the land. This argument was also significant for the second-class lands resulting from the opening of third-class lands. Moreover, the cultivation of the third-class lands would also increase the rents in first-class lands because the amount of production in the first-class lands would be much higher with using the same amount of capital and labor. The major reason behind the opening of different kinds of lands to the cultivation basically depends on the fact that the supply of nutrition should be increased in parallel to the population increases (Ricardo, [1911] 2004: 35). Consequently, Ricardo thought that the law of returns which was highly significant in agriculture would determine the quality of production function on the whole of the economy in the long-run (Kazgan, 2009: 82).

In this definition, the cultivation of lands as quality-based is subjected to the law of diminishing returns. The population increases and the increasing use of capital and labor in land indicate the essential point for the transition to the low-quality lands. However, Ricardo ([1911] 2004) is aware of the fact that the technical developments have labor-saving effects on the production process in parallel to the developments in the capitalist system. Especially, Ricardo's ([1911] 2004: 263-271) arguments on mechanization all support this notion. Nevertheless, as Kazgan (2009: 82) states that the mechanization process may eliminate the impacts of the reduced income only temporarily and therefore production cost in agriculture will gradually increase in the long-run. In other words, although Ricardo ([1911] 2004) supposes that the agricultural developments will be increased in parallel to the technical progress, these developments in the agriculture sector will fall behind the developments in the industrial sector within the frame of the production in the capitalist system.

The fundamental elements of the classical framework for income distribution analysis theorized by Ricardo ([1911] 2004) are basically emanated from the law of diminishing returns. Following the cultivation of lands, two major inputs are used to maintain the agricultural

---

[57] For instance, the case of "free good".

process: (1) capital and (2) labor. In first-class lands, the cost of capital and labor will be equal to that of the product produced after cultivation due to the absence of rent. Hence, the prices and the exchange-value of those lands will reflect the cost of capital and labor. If second-class lands open for the cultivation, depending on the increase in population, the distribution of returns for capital, labor, and rent for those lands will convert into many different patterns. Primarily, the transition from highest quality lands to the lowest quality lands will need using more inputs for the production of the same unit products. In other words, for the same amount of product, more costs will be incurred in the second-class lands. The exchange-value will be determined by the same method in the second-class lands as in the first-class lands.

However, in this case, the major problem depends on the fact that the same products will have different price ratios within the frame of different methods using in the production process. Therefore, the price of the product will be determined in the land where its production cost is high. This situation will lead to the selling of the product produced in low-cost first-class lands with the same price produced in high-cost second-class lands in case of free market conditions coupled with the competitive pressures. This product is produced with less amount of capital and labor in first-class lands compared to the second-class lands. In other words, in first-class lands, the cost of the product will be much lower rather than in the second-class lands. Therefore, the profit ratio accrued from the first-class lands will be much higher than the second-class lands. However, according to Ricardo ([1911] 2004), the profit rate is unique in the equilibrium point. Therefore, the residual from the difference of these two lands comprises of the amount of rent. As Savaş (2007b: 321) states that according to Ricardo, the rent is not a reason for the exchange-value of any product but it is the result of that product.

This statement also shows that the rent is functionless in the determination of the prices of the products. Accordingly, the fundamental component of the distributional problems should be investigated within the changing relationship between capital and labor. In course of any production process, the change of the capital/labor value only alters the amount of rent which also obliges to the emergence of rents in different lands.

Suppose for instance that the wages increase in the presence of the constancy in the value of money. This increase in the wage level will also increase the prices of labor-abundant products relative to the capital-abundant products. If the average rate of capital/labor is determined in the free market system, the prices of labor-abundant products are increased, however, the prices of capital-abundant products are decreased. All in all, the price of any product produced by the average rate of capital/labor will be stay constant. On the other hand, the prices of other products will be fluctuated on the basis of the ups and downs in the average price ratio of capital/labor.

Moreover, in the first scenario, the low-quality second-class lands were supposed to open for cultivation as a result of the progress in population. In this second scenario, let's suppose that the production proceeds by the increase in the production inputs in high-quality first-class lands. In other words, suppose that the high-quality first-class lands use more capital and labor. In this sense, the major aim is to detect the fluctuations in the amount of products. If such a production strategy provides fewer products than those produced in the second-class lands, the production should be transferred to these low-quality second-class lands. However, if the amount of products are higher in the first-class lands following the increase in the amount of capital and labor relative to the amount of products produced in second-class lands, the high-quality lands should be preferred for cultivation in the long-run. The difference in the amount of produced goods will be emerged as rents in the first scenario. Ricardo ([1911] 2004: 36) writes that in such case, the old land will be opened for capital to be employed and thus will equally produce

rent. The difference between the values of the production employed by two equal quantities of capital and labor will determine the amount of rent.

Additionally, as Savaş (2007b: 321) states that much more important case in terms of economic development depends on the trends emerging in the profit rate. Therefore, although the rent is a major component in the Ricardian system, the fundamental problem emerging in distributional practices essentially depends on the changes in the relationship between capital and labor. On this distributional problem, Ricardo ([1911] 2004: 71) states that because any kind of requisite may increase almost limitless, profits are essentially determined by the amount of wages, wages are determined by the price of necessaries, and the price of necessaries depend to the price of food.

Indeed, this notion of Ricardo ([1911] 2004) and his rent theory show that the low rates of profits do not depend on high amount of rents. The major reason is an increase in the cost of labor. It means that there is a negative relationship between profits and rents in terms of the costs of labor and capital. On the other hand, the cost of labor is determined by the interaction of the amounts of labor supply and labor demand. The marginal cost of product produced within the agricultural production process basically determines the price of labor.

The economic and social factors affecting in the determination of labor supply and labor demand may be differentiated, depending on different conditions. However, from the beginning of Smith (2012), the increase in the population level and thereby the amount of labor supply are all investigated in case of the nature of the means of subsistence. As Smith (2012: 84) states that the means of subsistence is a major factor behind an increase of every species of animals, and no species can ever increase beyond it.

Smith (2012) uses this kind of method in an attempt to understand the effects of natural life for the analysis of socio-economic framework. According to Smith (2012), there is a positive relationship between the population increase and the wage rate. The major impulse behind this increase in the population level depends on the increase in the wage ratio. Or alternatively, the increase in wage level is being one of the major reason behind the population increase. Every difficulty in reaching to the means of subsistence will create pressure upon the population increase. The acquisition of means of subsistence depends on the fluctuations in the wage rates. The wage rates increases will provide to obtain the necessary amount of means of subsistence which will be resulted in the increase in population and thus the amount of labor supply. On the other hand, wage rates decreases will cause to a reduction in the amount of means of subsistence and therefore will create downward pressure on population growth and the amount of labor supply.

The subsistence wage rate refers to the physiological minimum level at which workers provide basic nutrition. As Dünhaupt (2013: 6) states that the natural rate of wages shows the subsistence wage. For instance, according to Ricardo ([1911] 2004), there are two main factors behind the ups and downs emerging in the wage level: (1) the labor supply and labor demand and (2) the price of the products for which the wages spend. The wage rate above the subsistence level causes to the increase in population growth and thereby the amount of labor supply. On the contrary, the wage rate below the subsistence level pushes down the population growth and thereby the amount of labor supply. Smith summarizes this situation as follows:

> "The liberal reward of labour, by enabling them to provide better for their children, and consequently to bring up a greater number, naturally tends to widen and extend those limits. It deserves to be remarked, too, that it

necessarily does this as nearly as possible in the proportion which the demand for labour requires. If this demand is continually increasing, the reward of labour must necessarily encourage in such a manner the marriage and multiplication of labourers, as may enable them to supply that continually increasing demand by a continually increasing population. If the reward should at any time be less than what was requisite for this purpose, the deficiency of hands would soon raise it; and if it should at any time be more, their excessive multiplication would soon lower it to this necessary rate".

(Smith, 2012: 84-85)

These conditions specified for the labor supply have a different feature for the demand for labor. The wages in the classical framework are determined subject to the extents of wage fund and capital stocks. The wage ratio depends on the rate of increase in population and the amount of capital stock. In any production system, workers need consumption goods and the means of production in order to maintain their economic and social well-beings and their living standards. The mentioned-above contradiction between capital and labor become apparent in the socio-economic context. The acquisition of consumption goods by workers depends on the level of wage funds and is determined by the amount of capital stock. Indeed, the wages are essentially the monetary reflection of the consumption goods. Additionally, these consumption goods providing from the use of wage funds are all determined by the size of the capital stock. These wages paid for workers are dropped from the total capital stock organized before the beginning of the production process. The higher the wages, the higher the wage funds which determine the size of preliminaries allocated for wages.

All in all, the amount of surplus produced in the production process by way of total capital stock will be reduced equal to an amount of total revenue. However, depending on this wage ratio, the maintenance of the existence of workers in the production system will result in an increase in the total amount of products of capitalists at the end of the production process[58]. In theoretical case, the wage rate is determined by the total wage divided by the aggregate labor supply. As Kazgan (2009: 88) states that while the number of workers are constant, if the capital stock and therefore the wage funds increase, the wage rate will also be increased; without making necessary arrangements in using these parameters, the increase in the wages is impossible.

However, within the frame of the classical paradigm, the most important epistemological problem in the determination of the wages in case of labor demand is the ignorance of class-based distributional contradictions between capital and labor in both social context and the production process. The labor demand and labor supply and thereby the wage level and the profit rate are determined under abstract concepts. For this reason, the effective positions of productive powers and their positive and negative effects on wage level and profit rate do not be regarded[59].

As Savaş (2007b: 323) states that it is not possible to increase the available amount of wage funds without increasing saving rates of capitalists. This argument, in a sense, shows that the revenues produced by the workers in the short-run are controlled by the capitalist class and also maintains its basic features in the long-run. Hence, an increase in the income of workers, depending on an increase in the labor demand, will depend on an increase in the capital stock

---

[58] The theory of surplus-value of Marx is basically devoted to the analysis of the inner structure and the functioning of this issue.

[59] One of the most important counter-argument comes from the Marxian analysis on the capitalist system together with multi-dimensional investigations on classical assumptions.

and will get an extra revenue at the end of the production process. However, the only point that is ignored is the population increases.

According to classical theory, the real wage rate will stay constant along with an increase in the population growth and thereby in the amount of labor supply even though the nominal wage rate increases. It means that the wage fund will be equal to the increase in the level of labor supply. As Ricardo ([1911] 2004: 52) states that the natural price of labor has a critical importance as a price for labors because it enables them to subsist and to perpetuate their race, without either increase or decrease. Consequently, the natural price of labor will equilibrate in the subsistence level. This is a long-run relationship in the Ricardian framework. However, in the short-run, along with the increase in the amount of capital stock, the real wage ratio may increase within the frame of an increase in the labor demand and thus in the wage fund.

The possible result of this framework is the population increase which will bring down the real wages to the natural price level and therefore to the subsistence level. The short-term reflection of this case is the deviation of subsistence level from the wage level. The wage level may exceed the subsistence level. However, according to classical theory, free market conditions may eliminate these ups and downs emerging between subsistence level and the wage rate. All in all, for the classical perspective the only hope of a continuous improvement in the welfare of the laborers[60] (Savaş, 2007b: 324).

5.2.2 Marxian Framework

Although the theoretical investigation of the agents of production by way of classifying them according to their social positions was a fundamental way to understand the production systems and thereby the dynamics of the distribution between different classes, the class-based perspectives and the social meaning of these perspectives were almost ignored in the classical framework. Essentially, the arguments on income distribution were basically determined within the frame of social relations among production factors. Therefore, many of the class-based effects of these arguments were ignored on behalf of the interests of the capital-owners. Yet the two major production agents, namely the capital and labor, and their class-based contradictions among each other are comprised the other side of the analysis, different from the theoretical and methodological framework of the classical paradigm. The most reliable and detailed analysis of this class-based context of the distributional issues can be fully obtained from the Marxian framework.

The Marxian framework is intrinsically depended on the investigation of the capitalist mode of production in parallel to the analysis of the distributional problems emerging in the relationship between capital and labor. Therefore, the theoretical structure and extent of the Marxian framework are basically multi-dimensional. The distributional issues and the other social dynamics are all inherently depended on each other and thus cannot be examined separately[61]. According to Selik (1982: 17), the Marxian framework is generally concerned with the evolution of societies and, in particular, with the evolution of capitalist society, and also describes the evolution of societies in the change of the mode of production they underpin. The

---

[60] For a detailed analysis please see Malthus [1798] (1998).
[61] The arguments of Marx on the distribution of income should be interpreted in the same way as classical ones, depending on their theoretical framework. In this section, the theoretical infrastructure that will affect the distribution of income will be examined by focusing on specific factors related to this issue without going into the details.

capitalist mode of production is determined by the production powers of society and the production relations as in the evolution process of other modes of production.

The capitalist mode of production, as in other modes of production that exist in the evolution process of societies, is determined by the productive powers of society and the production relations that are determined on the axis of the productive powers. The production relations with the development of the productive powers bring about the evolution of the mode of production over time. This is an important indicator of the dialectical structure of the materialistic production systems. The social conditions and social relations are all exposed to the crucial changes in this dialectical process. The change imposes the necessity. To the extent of the changes in the production structure, the positions of the classes also change. In this sense, the new types of classes are emerged due to the differentiations in class positions.

In each mode of production based on the private property, the conditions of these class structures change. The interest-based behavioral patterns and contradictions within themselves stimulate the development of both modes of production and production systems. Each class should follow its own interest. Specifically, in the capitalist mode of production, the production relations of capital and labor are determined as part of their interest-base contradictions in the social system. The benefit of any class is almost equal to the loss of other class. In this sense, the historical dimension of the capitalist mode of production shows that the changes in power relations between capital and labor are not constant and thus they change over time on the basis of several factors.

Although there are many different types of social factors behind these changes emerging in power relations between capital and labor, the dialectical characteristics of these changes can be found in each phase of the production process. The fundamental characteristics of the income distribution are thus determined within the dialectical structure of power relations and class contradictions between labor and capital.

In the Marxian framework, the understanding of these characteristics on distributional issues between different classes depends on the understanding of the value which follows a similar theoretical structures as in the classical theory. The human needs are not common. Satisfying these needs is appeased through the use of natural resources. Human development is obliged to transform these resources and adapt them to their own needs. In other words, this transformation is also initiated to use of labor-power. The exchange of products is basically determined by the amount of labor they contain. Additionally, the major aim of the exchange process of products is to get a highest benefit from the other products. In this sense, the commodities have two kinds of components: (1) the use-value and (2) the exchange-value[62]. As Marx ([1976] 1982: 126) states that the usefulness of a thing or commodity indicates its use-value, and the realization of use-values are only emerged in use or in consumption. Therefore, the material content of wealth depends on use-values, whatever its social form is (Marx, [1976] 1982: 126). This material content of wealth is realized within the exchange conditions. Hence, the quality of commodities may differ as use-values, but as exchange-values, they are only depended on the quantity changes and thus do not include an atom of use-value (Marx, [1976] 1982: 128).

If, therefore, we disregard the use-value or its utility, only one feature remains as being the products of labor (Marx, [1976] 1982: 128). In an exchange of commodities among each other, they always change and do not keep their initial characteristics. However, as Marx ([1976] 1982: 128) states that if the commodities are abstracted from their use-values, the material

---

[62] As in the classical paradigm.

features and forms of that commodities will be also abstracted. In other words, the usefulness of the commodities will be disappeared. The only abstract labor[63] remains in an exchange process of commodities which are contained an equal amount of labor transformed from the concrete labor. The abstract form of labor is comprised of the fundamental thing that the society has: *values[64]*.

When we isolate commodities from their use-value on the basis of abstract labor in the exchange relations, only one feature remains, that of being the commodities of values. The common thing that emerges in exchange relations is merely values. In the words of Rubin (1972), the value theory has a crucial importance because it shows the interrelations of several forms of labor in the process of their distribution, which is established through the exchange relations among things, i.e., commodities. The main condition for the emergence of the value basically depends on the embodiment of the abstract labor[65] in the commodity. But how is then the size of the value to be measured?

The answer to this question can be found by focusing on the investigation of necessary labor-time for the production of any commodity. The amount of labor needed to the production of the commodity is utterly depended on the necessary labor-time to produce of that commodity, which is measured by its duration (Marx, [1976] 1982: 129). However, there is a problem here. If the value of any commodity depends on the necessary labor-time to produce it, the longer time periods for the production process creates the wrong perspective that the value of the commodity become higher.

In fact, the labor inherent to the essence of the value is pointed out the homogenous labor in the Marxian framework. In other words, it is reduced to the homogeneous labor which is equal to the socially necessary labor-time required to produce any commodity. Marx ([1976] 1982: 129) explains the socially necessary labor-time as a labor-time necessary for producing the use-value, depending on several conditions of normal production process that is given for any society, having an average degree of skill and labor intensity widespread in that society.

In this case, the commodities, either produced in the same labor-time or have the same amount of labor, will have the same value in the market for exchange. However, depending on the level of ability of labor and its efficiency increase, the necessary labor-time to produce the commodity varies and also perpetuates the dynamic changes in the values of commodities. As Marx ([1976] 1982: 129) states that the major factor in an attempt to determine the value of any article is thus depended on the necessary amount of labor socially, or the necessary amount of labor-time for its production.

All in all, the Marxian labor theory of value is separated from the classical value theory because of the effects of two factors. First, the Marxian framework focuses on both sides of the values, i.e., the use-value and the exchange-value. In its theoretical context, these two sides of value are evaluated based on their effects in the social production process. The major reason for these two-dimensional investigations of the value essentially depends on the approach for the analysis of social conditions within class dynamics. Therefore, the Marxian framework does not ignore the importance of the use-value in contrast to the classical theory.

---

[63] The destruction of special human qualities.

[64] Meek (2009: 227) states that "The ability to be the product of abstract labor is a feature that puts a commodity on top of everything as the bearer of these production relations".

[65] As Sweezy ([1946] 1962: 30) mentions that "Abstract labor is abstract only in the quite straightforward sense that all special characteristics which differentiate one kind of labor from another are ignored".

Second, the other distinguishing feature of the Marxian labor theory of value is the prominence of the importance of labor in the investigation of the source of value. Thus, the socially important feature of labor theorized in the value theory is another methodological innovation in which the classical framework does not have this kind of approach. In this case, the unique importance of the labor in producing of commodities makes the distribution theory much different than in the classical framework. While the surplus in the production process is based on the self-sacrifice of the capitalists in the classical framework, it is analyzed based on the position of labor within the production system in the Marxian framework. The additional value emerged at the end of the production process is called as the "surplus-value" in the Marxian paradigm and thus is evaluated within the frame of the position of labor in the production system. Therefore, the self-sacrifice of the capitalist for the production of the surplus cannot be in question in the Marxian paradigm.

This second point shows the theoretical underpinnings about the distributional issues of the Marxian framework. The labor-value theory can be thought as complementary for an understanding of the dynamics of the contradictions emerging in the relationship between capital and labor and of the components of the surplus-value. In this sense, the Marxian framework provides a holistic structure for the analysis of the income distribution and thus has a dialectical process from abstract to concrete analysis based on the changes in the pieces of the entity. The formation process of value and the surplus-value is the most important distinctive feature of the capitalist system. The components of this process can be explained by the mutual interactions of both value and the surplus-value.

As Marx ([1976] 1982: 125) states that an "immense collection of commodities" is a major component of the wealth of societies emerging in the capitalist mode of production, and the elementary form of these commodities is an individual commodity. The major aim of the production of this commodity is to satisfy the human needs. One of the most critical reasons for the mutual development of both human development and technical progress in each unit of time is the desire for more easily acquiring of these needs. However, in each mode of production, which is based on the private property structure in production systems, the labor-power and the technical progress are used to satisfy the interests of individuals, are not used to satisfy the needs of society. The rules of distribution are determined under the rules of private property. Therefore, the major aim behind the production of commodities, depending on the rules of private property, is to get more produced goods and thereby more surplus-value. Additionally, the production of the surplus-value is not sufficient and therefore it should be realized in the exchange process.

Under the guidance of the rules of private property in social forms, the production relations are produced by the contradictions among classes. In these relations, while the capitalist class has means of production and the commodities, the working class has only one power: its labor. The capitalist system provides the ownership of means of production under the control of the capitalist class. However, the working class is deprived of using these means of production. The only way to survive in the social context for workers is to sell their labor-powers like a commodity. In this sense, the labor-power is regarded as a commodity because it is exposed to exchange like the other commodities and therefore has an exchange-value. As Sweezy mentions that the exchange-value is characteristic of the capitalist system only (Sweezy, [1946] 1962: 56).

In the capitalist mode of production, the labor-power and its value is a major factor of the exchange and the distribution processes. However, the development path of the labor-power

and its importance in the social context differ in the development path of the capitalist production relations. From a "simple commodity production" to a "capitalist production", the quality of the labor-power is also changed in parallel to the progress emerging in the capitalist relations[66]. The major interest of the capitalist class is to get a maximum value from the labor-power obtaining from the production process. It means that, at the end of the production process, which is stimulated with the agglomeration of means of production and the labor-power, the capitalist should get an extra use-value. Because the value of means of production is transferred into the commodity without changing, the surplus-value is basically produced by the dynamic process of the labor-power. The more the labor-power is used in the labor process, or the more it increases its productivity over a certain period of time, the more value it gains. The capitalist production relations determine the distribution of that surplus and the appropriation methods. As Boratav (2015: 277) states that not the entire relationships between people that emerged from the production process or by reason of this process, but the connections that create special forms and mechanisms of seizing the surplus are understood as the production relations. In this sense, Boratav (2015: 277) expresses that there is a dependency relation between capital and labor in capitalist production relations. The major reason of this dependence depends on the fact that the capitalist class who owns the means of production should get the unique source of making value for its own interests even though the workers should sell their labor-power as the commodity in the market to survive.

All the historical process of the capitalist mode of production is emanated based on these mutual dependencies. As Dumenil and Levy (2009: 13) point on that the main system of the dependent relations among variables explains the analytical limits between the political economy and the general history and the social theory. However, as a distinguishing feature of the capitalist system, the worker sells its own labor-power to the capitalists for a certain period of time. For the residual of that certain time period, there is no right of the capitalist to get anything from the worker. However, the production dynamics of the capitalist system struggle to make this residual (namely the leisure time) a part of the production process, depending on changes in the class structure, the power relations among classes, and the social conditions of workers. According to Denis (1974: 15), in the capitalist regime, worker (wage earner) does not completely resign itself to his/her boss (employer). He/She gives to the order of his/her employer for a certain period (e.g., one month, one week, one day, or one hour) his/her manhandling and intellectual qualities that makes him/her an individual with a certain labor. The production cycle in which the structure of the distribution is formed in the Marxian framework can be shown as follows:

$$M - C\,(MoP\ and\ LP)\dots P\dots C'\,(C + c) - M'\,(M + m) \tag{1}$$

In this production cycle, the fundamental aim of the capital-owner is the maximization of the initial money, M. The capitalist should provide the condition of M > M'. It shows that the capitalist will get an extra money at the end of the production cycle. According to Sweezy ([1946] 1962: 58), the capitalist only lays out money for labor-power and other means of production if he can get a larger amount of money at the final phase of production process. The difference between M and M' is called as surplus value by Marx. In the process of making surplus-value, the creation of use-value becomes a useless process for the production cycle and for the interests of the capitalists. On the contrary, making more profits with an increasing amount of surplus-value becomes the main aim of the capitalists. The following expression of Marx analyzes this point in detail:

---

[66] For a detailed theoretical and epistemological investigations of the relationship between "simple commodity production" and "capitalist production" please see Marx [1976] (1982).

> "The simple circulation of commodities - selling in order to buy - is a means of carrying out a purpose unconnected with circulation, namely, the appropriation of use-values, the satisfaction of wants. The circulation of money as capital is, on the contrary, an end in itself, for the expansion of value takes place only within this constantly renewed movement. The circulation of capital has therefore no limits".

(Marx, [1976] 1982: 253)

This surplus-value, which is the basis of the distributional dynamics, differs in different periods within the frame of limitless circulation of capital among different classes. However, the major component of this difference depends on the changes in the labor-power. According to Sweezy ([1946] 1962: 59), the discovery of the origin of surplus-value basically depends on the investigation of the value of the commodity labor-power.

The difference between labor and labor-power should be also epistemologically explained in detail. Fine and Saad-Filho (2008: 39) point on that Marx calls the second one as the labor-power to distinguish workers from their working abilities or capacities, and calls the first one as labor which is the use of the labor-power. In other words, it means that the labor-power emerges by the use of labor in the capitalist production relations. In this sense, the labor-power is purchased in the capitalist system, not the labor. And therefore, this labor-power is the source and the labor is the essence of the value.

According to Harvey (2010: 117), labor transforms something into something else and thus should be regarded as a process. In this process, the labor-power plays the crucial role. The labor process works if the capitalist gets necessary means of production in the marketplace (Harvey, 2010: 121). After that, the purchase of labor-power enables the regeneration of these means of production, which can be called as a "dead" investment, through the process of laboring (Harvey, 2010: 121). According to Marx ([1976] 1982: 296) the labor process always transform the worker's labor, from the form of disorder into that of being, from the form of act into that of objectivity.

Furthermore, depending on the labor process identified by Harvey (2010: 121), Marx explains the revival of the means of production, or alternatively, the "dead" investments, and the valorization phase of those "dead" investments in conjunction with the labor-power as follows:

> "The production process, considered as the unity of the labour process and the process of creating value, is the process of production of commodities; considered as the unity of the labour process and the process of valorization, it is the capitalist process of production, or the capitalist form of the production of commodities".

(Marx, [1976] 1982: 304)

The capitalist makes the payments of labors as wages at the end of the production process. The level of wages is equal to the value of consumption goods which is necessary for the renewal of worker's labor-power for further production processes and the well-being of workers. Suppose, for instance, the consumption of 8 hours labor-power shows the minimum time period for the purchase of these goods. In this case, the wages that the worker acquires at the end of the 8 hours production process are equal to the value of consumption goods. However, there is a problem here because the worker sells its labor-power to capitalist for all day under the logic of capitalist production laws. Therefore, it is possible that capitalist can make pressure on labor

to work more than 8 hours for its own interests. If capitalist employs a worker for 12 hours, the additional 4 hours product remains as a surplus-product to the capitalist. In other words, the value of this surplus-product appears to belong to the capitalist. As Foley (2010: 50) states that thus paid labor mechanism allows capitalists as a class to seize the society's surplus labor period without recompensing the working class with its equivalent value return. Therefore, according to Marx ([1976] 1982: 320-329), the source of the surplus-product or the surplus-value is the exploitation of the working class by the capitalist ruling class.

In the Marxian framework, one simple working day is comprised of two parts. On the one hand, the first part is the necessary labor-time which includes the wages that workers get to renew their labor-power for further productions. On the other hand, the second part is the surplus labor-time employed for the capitalist. However, the major contradiction depends on the emergence of the production of the surplus-value which is described by Ollman (2009: 18) as the weakest point of the capitalist system. The fundamental reason depends on the following fact since workers get only a fraction of what they produce as wages, they do not buy a large fraction of what they produce. Furthermore, capitalists, under the pressure of increasing total production, unceasingly strive to find new markets to stimulate the stagnant consumption. However, they fail in finding of new markets periodically. Because people produce high amounts of products, they are forced to maintain their life having too less (Ollman, 2009: 18).

Furthermore, as Burns (2010: 34) notes that this amount of labor, which is not paid by the capitalists, is the source of the profits, namely the surplus value, left behind to capitalists. The profit is acquired by the exploitation of workers in the production process, not in the exchange process. However, it should not be forgotten that, in the previous modes of production, the products of labor confiscated by the proprietor class of means of production, depending on the laws of private property as similar to the capitalist system. Therefore, as Sweezy ([1946] 1962: 62) righteously states that "what is specific to capitalism is thus not the fact of exploitation of one part of the population by another, but the form which this exploitation assumes, namely the production of surplus value". Additionally, the accumulation process, which has different forms within the consecutive cycle period and expands the reproduction of the capital, ensures the growth of the effect of capitalist in the production system (Gouverneur, 2007: 86).

The power of a historical momentum and the roots of changes in the production systems can be fully understood on the basis of the power relations among the contesting classes under the exploitation dynamics. Brosius (2010: 78) expresses that the productive forces produce favorable and prosperous production relations via social selection and mediation, in reverse, they again develop the productive forces; which leads to the emergence of a mode of production.

This framework also provides some major insights about the value formation of the commodity which will emerge in the post-production process. In this sense, the total value of commodity is comprised of three different components: (1) constant capital (c); (2) variable capital (v); and (3) surplus-value (s).

First, the constant capital, c, denotes the value of raw materials, machines, and other tools using in the production process in order to produce new commodities. In this case, the critical point is the neutral position of the constant capital in producing new commodities because it transfers its existing value into this new use-value. In other words, constant capital transfers value to the new product at the same amount as in the value consumed during the production process. As

Marx ([1976] 1982: 321) states that the new produced commodity will have the value of the constant capital and thus re-emerges in it.

Second, the variable capital produces an excess value, namely a surplus-value, while reproducing equal to its own value, and be varied according to the existing circumstances (Marx, [1976] 1982: 317). Therefore, in that part of capital, there is always a change.

Third, the surplus-value is the residual which shows the exploitation rate of the working class by the capitalist class. This is residual because the workers are forced to produce more value than their necessary amount of labor-power equal to keep their living-standards. This is the major point that the capitalist system depends on.

The total value of these three parts comprises the basis of the distributional issues in the Marxian framework. Additionally, these three parts provide the necessary tools for the development of different categories of the Marxian framework such as the ratio of surplus-value, the organic composition of capital, and the profit rate.

The ratio of surplus-value (s') can be briefly defined as the surplus value (s) divided by the variable capital (v) and thereby can be shown as follows:

$$s' = \frac{s}{v} \tag{2}$$

In the Marxian framework, the rate of surplus, s', is called as the exploitation rate as stated above. On the basis of Marx's argument ([1976] 1982: 326), "the rate of surplus-value is therefore an exact expression for the degree of exploitation of labour-power by capital, or of the worker by the capitalist". On the other hand, the production of the surplus-value needs the commodity production (Selik, 1982: 53). In the process of commodity production, the ratios of s and v are determined. In this determination, the basic factor is the power relations among classes. The capitalist class always struggles for the reduction of variable capital (v) in order to maximize the surplus-value (s). Alternatively, it strives to benefit from the technical progress, insofar as possible, to increase the surplus-value. Or, it creates extra pressure for an increase in the working time to employ workers at maximum.

In the Marxian framework, these phenomena are investigated in two different categories of surplus-value: (1) the absolute surplus-value and (2) the relative surplus-value. On the one hand, the absolute surplus-value is achieved by the increase in the working time. On the other hand, the relative surplus-value is achieved by the reduction of the variable capital and the increase in the labor efficiency. All in all, as Divitçioğlu (1976: 42) states that in the capitalist production process, the value and the distribution of this produced value emerge in one production process. It is obvious that the production process determines the value and thus the distribution. This case is sufficient to distinguish the capitalist mode of production from all other modes of production that preceded it (Divitçioğlu, 1976: 42).

In addition to the rate of surplus-value, the other distinctive feature of the Marxian framework is the theoretical investigation on the development process of the organic composition of capital (q). The organic composition of capital (q) is calculated as the constant capital (c) divided by the sum of constant capital (c) and variable capital (v) and thereby can be shown as follows:

$$q = \frac{c}{c + v} \tag{3}$$

This organic composition of capital is a measure of the extent to which labor is equipped with materials, instruments, tools, and machinery in the productive process, in non-technical term (Sweezy, [1946] 1962: 66). Similar to the rate of surplus-value, there are several factors such as the change in the labor efficiency, the pressure on the variable capital, the changes in the prices of the constant capital, fluctuates in the profit rates, and the structure of the capital accumulation, which are made a change in the rate of the organic composition of capital, q. In a large extent, Marx formulates the organic composition of capital in detail and then separates the organic composition into two parts as follows:

> "The composition of capital is to be understood in a twofold sense. As value, it is determined by the proportion in which it is divided into constant capital, or the value of the means of production, and variable capital, or the value of labour-power, the sum total of wages. As material, as it functions in the process of production, all capital is divided into means of production and living labour-power. This latter composition is determined by the relation between the mass of the means of production employed on the one hand, and the mass of labour necessary for their employment on the other. I call the former the value-composition, the latter the technical composition of capital. There is a close correlation between the two. To express this, I call the value-composition of capital, in so far as it is determined by its technical composition and mirrors the changes in the latter, the organic composition of capital. Wherever I refer to the composition of capital, without further qualification, its organic composition is always understood".

(Marx, [1976] 1982: 762)

The third factor obtained by the sum of all components of the value is the profit rate. It is one of the most important indicators of the capital accumulation process because the accumulation strategy is established on the accumulated rate of profit over the production period. In this sense, the profit rate (π) is measured as the surplus-value (s) divided by the sum of constant capital (c) and the variable capital (v):

$$\pi = \frac{s}{c + v} \tag{4}$$

This function can be easily shown by the following equation[67]:

$$\pi = s'(1 - q) \tag{5}$$

All in all, the rate of profit (π) essentially depends on the changes of both the rate of surplus-value (s') and the organic composition of capital (q). The major dynamic of the capital accumulation is the rate of profit. Therefore, the class contradiction emerging from the relationship between capital and labor is one of the most important factors behind the distribution of income, depending on the dynamics of the changes in the rate of profit.

In the context of these different parameters, the inner structure of income distribution can be analyzed by pointing on several components of the socio-economic and political environment in the Marxian framework. However, the critical point in this theoretical framework is that the wages of workers are generally determined at the subsistence level. In that sense, the wage level

---

[67] $\pi = \frac{s}{c+v} = \frac{s.v}{(c+v).v} = s.c + c.v - \frac{s.c}{(c+v).v} = \frac{s.(c+v)}{v.(c+v)} - \frac{s.c}{v.(c+v)} = \frac{s}{v} - \frac{s}{v}.\frac{c}{c+v} = s'(1-q)$. This derivation is obtained from Sweezy ([1946] 1962: 68).

depends on two conditions: (1) the renewal of labor-power and (2) the preparation for further production cycles. Within the frame of the historical process and the capitalist production relations, the power relations between capital and labor is a critical factor in providing of the formation of conditions for subsistence level. If the worker is strong in the production process relative to the capital, the wages rise above the subsistence level. On the contrary, the capital strives to reduce the wages to the subsistence level. In some cases, there are also conditions that the wages may become lower than the subsistence level. Because the subsistence level is basically determined by the changes in the historical developments and the living standards that the country has, it depends on the relative bargaining power of the capitalists and the working class (Dünhaupt, 2013: 6-7).

The relative power of the working class in detriment to the capital may create positive effects on the wage repressions and the increase in working day in favor of the working class. Additionally, within the framework of the technical progress, the additional value obtained from the efficiency of labor become much easier to obtain for the working class. Thus, surplus-value is transferred from capital to labor. In this case, it is also possible to observe the temporary and adjusting effects of supply and demand on the determination of wages. If there is an increase in the demand for labor, the wage level will possibly be increased, depending on the rules of capital accumulation. However, these phenomena are not permanent.

In the Marxian framework, the increase in the capital accumulation provides the spreading of the critical elements of capital into the economic units on the basis of the degree that there is an increase in the demand for labor. The remaining part of the society becomes the wage-labor. In other words, the great majority of the unproductive workers have to be transformed into a productive ones (Marx, [1976] 1982: 790). Therefore, within the context of the surplus value, the relationship between capital accumulation and bargaining power of labor can be summarized as follows:

> "Taking them as a whole, the general movements of wages are exclusively regulated by the expansion and contraction of the industrial reserve army, and this in turn corresponds to the periodic alternations of the industrial cycle. They are not therefore determined by the variations of the absolute numbers of the working population, but by the varying proportions in which the working class is divided into an active army and a reserve army, by the increase or diminution in the relative amount of the surplus population, by the extent to which it is alternately absorbed and set free".

(Marx, [1976] 1982: 790)

5.2.3 Keynesian Framework

Although the classical and Marxian frameworks deal with the distribution of income distinctively in their theoretical contexts, the Keynesian framework which is developed in case of the arguments of Keynes focuses on the distributional practices by using different analytical tools. Essentially, the assumptions of Keynes constitute on the economic solutions of the contradictions and the issues emerged in the immediate aftermath of the World War I and the possibilities to escape from the "Great Depression". In the academic framework, the main aim of Keynes is to analyze the propositions of the classical theory. Thus, the theoretical integrity that Keynes try to constitute basically depends on the criticism of the rules and the operation of the capital accumulation in the socio-economic system of the classical theory. Therefore, the major research issues of Keynes focus on the fact that how the "General Theory" can be created

and what are the technical ingredients of this theory. Keynes's remarks can be quoted about this case as follows:

> "…the postulates of the classical theory are applicable to a special case only and not to the general case, the situation which it assumes being a limiting point of the possible positions of equilibrium. Moreover, the characteristics of the special case assumed by the classical theory happen not to be those of the economic society in which we actually live, with the result that its teaching is misleading and disastrous if we attempt to apply it to the facts of experience".

(Keynes, 1964: 3)

Different from the specific case of the classical framework, Keynes focuses on the understanding of the general case and therefore himself never focused explicitly on income distribution (Dünhaupt, 2013: 9). However, there are other studies of course (e.g., Kaldor, 1956; Pasinetti, 1962) which of them use the theoretical instruments and the several analytical assumptions of Keynes in order to understand the dynamics of the income distribution.

Keynes, himself, investigates the economic relationship between capital and labor within the theory of income and employment. However, the categories of this theory are mostly determined with the macroeconomic parameters rather than using of the major elements of the income distribution. In this sense, the theory of income distribution, depending on the assumptions of Keynes can be investigated in five basic categories as follows: (1) the effective demand principle; (2) the consumption function; (3) marginal propensity of consumption and the multiplier; (4) the investment function; and (5) the liquidity preference and the interest rate.

First, the effective demand is one of the most basic theoretical principle of Keynes for the determination of aggregate income. Also, it is important in order to understand the distinctive point of the Keynesian framework from the classical theory. Although the examination of the components of the aggregate income depends on quantity theory, Keynes investigates this issue in terms of the income-expenditure pattern. The aggregate demand in quantity theory is equal to the product of money supply/stock and the velocity of money. However, its theoretical establishment basically depends on the arguments of Say Law. In order to provide the equality condition between the aggregate demand and aggregate supply, both of the wages and prices should be determined in free market system. In other words, any rigidity in wages and prices will create an economic instability by affecting the elastic functioning of aggregate demand and aggregate supply. According to Say:

> "It is worth while to remark, that a product is no sooner created, than it, from that instant, affords a market for other products to the full extent of its own value. When the producer has put the finishing hand to his product, he is most anxious to sell it immediately, lest its value should diminish in his hands. Nor is he less anxious to dispose of the money he may get for it; for the value of money is also perishable. But the only way of getting rid of money is in the purchase of some product or other. Thus, the mere circumstance of the creation of one product immediately opens a vent for other products".

(Say, [1821] 1971: 134-135)

In this context, under the wage-price relationship in full of elastic economic activities, the products will automatically find the buyer, depending on the laws of demand and supply of the market to be sold. In the logical sense, it also includes the equality between the total cost of

production and the factor incomes which is implemented in Say Law. In the quantity theory, providing of this equality needs dynamic structure of $M*V$ (which is equal to $P*Y$). The higher the amount of $M*V$, the higher the consumption of products, depending on the increase in money wages. Therefore, the quantity theory assumes that the products are homogenous and therefore includes all components related to the theoretical basis.

Keynes's critique on quantity theory basically depends on those homogeneity assumptions of the quantity theory. Therefore, in the case of the theoretical framework of Keynes, the products should be investigated in the heterogeneous structure by regarding the contradiction between capital and labor. In that sense, Keynes examines the characteristics of the products into two different categorizations as (1) consumption goods and (2) investment goods. The aggregate demand does not only depend on the changes in the prices of consumption goods but also the prices of investment goods. The basic points, in which the distributional dynamics are affected, can be understood by investigating the changes in these prices of both consumption and investment goods. Thus, while the price changes of consumption goods depend on the changes in the real wages, the demand for investment goods depend on the changes in profit rates. The only ambiguous point here is the requirement of the analysis of the capitalist components in real wage function. Indeed, it blurs the examination of distributional practices on the basis of the changes in demand for consumption goods and investment goods.

The equality of aggregate demand and aggregate supply is not applicable in the Say Law if Keynesian arguments on psychological factors of economic agents and the behaviors of society are included into the analysis while the conditions in labor market and the goods market are constant. The most obvious example of this case can be found in the relationship between saving and income. At medium income levels, some part of the aggregate income is reserved as savings and therefore an increase in wage level leads to an increase in the savings (Kazgan, 2009: 226). However, in terms of the production process, an increase in savings following an increase in income level does not lead to the sale of produced goods which creates disequilibrium in the market. On the other hand, another point is the difference of parameters using in the production function and consumption function. The real income and savings have different dynamics than the profit rates. Therefore, the total demand cannot be expected to be such that the sales revenue is always at the level of providing the total cost of production in full employment or the price of supply (Kazgan, 2009: 226).

Keynes assumes that the economic production movements are determined by aggregate demand curve and the aggregate supply curve. However, the difference between the arguments of Keynes and classics depends on the fact that there is no way that the level of production is equal to the full employment level. On the one hand, the aggregate demand curve (D) shows the expected total sales revenue by firms pursuant to the level of employment (N) required for different production levels ($D = f(N)$). On the other hand, the aggregate supply curve shows the sales revenues, including the normal profits and the input costs of production. Different from the aggregate demand curve, the aggregate supply curve is the function of the level of employment (N). It is fixed in the short-run ($Z = \phi(N)$). In other words, the level of employment is determined in the intersection point of (D) and (Z) in the short-run, namely in the intersection of $f(N)$ and $\phi(N)$. This equilibrium point also shows the maximum point of the expected profit rates. The aggregate demand is totally depended on the expenditures of households, firms, and governments. Therefore, it is not being correlated with the parameters determining the sales revenues in aggregate supply. If the aggregate demand is higher than the aggregate supply, (D > Z), there will be an incentive for entrepreneurs to increase the employment level. On the

contrary, if the aggregate demand is lower than the aggregate supply, (D < Z), the employment level will be reduced because of a lack of incentives for new investments.

Keynes includes the demand for consumption goods, D_1, and the investment goods, D_2, into the analysis while rejecting the theoretical context of Say Law. In this analysis, the saving parameter plays a crucial role. Contrary to the assumptions of the classical theory, the consumption level (D_1) does not increase as high as the aggregate demand (D) which stimulates the increase in employment level. As the level of employment and income increase, the difference between D_1 and Z grows. This income portion, thus, is saved as the purchases of nonproducible liquid assets such as money (Davidson, 2007: 58-59). If the propensity to save is placed out of the current income, D_1 expenditures will not be equal to income that the income-earners get at every possible level of income (Davidson, 2007: 59).

While D_1 is determined by the endogenous variables, D_2 is determined by exogenous variables related to all other expenditure parameters (e.g., the investment expenditures, government expenditures, and exports) different from the current aggregate income and the employment level. Therefore, if the propensity to consume does not change, the employment level will be stay constant, unless D_2 is increasing at the same time in order to close the gap between Z and D_1 which may increase over that process (Keynes, 1964: 30). Hence, the economic system will be in equilibrium where the employment level is less than the full employment level, namely at the level where aggregate demand function is equal to the aggregate supply function (Keynes, 1964: 30).

In that sense, Keynes rejects the Say Law based on the differences between D_1 and D_2 and their relationship with Z. In the context of the dynamics of consumption and investment goods, the aggregate demand structure contradicts with the objectives of the aggregate supply. Therefore, the full employment level does not have self-equilibrating features. Although this case does not directly point to the distributional issues, it indirectly affects the development of income theory along with the use of macroeconomic parameters and based on the investigation of the employment structure.

Second, the consumption function of Keynes is also an important theoretical integrity for an understanding of further studies on distributional practices in the Keynesian framework in terms of its theoretical relationship with the real wages. Essentially, Keynes uses the real wage parameter rather than the nominal income parameter in his consumption function. The major reason behind the use of the real wage parameter depends on the fact that this indicator eliminates the effects of inflation on incomes. Additionally, the use of this parameter shows that the consumption is not affected from the "money illusion". As Kazgan (2009: 227) expresses that Keynes *a priori* agrees that the individuals can understand the behind of money veil even without the existence of the money illusion. In this sense, Keynes writes that:

> "Money is only important for what it will procure. Thus a change in the monetary unit …has no consequences. If, by a change in the established standard of value, a man received and owned twice as much money as he did before in payment for all rights and for all efforts, and if he also paid out twice as much money for all acquisitions and for all satisfactions, he would be wholly unaffected".

(Keynes, [1923] 1924: 1)

In addition to the real income parameter measured by adjusting the nominal income with price indices, the other parameters in the analysis of the relationship between consumption and income is regarded as ceteris paribus. Therefore, there will be a high correlation between these two factors. It means that the consumption expenditures will fluctuate, depending on the ups and downs in the real income level. The consumption function is expressed by Keynes as the following equation (1):

$$C_w = x(Y_w) \qquad\qquad (1)$$

Or alternatively, it can be expressed in equation (2) as follows:

$$C = W . x(Y_w) \qquad\qquad (2)$$

This equation is called as the propensity to consume by Keynes (1964: 90) and is determined by the tripartite functional relationship between x, Y_w (a given level of income in terms of wage-units) and C_w (the level of consumption expenditure on a given level of income). Moreover, Keynes (1964: 91-95) classifies the principle objective factors which are hard-hitting on the changes of this function as follows: (1) the changes in wage units; (2) the changes of the difference between net income and income; (3) "windfall changes" in capital – values are not allowed in calculating net income; (4) changes in the rate of time-discounting; (5) changes in fiscal policy; and (6) changes in the expectations of the relationship between the present and the future level of income. Each level of change in these factors will shift the consumption function which will possibly be resulted in the changes in the equilibrium point. However, although Keynes puts forward these factors and their possibility of changes, all of these factors are not basically determined in the short-run due to the external and internal shocks.

The major point of the changing dynamics of these factors essentially depends on two phenomena: (1) the characteristics of the human behavior and (2) the social conditions and the institutions that determine the income distribution and expenditure patterns. These two phenomena are fixed in the short-run. The market players are not focused on the short-run effects of the changes in practical factors which are basically determined the individual patterns and behaviors. Therefore, the constant forms of the subjective and objective factors in the short-run lead Keynes (1964: 96) to argue that the propensity to consume as a function is fairly stable. The major psychological law behind this case depends on the fact that men are motivated through their consumption level to increase as their level of income increases, but not as high as the increase in their income (Keynes, 1964: 96).

This presumption is also explained by Keynes in terms of the analysis of the marginal changes between the consumption expenditures and the income. The marginal propensity to consume, $\partial C_w / \partial Y_w$, shows that a unit increase in real income creates a much lower increase in the consumption expenditures. This case can be analyzed in Keynes's effective demand principle because the investigation of the reasons of why the income increases do not fully reflect in the consumption expenditures basically depends on the understanding of saving propensity of individuals. It means that the steadily reducing proportion of income increases is essentially represented in aggregate demand.

The third component of Keynes's theoretical coherence depends on the multiplier framework. However, Keynes did not produce this concept himself. It was derived from the research of Kahn (1931) which was analyzed by different parameters. Keynes uses the "multiplier" formula in much different sense in his theory. According to Kahn (1931), the increase in investment

expenditures has positive effects on the level of employment. Additionally, a unit increase in investment expenditures will create more than a unit increase in the level of employment. The multiplier formulation of Kahn is derived from this analytical basis[68]. As Kahn writes that:

> "The motive force that increases employment is an increase in investment or a reduction in savings. As a concomitant of this increase in employment occur other changes in savings and investment which, partially or wholly, neutralise the effect on the difference between savings and investment of the change that is the cause of the increased employment".

(Kahn, 1931: 182)

However, Keynes follows a much different way in contrast to Kahn in using the multiplier in his theory by focusing on the investigation of the effects of investment increases on income. Without looking at the Keynesian framework on this issue, the impact of the multiplier on the relationship between investment and income could not be understood from two perspectives (Kazgan, 2009: 228; Savaş, 2007b: 762). First, investment increase financed through expansion of money supply have a positive impact on the income increase. If the country has idle resources, this positive effect will be higher than the income increase compared to the investment increase. Second, this income increase, however, is limited due to the leakages in expenditure flows.

According to Keynes, the economic growth essentially depends on the positive value of marginal propensity to consume. However, the higher this positive value will result in an increase in the sensitivity of the fluctuations of investment level and employment level. Thus, the marginal propensity to consume is placed between these two levels, though much closer to unity than to zero (Keynes, 1964: 118).

If the marginal propensity to consume is not equal to zero, the following case is possible to occur: *the increases in the level of investment also lead to an increase in the incomes of the investment goods industries which results in an increase in demand for consumption goods and therefore the consumption expenditure. Due to an increase in consumption expenditures, the production level in consumption goods industries increase. Hence, the prices of production inputs and their incomes increase.* The causality between investment and income is constituted on this framework.

Keynes deals with the two components (i.e., C_w and I_w) of total output and thereby the total income, depending on the same method as in the mentioned-above framework. The sum of the value of these two components denotes the total value of output. Additionally, the formulation of marginal propensity to consume specifies that the ΔY_w should be higher than ΔC_w. $\Delta Y_w = \Delta C_w + \Delta I_w$ denotes how much of the amount of increases in the level of consumption and the level of investment is equal to the amount of increases in ΔY_w. On the one hand, ΔC_w denotes the increments of consumption. On the other hand, ΔI_w denotes the increments of investment. Thus, according to Keynes (1964: 115), it is possible to depict the increase in income level, depending on the equation (3) as follows:

$$\Delta Y_w = k\Delta I_w \tag{3}$$

---

[68] For studies on pre-Keynesian enhancing effects of investment and income please see Cassel (1903), Flux (1904), Taussig (1911), Carver (1924), Ohlin, Robertson and Hawtrey (1937), Pigou (1937), and Wicksell [1954] (1970).

k is the investment multiplier and ΔI_w denotes the increase in investment level in terms of wage-units. In this case, the value of $1 - (1/k)$ is equal to the value of marginal propensity to consume. It shows that how much the income increase is higher than the investment increase. The investment multiplier depends on the marginal propensity to save, namely to the changes in $[1 - (\Delta C_w/\Delta Y_w)]$. It means that there is a negative relationship between the marginal propensity to save and income increases due to the leakage in consumption flows. The ongoing increases in investment expenditure which is independent from the leakage in aggregate expenditure flows are not related to the changes in income level. This inverse relationship can be interpreted as follows: The larger the marginal propensity to save, the smaller the income increase, or vice versa. So that, the investment multiplier (k) can be formularized as follows:

$$k = \frac{1}{1 - (C_w/Y_w)} \tag{4}$$

In this context, the general framework for investment function depends on the fact that when there is incremental increase in the level of aggregate investment, the level of income will increase by an amount equal to *k* times the incremental increase in the level of investment (Keynes, 1964: 115).

However, for Keynes, there is an inefficient point where the marginal propensity to consume and the multiplier coincide: *the full-employment level*. The multiplier effect is active in the case of unemployment where part of labor and capital are idle in use. Additionally, the inflationary price increases do not depend on the changes in the multiplier. The point where the multiplier is ineffective also shows the optimal level of the actual inflation rate and full-employment level. In other words, at that point, the full employment level is reached and therefore any increase in the level of investment will lead to rise in money-prices without limit, irrespective of the rate of marginal propensity to consume (Keynes, 1964: 118-119). This is the point where the state of true inflation is obtained which will not increase the real income in the proceeding economic activities (Keynes, 1964: 119).

As a fourth foundation of the theory of Keynes, the investment function should be investigated in addition to the consumption function. As stated in the analysis of the Keynes's consumption function, the consumption expenditure is a function of income[69]. Therefore, the increase in consumption expenditure depends on the increase in the income level. In other words, the causality among each other is from income to the consumption expenditure. However, the factor that related to the increase in the level of income is ambiguous. According to Keynes, this factor is the level of investment and thus determines all economic activities. Hence, Keynes primarily dwells on making the investment function first and then explaining the parameters of this function.

The determination of these parameters needs the investigation of the behaviors of entrepreneurs. Additionally, the investigation of the reasons behind the investment incentives of entrepreneurs is the major problem for an understanding of the investment function. According to Kazgan (2009: 229), the relationship between three factors provides us to understand this problem: (1) the substitution cost of new investment; (2) the expected revenue from the new investment; and (3) market interest rate. First, the substitution cost of the new investment indicates the price that the investor will shift to produce for the new investment. Second, the expected revenue from the new investment denotes the difference provided from the sales with current prices. The

---

[69] Please see Equation (1) of this section.

relationship between the expected revenue of the new investment and the cost of making this new investment defines the concept of the marginal efficiency of the capital. In that sense, the marginal efficiency of capital[70] is being equal to the rate of discount (Keynes, 1964: 135). Therefore, it is qualified in the case of the expectation of yield and the current supply price of the capital-asset (Keynes, 1964: 136). If the rate of discount is higher than the market rate, the capitalist or the entrepreneur can make an investment or vice versa. The threshold for making new investment is the point where the discount rate and the market rate is equal to each other. In this formulation, the expectations are regarded as given. Therefore, the discount rate will be reduced along with the increases in the level of investment due to decreasing tendency of the marginal efficiency of new investments. Thus, the discount rate will be equal to the market interest rate and thereby the incentive for new investments will be disappeared.

However, the existence of expectations should be included in making new investments as a major factor in addition to the mentioned-above three factors. The marginal efficiency of capital curve is a downward-sloping function of the level of investment while the expectations are given. However, adding of expectations into this function as a new parameter is an unexamined point in the investigation of investment incentives. Therefore, the dependency relations of the marginal efficiency of a given stock of capital related to the changes in expectation should be investigated in detail because ups and downs in economic system are mostly affected by the changes in the marginal efficiency of capital relatively to the interest rate (Keynes, 1964: 143-144). This case also shows that the expectations have a major influence on the dynamics of investments and thus on the economic growth since these two major parameters affect the marginal efficiency of capital in the economic system.

However, the expectations has another critical importance in the theoretical framework of Keynes because they subject to the changes under economic and social phenomena. In the short-run, the expectations are in a permanent cycle of transformation. To be subject to a dialectical process is to be exposed to a continuous transformation of intellectual and organizational patterns. Therefore, under the expectations patterns, the level of employment is subjected to the changes as well as the changes in investment and income levels. Thus, on average, the fluctuations of expectations, irrespective from the time effects, will only create an effect on the level of employment over time (Keynes, 1964: 47).

Additionally, because expectations have a dynamic structure, they involve both uncertainty and the risk factor for the investor and lender. It includes uncertainty because in most cases it turns out that if the capitalist production system is left unchecked, the investments can be subject to the speculation emerging in the capital markets. It may also negatively affect the lender's condition as much as the capitalists and workers. Thus, the investment revenues and the incomes of individuals are subjected to the speculative risks. These negative implication and the uncertainty can be considered as crucial factors in forming the expectations.

Furthermore, the investments and thereby the marginal efficiency of capital can be affected by the risk factor in two conditions. The first one is the risk of the realization problem of the expected revenue from making new investments which result in a decrease in the marginal efficiency of capital. The second one is related to the problems for not being paid off the debt to lenders which result in an increase in interest rates (Kazgan, 2009: 230). All in all, entrepreneurs should carefully examine the uncertainty and risk factors in order to make new investments. However, the investor should not also leave all of these problems unsettled as idle

---

[70] According to Keynes (1964: 140), his definition on "marginal efficiency of capital" and Fisher's (1930) definition on "the rate of return over cost" have similar theoretical structure.

in the long-run because "…this *long run* is a misleading guide to current affairs. *In the long run we are all dead*" (Keynes, [1923] 1924: 80).

The final argument that constitutes a critical part of the unity of Keynes's "General Theory" is the liquidity preference framework. In this framework, the major aim of Keynes is to understand the ways that how the amount of money that individuals will hold in their hands is determined at the time of uncertainty. While the uncertainty issue within the frame of investment decisions and the marginal efficiency of capital in investment function is one of the major factors in the Keynesian paradigm, Keynes also focuses on the analyses of human behaviors about money in the liquidity preference framework. In this sense, Keynes primarily deals with the functions of money. Therefore, Keynes scrutinizes the role of money as a store of value rather than its role as the medium of exchange. For Keynes, the major point is to understand the forms of money that individual will choose to store their values. These forms can be classified into three cases as follows: (1) cash; (2) stocks; and (3) bonds. Additionally, the other critical question is related in which way an individual will get returns from money as a store of value.

The changes in the forms of wealth depend on multi-dimensional psychological laws based on two conditions: (1) the tranquillity that the individual will obtain as a result of holding money in hand and (2) the return from the other forms of wealth. The changes in the forms of wealth basically depend on the expected returns. In other words, the individual chooses to invest in many risk-free economic instruments. Thus, the traditional way to escape from risks and other issues aroused from the economic turbulences is to hold cash-money. Holding cash money in hand as idle ensures that uncertainties and risks are avoided from both current and future effects. The interest rate is the price of changing the wealth of individual from liquid/cash form of money which is held as idle. Therefore, the interest rate is determined as a result of the store of value function of money and therefore this perspective differs Keynes from the theoretical formulation of classical theory, which is determined under the exchange transactions of interest. In the classical framework, the major function of money is to provide effective exchanges among economic agents, which is also the main reason behind the changes in the money demand.

However, according to Keynes, the demand for money includes multi-dimensional parameters including social and economic factors, unlike the arguments of classical paradigm which state that the demand for money provides of making daily transactions among individuals. Some of the major motives in the determination of these parameters for which money is demanded by the individuals are as follows: (a) transaction motive; (b) precautionary motive; and (c) speculative motive. The major aim of money demand by individuals is to satisfy the need of cash requirements. Depending on the volume of economic activities, the demand for money may increase or decrease. For instance, following the increasing level of production along with an increasing capital accumulation, the cash flows may raise for selling of the consumption goods which will lead to an increase in the demand for money.

The precautionary motive denotes that some portion of aggregate income will be held in cash against the risks and uncertainties to be encountered in the future. These two motives depend on the internal structure and the institutional developments of the economic process. In other words, the changing factors within the economic process can be regarded as the major determinants of both transaction and precautionary motives. The value form of wealth preserves its liquidity feature within the frame of these two motives. Therefore, both of the transaction and precautionary motives are not elastic to the changes in the interest rate.

However, the sensitivity of the money demand within the speculative motive, in which the interest rate has an elastic form, includes different dynamics compared to the transaction and precautionary motives. The demand for money, based on the speculative motive, has a distinguishing characteristic that responds to the changes in money markets. For example, the relationship between the changes in the prices of stocks and bonds and the demand for money is determined by the speculative motive. In this case, the changes in the interest rate are the major parameter in the determination of the relationship between these two factors. Price declines in bonds and stocks are compensated by increases in the interest rate and thereby reduces the demand for money, or vice versa. All in all, these three basic motives describe the dimensions of the liquidity-preference framework (Keynes, 1964: 170). For transaction and precautionary motives, the function of liquidity-preference can be depicted in equation (5) as follows:

$$M_a = L_a(Y) \tag{5}$$

In this equation, M_a shows the demand for money based on transaction and precautionary motives, and Y shows the level of income which affects the money demand. In this case, depending on the theoretical assumptions, the interest rate does not include into this equation due to its inelastic form. However, the liquidity preference function based on these two types of motives may lose their validities due to the changes in the elasticity of interest rates in the conditions of high rates of interest. Additionally, the inelastic form of interest rate may transform into an elastic form.

On the other hand, the interest rate exhibits an elastic form in money demand function, based on speculative motive. In other words, incremental changes in the interest rate intensively affect the speculative motives of economic agents. In this case, money is evolved into different wealth forms from its liquid form, depending on the conditions of uncertainty and risks. Therefore, the liquidity-preference function varies on the basis of the speculative motive as in the following equation (6):

$$M_b = L_b(r) \tag{6}$$

M_b shows the demand for money based on speculative motives and r shows the interest rate which provides to understand the major reason behind the changes in the money demand. However, in this equation, the interest rate also plays an important role in the determination of the level of money demand. According to Keynes, when interest falls to a certain level, it becomes infinitely elastic. It means that the interest rate cannot fall under to a certain level. Thus, at that level, the individuals will lean to use more liquid assets such as cash-money.

The liquidity preference framework created by these three motives, as a whole, constitute the aggregate money demand. Although these three motives have different components, the aggregate money demand is related to both interest rate and the level of income which are depicted in the following equation (7):

$$M_d = M_a + M_b = L_a(Y) + L_b(r) = L(i, Y) \tag{7}$$

Or alternatively, it can be shown in equation (8) as follows:

$$M_d = L(i, Y) \tag{8}$$

The equation (8) shows that the demand for money is negatively related to the interest rate but it is positively related to the level of income. For instance, the higher the interest rate, the higher the amount of cost of holding cash-money. Hence, the reduction in the amount of money demand is just equal to the amount of difference between these two parameters. However, the higher the amount of income level, the higher the amount of demand for money holding in cash.

In the liquidity preference framework, the equilibrium point of interest rate is determined where the money demand and money supply is equal to each other. The money supply is essentially under the control of monetary authorities and the banking sector. On the other hand, the money demand depends on the behavioral pattern of individuals, firms, and the government. It means that the money plays an important role in the social structure and the economic activities in the traditional theory of Keynesian paradigm. On the contrary, money has a crucial role in the socio-economic paradigm which influences many of the social and economic categories such as income, employment, production, accumulation of capital, and income distribution, because it can affect the interest rate and the patterns of behavior of economic actors.

Therefore, Keynesian framework is different from the theoretical arguments of classical paradigm due to the formation of the value theory and the theory of income distribution of Keynes within the frame of money theory based on the liquidity preference framework. According to Keynes, if there is a change in the quantity of money, the major effect of this change will be created on the quantity of effective demand by way of its effect on interest rate (Keynes, 1964: 298).

In this case, the low rate of interest will increase the demand for money which will then affect the aggregate money supply and therefore it will change the production structure, employment condition, and income level. For instance, if the economy is not in full-employment level, an increase in the money supply will create a downward bias in the level of unemployment which is proportionally equal to the increase in the level of employment which will be resulted in an increase in the price level and wage level. Hence, depending on these arguments of Keynes, the Fisher effect and the classical money theory are rejected.

In the Keynesian framework, the changes in price level and the interest rate are not independent from the effects of ups and downs emerging in the money supply. The uncertainty and risks are the other factors related to the changes in money demand and money supply. Therefore, in each phase of the economic process, it is possible to experience the effect of money. If and only if the money can be neutral in just two conditions and thus does not affect the real economic parameters (Savaş, 2007b: 769): (1) the full-employment level and (2) the threshold at which interest rate is ineffective.

Furthermore, in the Keynesian theory, the level of investment has a substantial impact on the rate of interest as a real measure for an economic system. The level of investment depends on two factors: (1) the marginal efficiency of capital and (2) the interest rate. If the amount of capital goods increases, the marginal efficiency of capital and its returns will also increase at the same amount. The price of the capital goods will increase as their yields decrease which will result in a general increase in the price level. If and only if the level of investment is determined at the point where the marginal efficiency of capital is equal to the interest rate.

All in all, in the money theory of Keynes, many different types of parameters which are not regarded as important in the classical framework may have a crucial role in the aggregate economic process. Although Keynes did not create a full-fledged distribution theory so as to

understand the direct relationship between capital and labor, depending on the class-based components, it is possible to argue that the macroeconomic parameters such as wages, prices, investment, production, and the level of employment, in which Keynes used them in his theoretical background, may have an ample effect in understanding of the distributional issues.

This theoretical background of Keynes has developed the arguments of the economic researches on the analysis of the income distribution. As mentioned-above, although Keynes did not focus directly on the subject of income distribution, different economic sub-paradigms within the Keynesian framework have stimulated new developments about this topic by using the basic functions and parameters of Keynes's theory. Particularly, the studies of the Post-Keynesian framework about the income distribution have a crucial importance in order to understand the dynamics of the contradictions between capital and labor, depending on the Keynesian theoretical background[71]. For instance, the study of Kaldor (1956) should be investigated as one of the most crucial theoretical discussions on the analysis of the distributional issues.

In general, the Post-Keynesian school has profoundly comprehended the effects of the distribution of income between capital and labor upon the economic relations and social transformations. The changes in the distribution of income determine the structure of economic activities through several factors depending both the production system and employment patterns. Therefore, the assumptions on income distribution need to be analyzed in detail. This analysis will also provide the understanding of the dynamics behind the economic growth and development. For instance, both Keynes and the other contributors on the Keynesian framework such as Kalecki (1938, [1939] 2003), Kaldor (1956), Robinson (1956), Pasinetti (1962), Kregel (1973), and Minsky (1982) explicitly argue that the level of income and the profit rates can be easily determined and be kept constant at the desired value by controlling the level of investment. Although Keynes (1964) and Kalecki (1954) provided a theoretical background to these studies, they were rigorously modeled by the studies of Kaldor (1956) and Robinson (1956). In the next two sub-sections, the analyses on the distribution of income will be investigated based on two important Post-Keynesian researches done by Kaldor (1956) and Pasinetti (1962).

5.2.3.1 The Kaldorian Model

The essence of the economic theory of Kaldor (1956) depends on the fact that the total output, namely the income (Y), has two components. The first component is the level of wages (W) and the second component is the profits (P). In addition to these two basic components, there are also other categories for wages and profits which are not only included the manual labor but also salaries or are not only comprised the profits of entrepreneurs but also the income of property owners generally (Kaldor, 1956: 95).

According to Kaldor (1956), the difference between these two types of income category basically depends on the rate of marginal propensity to consume (or save). Thus, Kaldor (1956) assumes that the rate of marginal propensity to save of wage-earners is much lower than the capitalists. In this case, the total income and total savings, can be written in equation (1) and equation (2), respectively, as follows:

---

[71] For a detailed investigations please see the works of the following theorists: Victoria Chick, Paul Davidson, Alfred Eichener, Geoff Harcourt, Richard Khan, Nicholas Kaldor, Michal Kalecki, Jan Kregel, Hyman Minsky, Basil Moore, Joan Robinson, George Shackle, Piero Sraffa and Sidney Weintraub.

$$Y = W + P \tag{1}$$

and

$$S = S_w + S_p \tag{2}$$

In equation (2), S_w denotes the wager-earners' savings out of wages and S_P denotes the capitalists' savings out of profits. Depending on these two equations, Yeldan (2009: 175) states that "…investment expenditures, *I*, in this economy had already been decided *ex ante* by the profit-hungry entrepreneurial class". Therefore, the decision for making expenditures on new investments depend on the equality emerging between investment (I) and saving (S) as expressed in equation (3):

$$I = S \tag{3}$$

This equality condition between the investment and the total saving means that the investment expenditure is financed by the total savings. In other words, the amount of investment expenditure is determined by the amount of total savings. While the investment is taken as given, S_w and S_P depends on different parameters which are not exogenous as in equation (4) and equation (5), respectively:

$$S_W = s_w * W \tag{4}$$
and

$$S_P = s_p * P \tag{5}$$

Because the investment expenditure is assumed as equal to the total savings, I = S, the total saving function can be alternatively denoted as follows in equation (6):

$$I = s_w * W + s_p * P \tag{6}$$

In the classical framework, the total income of workers is totally consumed in a given period. The financial source of the investment expenditure is basically the profits of the capitalists. Therefore, the level of investment is always controlled by the capitalists[72]. Because the total income is essentially consumed by the workers, the rate of marginal propensity to save, s_w, is equal to zero. This also means that whatever the circumstances are, despite the fact that the workers earn wages, the capitalist class obtains all surplus value produced in each unit of production system essentially due to the power of capitalists on the control of investments (Savaş, 2007b: 935). Similar to this classical framework, although the marginal propensity to save is not zero for workers in the Kaldorian model, it is negligible. Kaldor argues that the rate of profit in the capitalist system can be determined by the natural growth rate and the capitalists' propensity to save, under the assumption that workers' propensity to save is negligible (Cin, 2012: 106).

By using these previous equations which are related to the total income, the further investigations can be available for further equations. In that sense, because total income is equal to the sum of total wages and profits, Y = W + P, the total wages can be written alternatively as

---

[72] In that sense, this theoretical proposition can be analyzed in a class-based framework but together with some caution.

W = Y – P. Thus, the investment equation will become as in the following equations (7), (8) and (9):

$$I = s_p P + s_w (Y - P) \tag{7}$$

$$I = s_p P + s_w Y - s_w P \tag{8}$$

$$I = P(s_p - s_w) + s_w Y \tag{9}$$

By using the investment equation, the profit share ratio can be derived as in the equation (10):

$$\frac{I}{Y} = (s_p - s_w) * \frac{P}{Y} + s_w \tag{10}$$

And thus,

$$\frac{P}{Y} = \left[\frac{1}{s_p - s_w} \right] * \frac{I}{Y} - \left[\frac{s_w}{s_p - s_w} \right] \tag{11}$$

P/Y shows the share of profits in the national income. In other words, the share of profits in the national income totally depends on the investment/output ratio when the propensity to save is taken as given. According to Kaldor (1956: 95), in the full-employment conditions, the equation (11) will depend on the fact that a rise in investment level, and thereby in total demand, will increase the level of prices and profit margins, and therefore decrease the level of real consumption, whilst a reduction in the level of investment, and therefore in total demand, creates a reduction in the overall prices (relatively to the wage level) and thereby leads to the formation of a compensating rise in the level of real consumption. This causality between investment and consumption in parallel to the changes in total demand and the profits also means that the aggregate demand determines the level of prices in relation to the level of money wages (Kaldor, 1956: 95).

Furthermore, by using the mathematical formulation of Yeldan (2009: 176), the profit rate (P/K) can be measured in equation (12) as follows:

$$\frac{P}{K} = \left[\frac{1}{s_p - s_w} \right] * \frac{I}{K} - \left[\frac{s_w}{s_p - s_w} \right] * \frac{Y}{K} \tag{12}$$

The results of this equation are theoretically depended on the hypothesis of Keynes. In other words, the ratio of investment to the total output does not react to the changes in s_w and s_p. The functioning of the Kaldorian model, thus, depends on two conditions: (1) the requirement of the difference for the ratios between s_w and s_p, and (2) the higher rate of s_p than the rate of s_w. These two conditions can be depicted in the following equations, (13) and (14), respectively:

$$s_w \neq s_p \tag{13}$$

$$s_p > s_w \tag{14}$$

The last condition which is depicted in equation (14) is also the basic requirement of well-functioning of the Kaldorian model and of its stability in the long-run. In the case of $s_p < s_w$, any reduction in the price level will make the demand to be much lower and hence will create

a further reduction in the price level, or vice versa. The level of stability of Kaldorian system depends on the difference between s_w and s_p. For instance, the model is called the ratio of $[1 / (s_p - s_w)]$ as the "coefficient of sensitivity of income distribution". The reason of this is a higher rate of dependence between the change in profit rate and the change in investment/output ratio. If the difference between s_w and s_p is being low, the sensitivity coefficient of income distribution becomes larger. Therefore, the incremental changes in investment/output ratio will lead to larger changes in P/Y and thus the income distribution; or vice versa. If it is assumed that the $s_w = 0$, then the profit will be measured in equation (15) as follows:

$$P = \left(\frac{1}{s_p}\right) * I \tag{15}$$

In other words, the profit rate depends on two determinants: (1) the total investment and (2) the capitalist consumption. According to Kaldor (1956: 96), it reminds of Keynes's parable about the widow's cruse logic. In this logic, related to the behavior of entrepreneurs, Keynes states that:

> "...however much of their profits entrepreneurs spend on consumption, the increment of wealth belonging to entrepreneurs remains the same as before. Thus profits, as a source of capital increment for entrepreneurs, are a widow's cruse which remains undepleted however much of them may be devoted to riotous living".

(Keynes, [1930] 2011: 139)

In addition, the following notion of Kalecki expressed in the context of his theory of profit is depicted the theoretical framework of the Kaldorian model by stating that "capitalists earn what they spend, and workers spend what they earn" (Kaldor, 1956: 96).

However, this special case of the Kaldorian model, which depends on the condition of $s_w = 0$, is the opposite case of the classical framework on income distribution analysis. In this case, the wages are residuals but the profits are not (Kaldor, 1956: 96). The profits are essentially affected by the changes in the propensity to invest and the capitalists' propensity to consume (Kaldor, 1956: 96).

Yeldan (2009: 177) also depicts the Kaldorian formulation in the case of $s_w = 0$ by pointing to the relationship between the profit rate and the rate of capital accumulation as formulated in equation (16):

$$\frac{P}{K} = \left(\frac{1}{s_p}\right) * \frac{I}{K} \tag{16}$$

According to Yeldan, $(1/s_p)$ has a similar role as in the "expenditure multiplier" theorized in the "General Theory" of Keynes. The investment expenditure of the capitalist raises the profit rate with the multiplier effect. Therefore, the Kaldorian assumptions are one of the most crucial theoretical frameworks about the income distribution derived from the traditional measures of the Keynesian assumptions.

5.2.3.2 The Extension to Kaldorian Framework: The Pasinettian Model

Pasinetti (1962) is the one who critically analyzed the model of Kaldor (1956). This critical approach is actually aimed at improving the Kaldorian framework. The major argument of this approach is to show that the savings of workers cannot be negligible. In other words, the theoretical structure of Kaldorian framework should be investigated in the conditions in which the savings of workers are positive. Or alternatively, if $s_p = 1$ and $s_w = 0$, the equation transforms into the following case (Pasinetti, 1962: 269):

$$\frac{P}{Y} = \frac{I}{Y} \tag{1}$$

This equation basically focuses on the investigation of the relationship between the rate of profit to the national income and the rate of investment to the national income. Therefore, Pasinetti (1962) makes some corrections and reformulation in the Kaldorian model rather than to change its theoretical underpinnings by using traditional Keynesian assumptions. In this case, Pasinetti (1962: 268-270) does not change major equations formulated in the Kaldorian model but adds one more identity to these three equations, (2), (3) and (4), as in the following case:

$$Y = W + P \tag{2}$$

$$S = S_w + S_p \tag{3}$$

$$I = S$$

$$P \equiv P_c + P_w \tag{4}$$

P_c denotes the profits accruing to the capitalists and P_w denotes the profits accruing to the workers. Indeed, this identity is the sign that the assumptions of $s_w = 0$ are abandoned. It means that if the savings of wage-earners are positive, the Kaldorian framework will not be theoretically useful anymore. Or alternatively, the changes in the national income based on the changes in the wages and the profits will be evaluated in much different context in the Pasinettian model. In the case of $s_w > 0$, it denotes that the savings manner of workers is positive and thus if they make investments thanks to these savings, they can earn both wages and profits. Hence, the case for $s_p = 1$ is abandoned in the Pasinettian theoretical framework and also the equation, which shows that part of the profit is spent on consumption, will lose its accuracy.

This is the major point that Pasinetti (1962) basically focus on so as to develop the Kaldorian model in the case of positive saving rates of workers. The distributional patterns between the wages and profits do not change in the long-run even if the $s_w > 0$ or $s_p < 1$. It is possible to reinforce this argument by adding the $P \equiv P_c + P_w$ identity into $I = S$ equation. Saving functions for workers and capitalists will become as in equation (5) and equation (6):

$$S_w = s_w * (W + P_w) \tag{5}$$

and

$$S_p = s_p * P_c \tag{6}$$

In addition, the equilibrium condition for I = S equation will become as in equation (7):

$$I = s_w(W + P_w) + s_p * P_c = (s_w * Y) + (s_p - s_w) * P_c \qquad (7)$$

By dividing this new equilibrium condition by Y and K, respectively, the following equations, namely (8) and (9), is obtained:

$$\frac{P_c}{Y} = \left(\frac{1}{s_p - s_w}\right) * \left(\frac{I}{Y}\right) - \left(\frac{s_w}{s_p - s_w}\right) \qquad (8)$$

and

$$\frac{P_c}{K} = \left(\frac{1}{s_p - s_w}\right) * \frac{I}{K} - \left(\frac{s_w}{s_p - s_w}\right) * \frac{Y}{K} \qquad (9)$$

which are similar to the Kaldorian framework for the right-hand sides of both equations. On the other hand, the left-hand sides of these equations denote the profit rates accruing to the capitalist class. Therefore, the right-hand side measurements are not the indicator for the total profits. In order to understand the dynamics of income distribution as a whole, the share of profits obtained by workers must be included into total income (P_w/Y) to both sides of equation (9) and can be expressed in the next equations, namely (10) and (11), respectively:

$$\frac{P}{Y} = \frac{P_c}{Y} + \frac{P_w}{Y} \qquad (10)$$

and

$$\frac{P}{K} = \frac{P_c}{K} + \frac{P_w}{K} \qquad (11)$$

In the Kaldorian model, two more components should be included into the equation (11) in order to understand their effects on the dynamic structure of this equation. These components can be listed as follows: (1) K_w, namely "…the amount of capital that the workers own directly – through loans to the capitalists…" (Pasinetti, 1962: 271) and (2) r, namely "…the rate of interest on these loans…" (Pasinetti, 1962: 271). Thus, the new equation (12) can be denoted as follows:

$$\frac{P}{K} = \left(\frac{1}{s_p - s_w}\right) * \left(\frac{I}{K}\right) - \left(\frac{s_w}{s_p - s_w}\right) * \left(\frac{Y}{K}\right) + \left(\frac{r * K_w}{K}\right) \qquad (12)$$

In the equilibrium point, the profits obtained by workers as a result of their investments thanks to their savings is equal to the rate of interest obtained from the ownership of capital, namely the K_w (Yeldan, 2009: 179). Therefore, the new identity can be rewritten as $P_w \equiv r * K_w$.

If the savings are the only way to obtain revenues from the capital, the ratio of K_w/K can be alternatively expressed as follows in equation (13) and equation (14), respectively:

$$\frac{K_w}{K} = \frac{S_w}{S} \qquad (13)$$

and thus

$$\frac{S_w}{S} = \left(s_w * \frac{(Y - P_c)}{I} \right) \tag{14}$$

In addition, the following equation (15) can be derived as follows:

$$P_K = \left(\frac{I - s_w * Y}{s_p - s_w} \right) \tag{15}$$

in which $I = (s_w * Y) + (s_p - s_w) * P_K$.

Therefore, the equation (12) can be rewritten as follows in equation (16):

$$\frac{K_w}{K} = \frac{S_w}{S} = \left(s_w * \frac{(Y - P_K)}{I} \right) = \left(\frac{s_w * s_p}{s_p - s_w} \right) * \frac{Y}{I} - \left(\frac{s_w}{s_p - s_w} \right) \tag{16}$$

If the last equation is included into the (P/K) equation, the following equation (17) is obtained:

$$\frac{P}{K} = \left(\frac{1}{s_p - s_w} \right) * \frac{I}{K} - \left(\frac{s_w}{s_p - s_w} \right) * \frac{Y}{K} + r * \left[\left(\frac{s_w * s_p}{s_p - s_w} \right) * \frac{Y}{I} - \left(\frac{s_w}{s_p - s_w} \right) \right] \tag{17}$$

Also the (P/Y) equation (10) comes out as in the equation (18) as follows:

$$\frac{P}{Y} = \left(\frac{1}{s_p - s_w} \right) * \frac{I}{Y} - \left(\frac{s_w}{s_p - s_w} \right) + r * \left[\left(\frac{s_w * s_p}{s_p - s_w} \right) * \frac{K}{I} - \left(\frac{s_w}{s_p - s_w} \right) * \frac{K}{Y} \right] \tag{18}$$

According to Pasinetti (1962: 271), the necessary theoretical components are obtained to understand the dynamics of income distribution and to measure the profit rates by using the latter two equations, (17) and (18), in the Post-Keynesian framework. These two general equations, which are the re-formulated equations of (10) and (12), is the re-arrangement of the theory of income distribution and the rate of profit presented in Section 5.2.3.1. Thus, the equation (12) in Section 5.2.3.1 is replaced by equation (17) in Section 5.2.3.2 to measure the rate of profit and the equation (11) in Section 5.2.3.1 is replaced by two distinct equations, namely (8) and (18), in Section 5.2.3.2 to measure the distribution of income between workers and capitalists and the distribution of income between wages and profits, respectively (Pasinetti, 1962: 271). In that sense, according to Pasinetti (1962: 271), in order to understand the dynamics of the share and rate of profits, one needs to analyze first the theory of interest rate.

Thus, in the long-run equilibrium model, the hypothesis is constructed on the assumption that the rate of interest is equal to the rate of profit (Pasinetti, 1962: 271-272). Depending to this hypothesis, if (P/K) is substituted with r, we obtain equation (19):

$$\frac{P}{K} * \left[1 - \left(\frac{s_w * s_p}{s_p - s_w} \right) * \frac{Y}{I} + \left(\frac{s_w}{s_p - s_w} \right) \right] = \left(\frac{1}{s_p - s_w} \right) * \frac{I}{K} - \left(\frac{s_w}{s_p - s_w} \right) * \frac{Y}{K} \tag{19}$$

If $(s_p - s_w)$ is cancelled out from both sides of the equation (19), we get equation (20) as follows:

$$\left(\frac{P}{K}\right) * s_p * \frac{(I - s_w * Y)}{I} = \frac{(I - s_w * Y)}{K} \tag{20}$$

By making some proper re-arrangements in this equation (20), we obtain two basic equations of Pasinetti's theorem which are depicting in equation (21) and equation (22):

$$\frac{P}{K} = \left(\frac{1}{s_K}\right) * \frac{I}{K} \tag{21}$$

and

$$\frac{P}{Y} = \left(\frac{1}{s_K}\right) * \frac{I}{Y} \tag{22}$$

These two theoretical expressions show that the equations for the rate of profit (P/K) and the share of profit (P/Y) in Pasinetti's theoretical structure have the same logical framework as in the Kaldorian framework. Pasinetti (1962) shows that the distributional relationship between wages and profits does not change in the long-run even if $s_w > 0$. By validating the theoretical assumptions of Kaldor, Pasinetti (1962) argues that the rate of wages to the aggregate income depends on two parameters: (1) the share of investments in total production; and (2) the marginal propensity to consume. The major dynamic of distribution between the wages of workers and the profits of the capitalists depends on the changes in the marginal propensity of savings. Any increment in this saving propensity will lead to an increase in the wages of workers acquiring from the aggregate income. All in all, depending to these hypotheses, the basic principle on income distribution between labor and capital depends on the fact that wages are distributed among individuals equal to the amount of labor they contribute and profits are distribution equal to the amount of capital they possess (Pasinetti, 1962: 272).

5.2.4 Neoclassical Framework

The major difference between the neoclassical paradigm and the other mentioned-above schools of thought essentially depends on the investigation on the value theory. According to neoclassical arguments the major importance should be basically focused on the examination of the use-value in the determination of the income distribution among economic agents within the frame of both theoretical and epistemological structure.

The neoclassical paradigm finds out the essence of the value in the law of utility. It means that the neoclassical paradigm constructs its foundation of the value theory on the "diminishing marginal utility" principle. However, the theoretical background of the neoclassical economics is backed to the marginalist revolution and thus the theoretical ingredients of the value theory of the neoclassical paradigm may be found in the arguments of the 18th century. Therefore, the investigation of marginalism will provide much deeper understanding about the theoretical foundations of the neoclassical framework on the theory of value.

Beginning from the end of the 19th century, marginalism has had the opportunity to create intellectual integrity in many different countries and was developed mainly within the studies of three marginalist theorists (although they had different theoretical backgrounds): (1) Jevons ([1957] 1965); (2) Menger ([1976] 2007); and (3) Walras ([1954] 2010). The common point in

all these theorists depends on the theoretical and epistemological break from the labor-value theory of the classical framework.

Individuals reciprocally engage in a continuous exchange process for goods and services with each other by buying and selling different kinds of products. They strive to get maximum utility from the use-values of the products during this exchange process. Therefore, the major component of the exchange process of goods and services is to get a marginal benefit from the production of one more unit of produced goods. The cost of production which is the main component of the exchange-value in labor value theory is put on the second plan in the neoclassical paradigms within the frame of subjective theory of value. The foundation on which the subjective theory of value is based on depends on the fact that the mathematical methods play a key role in explaining the source of value. The marginalist assumptions on value-theory are essentially constructed on the subjective foundations and thus the principle of marginal utility is determined in this subjective framework. According to Jevons:

> "A unit of pleasure or of pain is difficult even to conceive; but it is the amount of these feelings which is continually prompting us to buying and selling, borrowing and lending, labouring and resting, producing and consuming; and *it is from the quantitative effects of the feelings that we must estimate their comparative amounts*".

(Jevons, [1957] 1965: 11)

For instance, this argument demonstrates that Jevons evaluates his views on utility in a subjective structure and determines his decisions based on this structure. The utility is determined on the basis of a special feeling and wish of a men and the utility of the individual cannot be compared with each other. If the utility cannot be compared, each individual has different scale of utility for each product. Hence, these differences create the sources of the use-value.

On the other hand, the major component in the determination of these differences depends on the needs for the use-values. These needs determine the utility of individuals. In other words, the term of "utility" has a conceptual integrity which is evolved in parallel to an increasing needs of individuals. Therefore, the individual needs can be regarded as a reflection of special feelings and wishes.

In the theoretical framework of Menger ([1976] 2007), the major reason behind the demand for economic goods is intrinsically depended on the fact that individuals desire to these economic goods and thereby obtain utility from the consumption of these economic goods. However, the amount of produced goods is limited relative to the human needs. As Menger ([1976] 2007: 111) expresses that a long continued decrease in abundantly available goods must finally make them scarce at least in some degree.

The term of "marginal" has crucial importance in the determination of the source of value which depends on getting utility from the produced goods, or alternatively, from the consumption of that produced goods. Therefore, the source of value has a close relationship with utility and the marginal revenue obtained from the consumption of the use-value.

The dependence of utility to the "marginal" framework is the theoretical base of the marginalist paradigm. According to the "marginal utility" concept, if an individual increasingly consumes the same type of product, the marginal utility of that product decreases with each additional

unit consumption. The major reason behind this case depends on the fact that the utility of individual gets lower with the consumption of each additional unit of the same product. The human needs and desires for that product get lower with the consumption of one more unit. Since the utility of each product is subjective, the individuals are only personally aware of the characteristics of the produced goods and the marginal utility obtaining from their use. For instance, while "Product A" may provide y amount of utility to an individual x in a given amount of consumption level, it may provide y+1 amount of utility to an individual z. The level of diversity is the intrinsic property of the utility.

According to Jevons ([1957] 1965: 37), the problem of the economy builds upon the maximization of pleasure through satisfying the individual needs and wants to the highest level by using the least effort in the production process of any thing. In order to understand the elements of utility and thereby the major problem of the economics, a person must certainly understand the wants and desires of man (Jevons, [1957] 1965: 39). Therefore, according to Jevons ([1957] 1965: 38), the product that provides utility can be defined as any object, substance, action, or service, which can provide pleasure or avoid from pain.

The usefulness of a product is not a general property of that good. The product has a value based on the requirements of an individual. In other words, the utility of a product depends on the amount of that product which is owned by the consumer (Jevons, [1957] 1965: 51). The theoretical model of Jevons is not static because the utility-value phenomenon is examined on the basis of keeping all other products constant and excluding from the analysis. The utility can be measurable only because the product has a specific quality. Beyond the maximum point of utility, total benefit will begin to decline. Jevons ([1957] 1965: 51) defines this point as a "*final degree of utility*" which provides a very small quantity to the existing stock.

The behavioral pattern of the individual is determined by the inverse relationship between the amount of the product and its marginal utility. The use of any product within a separate set of objectives is explained by the equality of marginal utility of their additional units. Therefore, according to Jevons ([1957] 1965: 69), the marginal utility is the so much absolute pleasurable effect produced by commodity in an uncertain duration of time.

The amount of labor consumed during the gain of utility is also determined the amount of pain. According to Jevons ([1957] 1965: 168), the labor is "…*any painful exertion of mind or body undergone partly or wholly with a view to future good*". On the other hand, the time factor in producing goods denotes the level of pain of labor. The cost of production, thus, may increase or decrease subject to the level of pain emerging in the production process. Additionally, in the marginalist framework, the means of production has a use-value similar to the means of consumption and therefore are described in the marginal utility[73].

For the marginal thought, the concept of "welfare" has a great importance. Indeed, if competition conditions are provided, the rational individual will efficiently allocate their commodities by regarding the necessary conditions to maximize his/her welfare. Total welfare will be maximum at the equilibrium point where the marginal utility of one good is equal to the marginal utility of the other good. Although the exchange-value is proxied by the prices, it is basically determined by the marginal utility. The higher the marginal utility of any product consumed by the individual, the higher the exchange-value of this product selling in the market.

---

[73] Please note that in the theoretical structure of Menger ([1976] 2007: 84), the means of production are depicted as "higher order goods". This provides for the inclusion of the components of both demand and supply into the marginal utility framework.

Therefore, the major aim of the exchange of products depends on the difference of the values of each product because of their differences in marginal utilities and their prices. These differences play a crucial role in the determination of both relative prices and the equalization of the marginal utilities of several products. The exchange process aims to maximize the interests of the economic agents. The prices come out with the marginal utility determining the exchange-value which means that the prices are determined in parallel to the changes in the marginal utilities.

As the marginal utilities are figured by the human needs and wants, the economic agents have the power to affect the economic system as consumers and producers. The conditions of demand and supply depend on the dynamics of the relationship between consumer behaviors and the producer behaviors in the free market system. Additionally, the prices of any two products will be the same in the existence of free market conditions.

In addition to the determination of prices of products, Jevons ([1957] 1965) notes that the sources of the production costs of these products should be also investigated in order to get a comprehensive understanding about the economic system. For instance, depending on the concept of "disutility", the increase in the labor-time is one of the major reasons behind the increase in the production costs. Therefore, labor is a measure of the real costs to the extent that it includes the pains emerging in the production process. The value of labor is determined on the basis of the changes in the relationship between the utility which is obtained from the consumption of the product and the disutility which is emerged in the production process of that product. Increasing cost level becomes a law arising from the individuals' psychology, because the (perfect) competition conditions do not match with the diminishing cost emerging in the firm (Kazgan, 2009: 128). Diminishing marginal benefit or the increasing work pains make the increasing cost condition required for (perfect) competition an unchanging law. Because laisser-faire can only be defended under (perfect) competition conditions (Kazgan, 2009: 128).

Essentially, the prices are considered as constant in equilibrium condition based on exchange process. However, what will be the market prices of the products after the exchange process? The answer to this question depends on two components: (1) the trading body and (2) the law of indifference. According to Jevons ([1957] 1965: 88), trading body depicts any body either of consumers or producers and the law of indifference is the same commodity in the same market which has only be one price or one exchange rate (Jevons, [1957] 1965: 211). Although Jevons ([1957] 1965) and Menger ([1976] 2007) make a partial equilibrium analysis in the determination of prices, their model can be easily transformed into a general equilibrium model by adding multiple exchange process.

The equilibrium point of the exchange of products is obtained from the existence of the equality in marginal utilities of products. The only drawback of this equality is the absence of the investigation of the demand conditions. The supply factor has a pioneering role in the exchange of products. Therefore, the determination of production costs depends on the relationship between two components within the frame of this equality: (1) the supply and (2) the marginal utility. On the other hand, the cost of production is based on the level of pains of labor emerging in the production process (Jevons, [1957] 1965). However, it ignores the necessary labor-time to produce any product. In this context, the marginal framework and thereby the neoliberal paradigm diverge from the classical framework[74].

---

[74] Especially from the arguments of Ricardo.

However, the determination of prices within the frame of the changes emerging in aggregate demand and aggregate supply needs to the constancy in the marginal utility of money and the measurable characteristics of the utilities (Savaş, 2007b: 535-536). Therefore, Jevons preferred to use these assumptions that do not fit into real-world conditions (Savaş, 2007b: 536).

The same conceptual integrity is maintained in the general equilibrium analysis of Walras ([1954] 2010) which is derived from the Jevons and Menger. In other words, the assumptions of Walras ([1954] 2010) on the conditions of the general equilibrium framework plays an important role in the development of the marginal theory and thus in the formulation of neoclassical paradigm. According to Walras ([1954] 2010), the major determinant of value can be found in the changes of marginal utility which is contradicted with the arguments of Jevons. Therefore, the source of utility is subjective and it is not measurable.

The major aim of the general equilibrium analysis is to understand the relationship between the n number of production factors and m number of product prices. There are two basic equations in which the general equilibrium analysis depends on: (1) the demand equation and (2) the supply equation. The demand equation is the leading one in the analysis of Walras ([1954] 2010). The demand equation is divided into two sub-equations in the formation of individual demand equations: (1) the budget equation and (2) the consumption expenditure equation. In budget equation, the relationship between the income of individual and the level of consumption of individual is investigated. The level of income depends on the amount of labor (x) and the prices of each products (w). On the other hand, the consumption expenditure is measured by multiplying the amount of the product purchased by the available income acquired at the end of the production process and the prices of this product. In this case, the equality condition of the budget equation can be derived as follows[75]:

$$x_1 * w_1 + x_2 * w_2 + \cdots + x_n * w_n = y_1 * p_1 + y_2 * p_2 + \cdots + y_m * p_m \qquad (1)$$

On the other hand, the consumption expenditure equation is derived on the basis of the theoretical structure of the "maximum utility theorem". The utility of an individual is realized in the following condition:

$$\frac{MU_1}{p_1} = \frac{MU_2}{p_2} = \cdots = \frac{MU_n}{p_n} \qquad (2)$$

Moreover, Walras ([1954] 2010) denotes the individual utility by choosing one product as numéraire from n number of products which shows that all prices are measured in terms of this product ($P_1 = 1$) and expresses as follows:

$$MU_1 = \frac{MU_2}{p_2} = \frac{MU_3}{p_3} = \cdots = \frac{MU_n}{p_n} \qquad (3)$$

Thus, the number of these equations is one less than the total number of products. If the budget equation is included into this equation, then the number of equations is balanced with the number of products. The individual demand function is determined when the prices of products and inputs and also the amount of products are constant. All in all, the demand function basically includes two components: (1) the prices of products and (2) the prices of inputs.

---

[75] Note that the equations (1), (2), (3), (4), (5), (6) and (7) are obtained from Kazgan (2009: 130-131).

For a specific product, e.g., X₂, the aggregate demand function is the sum of all other individual demand functions as indicated in the following equation (4):

$$X_2 = F_2(p_2, p_3, \dots, p_n, w_1, w_2, \dots, w_n) \qquad (4)$$

Since the product X_1 is taken as numéraire, the number of equality will be one less than the total equality. Therefore, the demand function of X_1 can be derived from the budget equation. If the budget equality and the expenditure equation is summed up, the aggregate demand function of X_1 will be as follows in equation (5):

$$X_1 = Y_1 * w_1 + Y_2 * w_2 + \dots + Y_n * w_n - (X_2 * p_2 + X_3 * p_3 + \dots + X_n * p_n) \qquad (5)$$

On the other hand, the supply function is also included two sub-equations similar to the demand function. These two sub-equations can be categorized as follows in equation (6) and equation (7):

(1) *The Production Cost-Price Equation*: The price of the product is equal to the product of the amount of inputs required for the production of that product and the costs of these inputs. In this case, the price of product X_1 is taken as 1 and thus we obtain:

$$p_2 = a_{21} * w_1 + a_{22} * w_2 + \dots + a_{2m} * w_m \qquad (6)$$

(2) *Total Inputs-Existing Inputs Equation*: In each consumption product, the necessary amount of input for the unit production of the product, *x*, is equal to the sum of the level of production of this consumption product which is depicted as follows[76]:

$$Y_1 = a_{11} * X_1 + a_{21} * X_2 + \dots + a_{n1} * X_n \qquad (7)$$

As a result, there are four different unknown equations in Walras's model: (1) *n* amount of productive services for selling, (2) *n* amount of productive services prices; (3) *m* amount of products; and (4) *m* amount of product prices. In this framework, the numéraire is also regarded as a common unit of measure for all other prices (e.g., $p_1 = 1$). If this is the case for the Walrasian model, the number of unknowns will be equal to 2m+2n-1 and the number of equations will be same as the number of unknowns, 2m+2n-1. The determination and the measurement of the general equilibrium system depends on the providing of all these conditions. Hence, the prices and the amount of products are involved in an interaction. The economic ups and downs which may occur in this system are only short-term. Therefore, the long-term problems are not possible in the theoretical framework.

The neoclassical distribution theory is theorized, depending on the arguments of a trilogy of the marginalist revolution, namely Jevons, Menger, and Walras. In the context of the value theory of the marginalist framework, the neoclassical paradigm shows that each production inputs get an income equal to their amount of contribution to the produced products. This assumption is essentially different from the assumptions of labor-value theory which depends on the analysis of the capitalist production relations between capital and the labor.

The Marxian framework regards the logic of the formation of the surplus-value as an obligatory law of the capitalist system and thus the profit rate is equal to the degree of the exploitation rate

---

[76] Each price of the products and inputs are represented by the numéraire.

of labor. On the contrary, in the neoclassical distribution theory, the surplus is consumed in the production process and therefore there is no surplus extracted to the capitalist class or other classes. Each input gets income equal to the amount of what they produced in the production process and the aggregate income is equally distributed between economic agents. Therefore, for the neoliberal paradigm, there is no exploitation in the capitalist system.

Essentially, three major theorists of the marginalist revolution, namely Jevons, Menger, and Walras were constituted the theoretical backgrounds of this arguments. In this theoretical framework, it is not possible to argue that the social classes exist and thereby the social conflicts emerging in the capitalist system. If the aggregate income is equally distributed between economic agents, the income of the capitalists is also fair according to this framework. Therefore, the neoclassical distribution theory assumes that the social distribution is a norm and it does not diverge from the social and economic fairness.

The production system has an important effect for the analysis of the distributional practices as well as for the value theory. The focal point of these two concepts basically depends on the law of the "equality in margin". The prices of each input are equal to the amount of their contributions to the products. The marginal efficiency is the fundamental principle of the neoclassical paradigm. The roots of the neoclassical arguments on distribution can be found in the imputation theory of Menger ([1976] 2007) which focuses on the analysis of production factors called as the "higher order goods". The value of the production factors depends on the determination of values of the factors producing these "higher order goods". Therefore, the value of higher order goods has a crucial importance and a special feature in attributing to our lives and well-being (Menger, [1976] 2007: 152).

According to Menger ([1976] 2007), the production inputs are regarded as the higher order goods irrespective of the consideration of their orders in the production system. Therefore, there are no differences in those inputs because the importance of a value of the concrete quantity of a higher order good is equal to the difference in satisfactions that can be attained to them. Additionally, Menger ([1976] 2007: 150) notes that the value of the production factors is determined by attributing to the product value at the lower order where they contribute to the production process and therefore the value of higher order goods is dependent on the expected value of the goods of lower order they prepare for the production.

The determination of the value of goods can be easily derived from the exclusion of the necessary inputs from the production of that good. The expected effect of the exclusion of these inputs will bring out of both quality and the quantity of the value. In other words, the total loss of value in the aggregate production process will reveal the value of the production factors. If this production factor is transferred from using in the production of "good A" into the production of "good B", it will denote the opportunity cost of "good B". Thus, the amount of loss in total value will be equal to the opportunity cost of transferring inputs from one production process to another. The value of the production inputs is thus determined within the frame of the logic of the marginal efficiency theory. If the production process has constant returns to scale (CRTS), the total value of marginal contributions of inputs will be equal to the value of total production. It means that the total amount of goods will be consumed by the economic agents in the free market conditions.

Additionally, the value of the inputs, which is transferred from one production process to the other, will be revealed in the production of an alternative good if the production has CRTS. However, the extra value produced in the alternative good and the extra value produced in the

previous product will not be equal to each other. The value calculated in this case equals to the difference between the value of the alternative product and the value added of the previous product. In the theory of Menger ([1976] 2007), the value of the production factors producing the "higher order goods" is captured by the amount of decrease in the value of the product when the inputs are dropped from the production system. Therefore, the methodology of Menger ([1976] 2007) in measuring the value has produced much different senses from the methodology of the studies related to higher-order goods.

One of the most important theoretical criticisms directed to this reverse logic is done by Wieser (1927). The theoretical context of Wieser (1927) comprises of making a comprehensive analysis in an attempt to understand the relationship between labor, capital, and land and to investigate the sources of the economic values. The distinguishing feature of Wieser's theory basically depends on the social factors and conditions related to the economic relations and thus it combines the laws of economics and psychology. In that sense, Wieser (1927: 3) writes that his research benefits from the method recently constituted as the psychological and the name is come from the theory which takes its core components from the mind of the economic man (Wieser, 1927: 3).

This multi-dimensional perspective has an important role in the analysis of the source of the value and thereby the income distribution. However, related to the theoretical context of Menger ([1976] 2007), the determination of value depends on much different logical framework though Wieser (1927) adopts the effects of higher-order goods on the production system. According to Wieser (1927: 103), the marginal law is valid for all orders of products in the production system because it is also valid for the stocks of commodities of the first order in the household. It shows that there is a multi-correlation between these two units.

Wieser (1927: 103) also notes that according the productive marginal utility, which is obtained from the marginal utility of the marginal products, the finished products will have to be measured irrespective of what those products into which they are to be turned. The concept of the productive marginal utility allows for an understanding of the value of production factors to be determined in the context of value added they produce during the production process. However, the modern production system has a complex structure within the effects of technological innovations. Therefore, the determination of the values of products and inputs should be carried out by the analysis of the production process altogether.

The concurrent evaluation of the production processes indicates indirectly that the production factors cannot be analyzed separately. In this case, according to Wieser (1927), the value of the production factors is determined by the value of the products they contribute within the frame of the marginal law. The philosophical structure of this assumption depends on the fact that no branch of human activity including economic production could finish its expiration without referring to the process of attribution (Wieser, 1927: 116). The source of value basically depend on the law of marginal efficiency in case of the production increases. Hence, it is equal to the value of the increments in the margin. Therefore, the law of CRTS is the basis of the theory of Wieser (1927) similar to the theory of Menger ([1976] 2007).

All of these mentioned-above theoretical arguments of both Wieser (1927) and Menger ([1976] 2007) strengthen the value-theory of the neoclassical paradigm in terms of its advantages for the analysis of the income distribution within the frame of both production inputs and the production process. Therefore, the law of marginal efficiency is the fundamental principle of

the neoclassical paradigm and hence supports attempts for an analysis of the sources of the value theory.

The work of Clark ([1899] 1908) is the other major one in the investigation of the marginal efficiency law in case of the subjective value theory of the neoclassical paradigm so as to understand the dynamics of the distributional practices. According to Clark ([1899] 1908: 30), the law of distribution depends on the social laws of economics because they account for the organizational form of society by categorizing their structure into their producing groups, and for the categorization of each group according to their group of classes such as labors, capitalists, and employers.

Clark ([1899] 1908), who does not reject the concept of class, analyzes inter-class interactions in the context of both static and dynamic socio-economic laws. However, when examining the distributions among the classes, Clark ([1899] 1908: 65) focuses on the characteristics of the marginal productivities of the production factors and therefore adheres to the law of marginality. Under the impact of the diminishing returns principle, the law of marginal productivity applying to labor and rent improves the conceptual integrity of the neoclassical theory on income distribution. According to Clark, the major purpose of this study is:

> "…to show that the distribution of the income of society is controlled by a natural law, and that this law, if it worked without friction, would give to every agent of production the amount of wealth which that agent creates. However wages may be adjusted by bargains freely made between individual men, the rates of pay that result from such transactions tend, it is here claimed, to equal that part of the product of industry which is traceable to the labor itself; and however interest may be adjusted by similarly free bargaining, it naturally tends to equal the fractional product that is separately traceable to capital. At the point in the economic system where titles to property originate,—where labor and capital come into possession of the amounts that the state afterwards treats as their own,—the social procedure is true to the principle on which the right of property rests. So far as it is not obstructed, it assigns to every one what he has specifically produced".

> (Clark, [1899] 1908: 7)

The diminishing returns principle used by Ricardo ([1911] 2004) for rent theory applies to all production factors by Clark ([1899] 1908). The structure of income distribution is determined by the rules of diminishing returns principle. Each additional unit of production factors using in the production system provides a declining rate of returns. For instance, if the level of employment is increased in addition to the constant quantity of capital, the marginal return or efficiency will be decreased for this production factor. Especially, related to this case, Clark, who sets the rules of distribution in the context of labor and capital, states that:

> "…in connection with capital, the line that divides the first division of economic theory from the second runs between the law of diminishing productivity and the application of it. Supply capital in successive units to a fixed force of laborers, and everywhere you get, as a result, smaller and smaller additions to your output …In such a state there are no wages or interest to be paid, and no market rates of any kind to be determined; but the principle of final productivity reveals itself with entire clearness in the simplest economy. It is when this principle acts in such a way as to determine how many laborers and how much capital there shall be in one of the industries of

a civilized state that it produces a social effect. This action of the general law is a fitting subject for the theory of social economics; and here it becomes the basis of a theory of distribution".

(Clark, ([1899] 1908: 36)

Under the guidance of the perfectly competitive market structure, the workers will earn wages equal to the amount of what they produce. This condition is also consistent for the case of interest income. Therefore, the profit making process is not possible in this structure. As Clark ([1899] 1908: 101) indirectly expresses that with a proper structure for complete and free competitive system, each unit of labor can earn exactly equal to the value of a final unit produced.

The major reason behind making more profits depends on the competition between the factors of production. In this context, the producers will put downward pressures on the prices of products in order to make profits. The logic of this case depends on the fact that the reduction in the commodity prices will stimulate the aggregate demand and the production system which will be resulted in a higher demand for labors and thereby the wages of workers. All in all, the net profit will be disappeared from the economic system.

The ups and downs in the production system will also create a temporary advantage for making profits even if there is no equilibrium in the economic system. The producers will acquire their incomes equal to the amount of the value they produce. It means that each input will get a return equal to its contribution to the product at the equilibrium point. If the returns of wages and interests are lower than the value of the total products, the remaining part of the return will be acquired by the entrepreneurs as profits. However, this residual is temporary because there will be no net profits in the equilibrium point. Therefore, the profits will change, depending on the fluctuations in the level of wages and the interest payments.

The fundamental dynamics of the income distribution essentially depends on this condition. Clark ([1899] 1908) attempts to investigate the major factor affecting the income distribution in terms of the changing relationship between the marginal productivity theory and the production factors. All these conditions are relevant to the perfectly competitive market structure, however, even in the imperfectly competitive market structure, it still tends to obtain that amount of value of product. The final product of labor creates a standard for the pay of labor; and actual wages fluctuates around this amount (Clark, [1899] 1908: 101).

The marginal productivity-based income distribution theory of Clark ([1899] 1908) is also extended by the work of Edgeworth (1904). Similar to the methodological basis of Clark ([1899] 1908), Edgeworth (1904) depends on the rules of marginal law and theorizes the income distribution within the frame of this law. The subjective value theory is the essence of an understanding of income distribution and disutility concept in the production system is still relevant. According to Edgeworth (1904: 168), the maximization of utility of entrepreneur depends of his/her net income minus the disutility incident to its production. Therefore, it is possible to argue that all production factors are exposed to disutility in the production system. Additionally, the rules of distribution are prevailing for each production inputs contributing the production system. It means that "distribution is the species of exchange by which produce is depends on the division of different parties who have contributed to its production (Edgeworth, 1904: 159).

The distribution theory of Edgeworth (1904) focuses on the demand side of the production factors as in the theoretical framework of Clark ([1899] 1908) and the other neoclassical theorists. However, the critical thing basically depends on to analyze the assumptions behind the increasing scale of demand for inputs and in which conditions they are valid. In this sense, Kazgan (2009: 146) categorizes these assumptions into three as follows: (1) the infinite elastic input supply curve for each firms at the nominal market prices of inputs in perfect competitive market structure; (2) the profit maximization aim of firms; and (3) the existence of physical returns of variable inputs subject to the law of diminishing returns. If these three assumptions are given, the theory of marginal efficiency explains the amount of inputs using in firms (Kazgan, 2009: 146). The amount of input usage in firms is determined under the guidance of supply and demand conditions.

Additionally, the input demand function of a firm depends on the interactions of both the marginal efficiency of input and the prices of the product. If the input supply curve is infinitely elastic, the intersection point of the demand and supply functions will provide the occurrence of the optimal level of input quantity. It means that the optimum level of input quantity basically depends on the changes emerging in input demand and supply functions in a given theoretical conditions. If demand is higher than the supply, the price of the product will be increased, or alternatively, if the demand is lower than the supply, the price of the product will be decreased. This is the fundamental law of economics which is strictly adopted by the neoclassical paradigm.

According to Kazgan (2009: 146), the maximization of profits results in using the factors at the point where the price of input is equal to the value of the marginal efficiency of input. This maximum level of profit also shows that the costs of inputs are at minimum in which they are using in the production process. In other words, the necessary condition for the maximization of profit essentially depends on the fact that the costs of inputs should be reduced to the minimum level. Additionally, the point of profit maximization also denotes the maximum point of utility. At this point, each input will get an additional income equal to the returns of their marginal efficiency.

All in all, Edgeworth (1904) adopts and pursues the fundamental ingredients of the neoclassical factors related to the income distribution in his theory. If there are two factors in the production process (e.g., capital and labor), the maximum point of utility will be provided where the MP_K is equal to the MP_L. The prices of capital and labor will be also equal to each other in the equilibrium point. Therefore, Kazgan (2009: 146) states that the marginal efficiency of variable inputs should be balanced with the rate of factor prices.

An additional unit of input, which will be used in the production system, will lead to the reduction of factor prices equal to the amount of reduction in marginal efficiency under these conditions. The same logical framework is also robust for the product market. At the equilibrium point of a price of each product, the higher the level of production of a specific product will result in the reduction of prices of that production. However, since the input demand increases, depending on the increasing tendency of the production, the input prices may also increase which then will be resulted in the change of distributional practices between two economic agents, namely the capital and labor. In this sense, the elasticity of each input should be also considered in this framework. If any input, using in the production process, is abundant in the market, the demand increases for this input will not increase its prices in the market too much. Therefore, if the input quantity is given, the marginal efficiency theory is determined,

depending on the marginal efficiency of the price of an additional unit of input under the static conditions (Kazgan, 2009: 146-147).

However, as Edgeworth (1904: 214-215) states that so far as the competition is constituted on a free system, the received theory of supply and demand, even in its harsh mathematical form, would be applicable. In perfectly competitive markets, if firms increase their production scale, the prices of their products will not change. Thus, the demand for inputs for an additional unit of production will be basically depended on the elasticity and the efficiency of the inputs. If the input quantity increases, the marginal efficiency of that input will decrease. Therefore, there is a negative relationship between the input quantity and the input efficiency.

On the other hand, the marginal revenue is determined with the equality of factor prices and the incremental increases beyond this point is not possible. The marginal revenue increases but in decreasing amounts. In that sense, firms may change their factor composition in order to maximize their profits. Therefore, all inputs should be substitutable with each other. The substitutability condition of inputs is one of the most important advantages for firms so as to have an optimal level of profits and to change the distributional practices in favor of their own interests. According to Edgeworth (1904: 214), an accurate distribution theory must use the action appropriate to combinations, having some effects on collective treaties between employers and employees.

The distributional factors are also discussed by other theorists such as Wicksell ([1954] 1970) and Marshall ([1890] 1920). Primarily, according to Wicksell ([1954] 1970), the total amount of products is precisely consumed by the economic agents in the free market system under the influence of law of margin which specifies that each input gets an income equal to their marginal efficiency. Therefore, this case subjects Wicksell to the basic principles of the marginal revolution and thereby the neoclassical paradigm both at the theoretical level and practical dimension. Indeed, the law of marginal efficiency can still be substantial and the consumption of produced goods without any surplus needs the perfect competitive market structure in any given economic conditions. As Wicksell states that the most highest satisfaction level emerges from the competitive free market system in the presence of the distribution of the commodities which is most favorable economically (Wicksell, [1954] 1970: 75).

Moreover, according to Wicksell:

> "*If an economy comprises the production, distribution and consumption of only two commodities, the proportion of exchange between them is given by the following conditions: (1) that wage, rent and interest during production of both commodities must be equal; (2) that at the level of wages and rent attained, interest becomes a maximum …; (3) that the existing capital must just suffice to employ the existing number of workers and to rent the existing area of land, and; (4) that the two commodities are distributed among all members of the economy directly or after a preceding exchange, in such a way that the ratio of the marginal utilities of the quantities consumed yearly becomes everywhere equal to the ratio of exchange of the goods*".

(Wicksell, [1954] 1970: 160)

Furthermore, Wicksell ([1954] 1970) argues that the dependence of the distributional rules to the law of marginal efficiency strictly needs the existence of CRTS in the production system as well as the free competitive market structure. In other words, the consumption of all goods

without any surplus at the end essentially depends on the existence of CRTS in the production system. Thus, each input will get an income equal to the amount of what they produce. The volume of production is not important in this theoretical framework. The only matter is to provide the existence of the CRTS (Kazgan, 2009: 148). If the rules of constancy in returns do not proceed in the production system, the economic components will be negatively affected. It means that the distributional practices between economic agents will result in an unequal structure following the disturbances in the economic activities.

Besides the distribution theory of Wicksell ([1954] 1970), Marshall ([1890] 1920) develops a theoretical model which basically fills the gap emerged in the marginal revolution, related to the input supply analysis. In this new theoretical structure, the demand and supply functions for inputs are investigated altogether. Therefore, as Marshall theorizes the determination of prices of products with supply and demand functions and evaluates the input prices in this framework, his theoretical base is separated from the marginal efficiency theory (Kazgan, 2009: 149).

According to Marshall ([1890] 1920), there are four types of economic agents in the production system: (1) *Land*; (2) *Labor*; (3) *Capital*; and (4) *Organization*. Although the capital, labor, and land can be examined in the same theoretical framework as in the other approaches, Marshall ([1890] 1920) differs from the other neoclassical theorists because of his investigation on the organization. According to Marshall ([1890] 1920: 84), "capital consists in a great part of knowledge and organization: and of this some part is private property and other part is not". The knowledge has a great importance in the production process and therefore "organization aids knowledge" (Marshall, [1890] 1920: 84).

Finally, Marshall ([1890] 1920) investigates the features of income distribution at the national level, depending on the law of demand and supply within the case of the production system and the factors of production. In this sense, Marshall summarizes the rules of distribution of total wealth in society as follows:

> "The efficiency as compared with the cost of almost every class of labour, is thus continually being weighed in the balance in one or more branches of production against some other classes of labour: and each of these in its turn against others. This competition is primarily "vertical": it is a struggle for the field of employment between groups of labour belonging to different grades, but engaged in the same branch of production, and inclosed, as it were, between the same vertical walls. But meanwhile "horizontal" competition is always at work, and by simpler methods: for, firstly, there is great freedom of movement of adults from one business to another within each trade; and secondly, parents can generally introduce their children into almost any other trade of the same grade with their own in their neighbourhood. By means of this combined vertical and horizontal competition there is an effective and closely adjusted balance of payments to services as between labour in different grades; in spite of the fact that the labour in any one grade is mostly recruited even now from the children of those in the same grade.

> The working of the principle of substitution is thus chiefly indirect. When two tanks containing fluid are joined by a pipe, the fluid, which is near the pipe in the tank with the higher level, will flow into the other, even though it be rather viscous; and thus the general levels of the tanks will tend to be brought together, though no fluid may flow from the further end of the one to the further end of the other; and if several tanks are connected by pipes, the fluid in all will tend to the same level, though some tanks have no direct connection

with others. And similarly the principle of substitution is constantly tending by indirect routes to apportion earnings to efficiency between trades, and even between grades, which are not directly in contact with one another, and which appear at first sight to have no way of competing with one another".

<div align="right">(Marshall, [1890] 1920: 380)</div>

All in all, from the beginning of the theoretical arguments of the classical framework, Marxian, Keynesian, and Neoclassical paradigms have been investigated the major facts of income distribution in different contexts. In the classical framework, the rule of distribution between the production factors is based on the functioning of the value theory. It means that the methodological and epistemological difference between the use-value and exchange-value and thereby their differential effects create the major components about the income distribution. The classical theory basically discourses three kinds of production factors: (1) labor; (2) capital; and (3) land. The aggregate national income is distributed among these three social classes. However, the value of the product essentially depends on the amount of labor which is spent for its production. In this sense, the labor-value theory is regarded as the fundamental criteria for the determination of the income distribution. However, the classical arguments on labor-value theory are also exposed to several criticisms from the subjective value theory developed by the neoclassical paradigm. The major reason behind these criticisms depend on the fact that Smith (2012) has a great emphasis on use-value in the explanation of the factors about the income distribution.

In the Marxian structure, the distributional factors are changed due to class conflicts and the power relations in social segments. These two factors determine the rules of income distribution. The major reason behind the class contradictions depends on the existence of the private property. In the capitalist system where private property relations dominate the whole system, the ownership of the means of production is controlled by the capitalist class. Therefore, the working class is subjected to sell its labor-power to the capitalist class in order to maintain their living standards. The capitalist has a right to exploit this labor-power for the whole day. In this context, the wage level is determined by the power relations between labor and capital in a given socio-economic conditions. Because the labor-power is subjected to the exploitation of the capitalist class for the whole working day, the capitalist strives to obtain maximum value from this labor-power in order to increase the profit level. In this sense, the total value of the products produced by the worker will be higher than the subsistence level of labor. The main aim of the capitalist is to fix the wage level of the labor at the subsistence level, or, if possible, below the subsistence level. Under the existence of the reserve army of labor, the capitalist class strives to pull down the wage level to the lowest level. Thus, the remaining surplus essentially shows the profit level of the capitalist after then the wages are subtracted from the total value.

In the Keynesian framework, the major researches for an analysis of income distribution basically depend on the theories of Kaldor (1956) and Pasinetti (1962). Although there is no specific title on income distribution in the theoretical framework of Keynes (1964), five key factors of this framework constitute the different elements of the Keynesian distribution theory for further works. These five factors can be classified as follows: (1) the effective demand principle; (2) the consumption function; (3) the marginal consumption propensity and the multiplier; (4) the investment function; and (5) the liquidity preference framework and the interest rate. The Keynesian arguments about the distributional practices consist to the inclusion of an independent investment function into their theoretical basis. The animal spirits of the entrepreneurs are the major determinant before making an investment decision. Additionally, expenditures and the saving rates significantly affect the structure of the investment. For

instance, the balance between saving and investment is a major determinant of the investment function. In this context, the capital accumulation and thereby the distribution depend on the changes in the parameters of investment function.

Finally, the neoclassical paradigm examines the features of income distribution, depending on the law of marginal efficiency. Each factor of production acquires an income equal to the amount they produce. Therefore, according to the theoretical assumptions of the neoclassical paradigm, factors of production get a fair income equal to the value of their labor-power. In this case, it is not possible to address the existence of the surplus value. Therefore, the concept of inequality is not significant in the economic system. The economic fluctuations and contradictions are thus short-lived and temporary. Although the distributional outcomes basically depend on the law of marginal efficiency, the role of technological progress and the components of economic growth have crucial effects on distributional dynamics based on the changes in the production function. The causality between these parameters are as follows: The changes in the technological developments determine the potential increases in the economic growth. Therefore, the distributional practices are formed on the basis of the changes in the economic growth. In other words, the changes in the technological progress comprise of an important component of the economic development. Depending on this causality framework, the neoclassical paradigm specifies that the distributional problems do not emerge due to the class conflicts or the struggles between classes; on the contrary, they essentially depend on the changes in the technological ingredients and therefore the income distribution is not a matter of social conflict or struggle as Yeldan (2009: 97) states.

5.3 Explaining the Labor Share of Income

The neoliberal era consists of the most severe debates on income distribution in the capitalist mode of production. The sub-factors behind these debates on distributional problems include different types of reasons, depending on the changing structure of the production system. The changing conditions of the factor shares can be easily understood by the comparison of pros and cons of problems occurred in the economic activities within the frame of both Keynesian and Neoliberal paradigms.

For instance, the Keynesian labor market policies have been significantly changed in the neoliberal era in favor of the interests of capital through the reorganization of the labor legislation, the rearrangement of the labor rights, and the reallocation of resources between different sectors. As Boratav (2015: 189) states that the golden age for labors was gradually turning into a barbaric capitalism of the golden age of capital. In this context, the rights of workers earned in the Keynesian era put under the command of capital, depending on the changes in the work legislation of the real politics of the neoliberal era. Additionally, the economic and social interests of labors were being limited towards the neoliberal policies under the guidance of the ruling class.

The basic points of the changes occurred in the labor market policies of the neoliberal period can be listed as follows:

1. The rising prominence of the policies through the use of privatization and deregulation in the labor markets.

2. The changes of the firm structure and production system, depending on the privatization policies.

3. The limitation of the organization and syndication rights under the work legislation.

4. The increasing role of finance in economic transactions and its integration with the labor market policies.

5. The prominence of international agreements, aiming at improving the labor mobility and thereby increasing demand for low-cost labor among countries.

6. The increasing scale of multinational and transnational firms in economic relations and the determination of the labor market policies through the interests of these giant firms.

7. The changes in the structure of public policies from government-led to capital-led strategies.

The increasing scale of the integration process of labor market policies through the interests of private capital was also changed the distributional rules in favor of the capital in the neoliberal era. The technological progress and thereby productivity gains have all exceeded the increases in the wage level in that period and therefore the surplus emerged from the productivity-wage gap was appropriated by the capitalist class in parallel with the increasing effects of the neoliberal power on labors. According to Greenspan:

> "…increases in hourly compensation …have continued to fall far short of what they would have been had historical relationships between compensation gains and the degree of labor market tightness held …As I see it, heightened job insecurity explains a significant part of the restraint on compensation and the consequent muted price inflation …The continued reluctance of workers to leave their jobs to seek other employment as the labor market has tightened provides further evidence of such concern, as does the tendency toward longer labor union contracts …The low level of work stoppages of recent years also attests to concern about job security …The continued decline in the share of the private workforce in labor unions has likely made wages more responsive to market forces …Owing in part to the subdued behavior of wages, profits and rates of return on capital have risen to high levels".

(Greenspan, 1997)

The neoliberal period has witnessed a significant decrease in the labor share of income in favor of capital, especially in developed and emerging market economies. The reasons behind the reduction of the income share of labor in an aggregate economy basically depended on the transformation of the socio-economic conditions in order for more dependency towards the neoliberal paradigm. In order to understand the changing dynamics of the distributional practices, the analysis should be based on class relations emerging in different social classes and therefore it needs a multi-dimensional perspective on making comprehensive analysis.

For instance, some of the major reasons behind the ups and downs in the labor share of income, depending on the neoliberal market structure, can be listed as follows: (1) capital-led growth strategies; (2) the policy components towards the maximization of interests of capital; (3) the more flexibility in the labor markets; (4) the increasing demand for low-cost labors and the rearrangement of the employment legislation; (5) the more incentives for private capital in state-owned enterprises, or alternatively, increasing incentives for policies toward the privatization in the economic relations; (6) the limitation of rights in employment and the right of

organization; (7) the imposition of such policies toward the reduction of the unionization; (8) the shift of capital from real sector into financial sector; (9) the increasing volume of "reserve army of labor" all over the world economies and thereby the reduction of the bargaining power of the labor; (10) the increasing dependency of households to the financial sector by incurring debts so as to keep stable their living standards; (11) the more incentives for consumption and the integration of households into the financial system; (12) the erosion of the social policies and public assistances under the strategies of privatization and more flexible labor markets; (13) the shift of long-term employment-led investments into the short-term profit-led speculative investments; (14) the transformation of the policies of economic development into profit-based strategies of capital; (15) the rise of institutional investments and therefore the increase in the rate of investment in pension funds and the speculative attacks on income and wealth; (16) the resign from the policies toward redistributive taxation and therefore the erosion of wages as a consequence of an increase in indirect taxes; (17) the privatization of the agriculture and the decline in the rural employment; (18) the increase in the competition level in micro and macro levels in economic system and the increasing demand for low-cost labor in underdeveloped countries as a result of the changes in the domestic production; (19) the increase in the concentration and the centralization of capital in line with the increase in the competition level; (20) the increasing scale of service sector where the labor force is much cheaper than the other sectors such as industry and the agriculture; (21) the increasing gap between productivity and the wage level; (22) the distribution of retained earnings through the earnings of shareholders in the forms of dividends and stock buybacks than the earnings of the workers; (23) the dismissal of workers under the hostile mergers and the acquisitions of the firms; (24) the changing structure of labor contracts into more short-term and unsecured; and (25) the increasing existence of the speculative asset bubbles and more crisis-prone economic and social system.

These factors show that the changes in the labor share of income in the neoliberal period consist of different types of paradigms and they cannot be investigated in the context of phenomena under the Keynesian framework and its methodological concept. It also shows that the analytical and theoretical investigations should be focused on the listed-above factors in the context of different types of measures and dimensions in order to understand the distributional practices for factor shares in the neoliberal era. Therefore, different types of methods and parameters all compose of an important case for the analysis of different dimensions related to the distributional facts. Additionally, the use of these methods lead to the scientific developments behalf of how capital increases its profits and gets more income share from the aggregate national income.

The following sub-section will focus on several descriptions and presumptions on the labor share of income. On behalf of the understanding of measurement methods of the labor share of income, they will provide a crucial information for further analyses. In other words, they will reveal the underlying assumptions and arguments of the changes occurring in the distributional dynamics between factor shares. In addition to the investigation of the theoretical backgrounds and the empirical methods of the labor share of income, the research will also focus on details of the listed-above factors which make labor's share more unstable in case of the following topics[77]: (a) globalization; (b) skilled-biased technological progress; (c) labor and product markets policies; and (d) privatization policies and structural change.

---

[77] We can also add financialization as a fifth topic here. However, for detail analysis about the transformations and development that took place in the neoliberal period please see section 3.3.

5.4 Different Measures of the Labor Share of Income

One of the major scientific topics, in which the economic approaches focus on, is based on the investigation of the income distribution. From the classical framework to neoliberal paradigm, several schools of thought have been pointed on the problem related to the income distribution between the factors of production. These approaches has its own norms about the distributional practices, based on different methodological structure. However, as Blaug (1996: 467) states that "…the great mystery of the modern theory of distribution is why anyone regards the *share* of wages and profits in total income as an interesting problem". Although the answer of this proposition may change for different approaches, the fundamental dynamic depends on the power of their perspectives on distributional problems within the socio-economic and political categories. For instance, in the Marxian framework, the distributional phenomena have class-based features and therefore they are defined as a response of power relations emerging in classes.

On the other hand, in the neoclassical view, the distributional issues essentially change on the basis of the developments occurring in the economic system, depending on the law of marginal efficiency. Each agent of production gets the amount of income equals to the value of what they produced in the market. Therefore, the distributional practices do not depend on the dynamics of classes and power relations. The Keynesians also theorize their arguments on income distribution on the basis of the components of savings and investment in the theoretical framework of Neo-Ricardians such as Kaldor (1956) and Pasinetti (1962). In this context, they basically depend on the components of the production mechanism of the capitalist system. However, they do not reject the class dynamics emerging between factors of production, depending on the changing power relations of the economic actors in the production system. All these paradigms have their own methodological and theoretical frameworks in order for the investigation of the distributional issues and thus they cannot be generalized.

The basic question for each framework is what kind of methodological structure are we internalize for the distributional facts. In other words, do we reject the existence of the classes? Or alternatively, should we further retain the class-based analyses for the social processes? This determination also leads us to the structural developments for the components of analysis. The crucial fact is the determination of the distribution of factor shares in the aggregate national income as Glyn (2009) focuses on his analysis. Although the factors determining the rules of distribution have different kinds of parameters in the presence of technological progress in the neoliberal period, the distribution of aggregate income among factors of productions have some common features.

First, the social framework still has its fundamental dynamics of the capitalist production relations. All these dynamics are inherent to the production structure of the capitalist system. However, the components of the production system can be divided into two kinds of social categories. While the first category has their own property rights on the means of production, the other has not. This phenomenon is the major determinant of the distributional problems. Second, each social category has its own impetus in order to keep stable its social status and therefore each of them is supposed to preserve the interests of their social conditions. Finally, the capitalist production system subordinates the factors of production to the dynamics of the production based on the property of means of production. It means that for the social categories,

who have not their own means of production, do not have any opportunity to sell their labor-power to the capitalists[78].

From the base segments to the lower segments of the society, each individual has their own characteristics in the relations of the capitalist production. Therefore, these three different factors basically determine the methodological infrastructure for the investigation of the distributional practices among the factors of production which will be used in the empirical analysis.

The class-based perspective will be the major factor behind the understanding of the dynamics of income distribution. Therefore, the assumptions based on class dynamics will be adopted in the theoretical discussions within the case of distributional issues. It means that the structure of the income distribution and its components will be investigated within the frame of the power relations between capital and labor.

In this work, the major issue is to show the changing dynamics of the position of labor in the society both theoretically and empirically. For instance, some of the major questions about this topic can be listed as follows: What are the major components behind the share of aggregate national income and the ups and downs in the labor share of income? Or alternatively, what are the impacts of these components on the labor share of income? How do these components affect the factor share accruing from the aggregate national income? These kinds of theoretical and analytical questions establish the foundation of this work which will be approached in Part 6. However, different kinds of perspectives and measurement methods will be investigated before the empirical analysis.

As I mentioned previously, the analyses on income distribution become one of the most crucial topics in economic analyses from the very beginning of the increasing capitalist relations among economic agents. However, the increasing focus on the distributional issues is not special to the capitalist system. Rather, from the emergence of the rule of private property, in each phase of the exchange of goods and services, the distribution topic already remained in the forefront of the relationship among economic agents in order to maintain their well-beings and standards of living. Therefore, the distributional issues were stand out as the dominant factor of each phase of the modes of production, depending on the existence of private property in socio-economic and political relations.

Typically, from the beginning of an increasing dominance of the capitalist relations on social norms and practices, the researches about distribution of income and wealth have increased their scientific contexts for each point of the social framework. As one of the most particular subject for the economic investigation, the distributional practices were all examined by different types of schools of thought, depending on different methodological contexts. These differences were formed around their theoretical arguments of each school of thought. Therefore, the common sense was not emerged about the distributional patterns.

---

[78] One exception to this case is the intellectual propriety that is produced within the framework of innovation. This ownership requires that all factors that influence that innovative idea are its. In other words, the economic individual lacking the means of production may not have to sell its labor-power to capitalism within the context of innovation. However, this can impose the necessity of the means of production to be carried out at the transition from the production stage to the concrete level of the innovative level at the abstract level. At this point, if innovator does not have real capital, he/she will have to adopt capitalism rules. If he/she owns the means of production, he/she will have to apply the dynamics of capitalism (in line with the technical progress and increasing level of globalization) with the pressure of competition again.

From classical theory to the neoclassical thought, the distributional issues were all involved in the analyses of different topics of the socio-economic, political, cultural, sociological, and philosophical studies for an investigation of the capitalist relations of production among economic agents. In some studies, the factors behind the income distribution were investigated in macroeconomic framework, depending on the dynamics of economic growth, but in other studies, were examined in class-based structure. For instance, according to Smith (2012), the total national income and thereby the total national products were distributed among three social classes (i.e., the owners of land, capital, and labor) equal to the value of their contribution to the products. Therefore, the total value of the production were all distributed among the owners of land, capital, and labor as rent, profit, and wages, respectively. As Smith states that:

> "…the price or exchangeable value …of all the commodities which compose the whole annual produce of the labour of every country …must resolve itself into …three parts, and be parcelled out among different inhabitants of the country, either as the wages of their labour, the profits of their stock, or the rent of their land …Wages, profit, and rent, are the three original sources of all revenue, as well as of all exchangeable value. All other revenue is ultimately derived from some one or other of these".

(Smith, 2012: 55-56)

According to Smith, Ricardo and other classical theorists, the factors of production, which affect the aggregate income, should be examined in unity in order to understand the dynamics of the income distribution. Therefore, they rejected the class phenomenon among socio-economic context. However, both of these classical contributors did not distinctively investigated these three types of production factors in a class-based category.

Indeed, the most crucial issue for the classical framework is to understand the factors behind the dynamics of economic growth and also to investigate the differences in revenues among economic agents accruing from the aggregate national income. Additionally, they basically focus on the examination of the structure of the distribution of income and wealth. In order to understand these issues, it is necessary to get full of information about the values that the factors of production add into the products. However, according to Streightoff (1912), the distribution of income and wealth among the factors of production are dealt with a special and important topic even though it is not possible to get accurate information about the relations of the characteristics of the economic agents in the production system. As Streightoff (1912: 154-155) notes that bits of information are not accurate for analyzing the distribution of incomes from property. Distributional knowledge is very crucial to rational legislative direction of development and if there is no certain aim for practical use, this knowledge on income distribution does not exist (Streightoff, 1912: 155). Therefore, the person should not waste his/her time to obtain it (Streightoff, 1912: 155).

This knowledge-based investigation for distributional issues was diversified and transformed within changing economic, social, and political paradigms in line with the developments in the capitalist relations of production. The basic fact in this structural change depends on the increasing scale of complex relations among classes. Technological developments emerged in in the capitalist system were all differentiated the distributional framework. Additionally, the class contradictions and power relations among economic agents were all increased their effects on the distribution of income and wealth. Especially, economic crises increasingly revealed the impacts of the class powers in the capitalist system for the case of the distributional issues. Therefore, as Kuznets (1933: 30, quoted in Durlauf and Blume, 2008: 837) points on that the

emergence of conflicts in political and social frameworks has a crucial impact on the changes of the relative share of the productive factors.

All these factors were led to make further thoughts and investigations on data for the distribution of factors of production in the capitalist system. By doing this further investigation on distribution within different perspectives were provided ways for critical developments for both the economic growth and the economic progress. In this sense, Keynes (1939) notes that:

> "…the stability of the proportion of the national dividend accruing to labour, irrespective apparently of the level of output as a whole and of the phase of the trade cycle. This is one of the most surprising, yet best-established, facts in the whole range of economic statistics…"

(Keynes, 1939: 48)

However, in the neoclassical framework, the factor shares were assumed as relatively constant over time, depending on the empirical investigations of Cobb and Douglas (1928). Pursuant to Cobb and Douglas (1928), the distributional facts among two major classes stay constant in the long-run even if different socio-economic conditions create different outcomes on the factor shares in the economic system and thus creates ups and downs in the labor share of income. Depending to their theoretical framework, if factors of productions earn their marginal products in each phase of the production system, the income shares of these factors will be stay constant. For instance, according to Cobb and Douglas (1928: 151), the production function could be modeled in the presence of the indices of production (P), labor (L) and capital (C), as follows:

$$P' = 1.01 \, L^{3/4} \, C^{1/4}$$

As Cobb and Douglas (1928: 156) show that the three-fourths of the product to labor and one-fourth to capital is divided in the presence of a given production system for the period in question. Thus, after using of some other advanced mathematical tools, Cobb and Douglas (1928) determine the value of the labor share approximately as 2/3 of the total share in national income producing in the model for the production function as follows[79]:

$$P' = 1.01 \, L^{2/3} \, C^{1/3}$$

---

[79] Although there are advantages of using Cobb-Douglas production function at the abstraction level, it has many different kinds of limitations for an understanding of the distributional relations between labor and capital. However, it is not theoretically possible to dispel those limits in modeling the Cobb-Douglas production function. Primarily, the function includes only two inputs and therefore the factors affecting the labor or capital do not involve into the model, namely, they are treated as exogenous. Or alternatively, it means that the labor as an input for production is treated as homogenous. Second, the economic system depends on the perfectly competitive market structure. Hence, production function assumes as CRTS. The imperfect competitive market structure cannot be modeled in the Cobb-Douglas production function. Third, the issues around the measurement methods of the labor share are also binding for the measurement methods of the capital share. The Cobb-Douglas production function includes only the available amount of capital for the production. Fourth, the industrial sector is not homogenous for employment and the means of production. However, there are also other sub-groups for the industrial sector where the technological progress is in the foreground. Therefore the Cobb-Douglas production function has not unlimited power so as to model these sub-groups of industries. Fifth, the production function is available for the substitutability among inputs, however, the complementarity among inputs, on the other hand, is not in existence for the Cobb-Douglas production function. Finally, labor share and the capital share is assumed as constant in the long-run. This constancy is basically neglected to the class-based analyses. Additionally, it rejects the effects of the social, political and cultural changes on these income shares of labor and capital.

As a result of the generalization process of all these assumptions, Cobb and Douglas (1928) asserted that the factor shares would stay constant over time in the presence of CRTS and the perfectly competitive market structure.

On the other hand, this constancy assumption for the share of capital and labor incomes also stimulate to an increase in the studies on personal income distribution both theoretically and practically. According to Lydall (1968: 2), the class-based analyses and the generalization of the functional income distribution among production factors do not give theoretically efficient outcomes and therefore the expression of the arguments and the assumptions within the frame of functional income distribution may lead to find different outcomes in the practical framework:

> "Adam Smith, Ricardo, and Malthus took it for granted that landlords were rich, labourers were poor, and capitalists were somewhere in the middle …Much of the discussion of the problem of distribution is still carried on in these terms, despite the fact that it is well known that many landowners are poor, many employees earn more than some capitalists, many property-owners work and many workers own property".

<div align="right">(Lydall, 1968: 2)</div>

These assumptions were also investigated for much longer time period which begins in 1850s (Johnson, 1954). For instance, Johnson (1954: 175) finds a similar result obtained by Cobb and Douglas (1928) that there is no "significant secular change" in the share of labor in his sample period.

Alternatively, Solow (1957) obtains similar analytical results in the context of the United States dataset, as Cobb and Douglas (1928), inquiring into the sources of the economic growth. Based on the empirical results of Solow (1957), the fundamental dynamic in the determination of the changes in factor shares depends on the changes in the technological progress. As Solow (1957: 312) states that all kinds of ups and downs, developments in the level of education of the labor force, and all other things will be based on the changes in the technological progress.

However, Solow (1958) was skeptical about the constancy of the factor shares and therefore his further analysis attempts to focus on the factor of technological progress for an investigation of distributional practices. In the aggregate structure, the factor shares follow a smooth and highly constant process, but they are exposed to the fluctuations between different sectors for a short-run. This result shows that the general framework for the constancy of the factor shares, more specifically changes in the labor share, should be considered within the frame of the technological progress[80].

---

[80] The CES production function theorized by Arrow et al. (1961) were all included these facts, especially for modeling the effects of technological progress, in line with the theoretical assumptions of the Cobb-Douglas production function. Therefore, the theoretical discussions on the neoclassical framework were depended to the CES production function so as to understand the dynamics of the changing factor shares. Even though the CES production function transforms the unrealistic assumptions of the Cobb-Douglas production function into more realistic framework for the economic system, it still contains some limitations. First, the CES production function includes two inputs as Cobb-Douglas production function in addition to its parameter on technological progress. However, the structural framework of CES production function provides opportunities for more inputs to be included in. However, although CES production function can introduce more inputs in the theoretical context, it cannot introduce more inputs in the practical framework because it necessitates complex mathematical algorithms and the measurement of these algorithms. Second, the CES production function has not solutions to the endogeneity problem in the selection of variables. Additionally, the possibility for multicollinearity among the

However, the constancy arguments for the factor shares were ended by the empirical investigation of Kuznets (1959). The distinguishing characteristic of Kuznets's (1959) work from the works of Cobb and Douglas (1928), Johnson (1954), and Solow (1957, 1958) depends on his large-scale dataset for the investigation of income distribution among factors of production[81]. His estimation bases on cross-country analysis and also depends on the panel structure for high and low-income countries. The empirical evidence suggests that the factor shares move away from their constancy over time when these other countries are included in the analysis and therefore the constancy framework for factor shares cannot be generalized for other sample countries. As Kuznets (1959: 54) states that the long-term change in the share of salaried persons among all workers would have an upward trends during the economic growth. All in all, Kuznets approaches to the following results in the context of the cross-country analyses, including both high-income and low-income countries:

> "The situation in earlier decades, when the share of participation income in national income was constant, is a matter of conjecture: in some countries and some periods, the rise in the share of compensation of employees in participation and hence in national income may have outweighed the decline in the share of wages in compensation of employees, causing the wage share to rise; whereas in other countries and periods, the rise in the share of compensation of employees in participation and hence in national income may have been outweighed by the decline of the share of wages in compensation of employees, causing the wage share to decline; and finally in still other countries and periods the conflicting trends may have offset each other, producing a stable wage share. Stability of the wage share, like the stability of many other economic statistics, if and when observed, is due to the balancing of conflicting effects of the underlying determinants; and its occurrence and continuity depend upon the occurrence and continuity of that balancing …the wage share in the United Kingdom …was an exceptional and temporary phenomenon; that the apparently stable share in the United States was that of wages and salaries--and it has been replaced in subsequent revision by a long-term rise; and that long-term stability of the wage share has not been observed for any other country".

(Kuznets, 1959: 56)

---

parameters is very high. Third, the CES production function does not deal with the aggregate form of the distribution among factors entirely. Fourth, although the technological change is a major determinant of the change in the labor share in the theoretical structure of the CES production function, it is not the single factor for the production function, and therefore, it may not provide robust outcomes. Fifth, the extension of the other variables affecting the labor share into the production function may result in the divergence from the theoretical structure of the neoclassical framework (e.g., the law of marginal efficiency and the model of general equilibrium). For instance, the political, social and cultural factor are also neglected in this production function as in the Cobb-Douglas production function. Finally, the CES production function does not deal with the class-based relations of the production system. The major issue for the CES production function is to show the effects of technological progress on the labor share of income. The main structure of the model is founded on this assumption. The production system and the capital/labor ratio are all determined under the impacts of the technological change. However, the other factors affecting the production function are either not investigated or treated as exogenous. Therefore the emergence of the unrealistic assumptions is possible. Depending on these limitations, thus, the causes and the results of the distributional issues are wrongly evaluated within the frame of empirical analyses. Finally, the CES production function does not introduce any material for an integration of the impacts of financial developments to the distributional issues emerged in the production function. For a detailed comprehensive theoretical analyses for distributional relations and the several reasons behind these relation between capital and labor please see Brada (2013).

[81] The works of Kaldor (1961) and Kravis (1962) can also be added to these studies.

In addition to the empirical examinations of Kuznets (1959), there are also other empirical studies and different methodological methods for the estimation of the factor shares, especially for the labor share. The common point of these studies is to reveal the major reasons behind the changing dynamics of the labor share in different economic systems and time periods and then to focus on the examination of these changes in the theoretical and practical frameworks.

The basic question depends on how can we evaluate different kinds of assumptions in the aggregate form? If each sector creates its own models, how can we integrate the components of the production and the finance? The problems about the aggregate analysis of the methodological perspectives appear as a crucial factor for the neoclassical theory. Therefore, the investigation of other parameters and paradigms in the measurement of factor shares are necessary for making comprehensive analysis about the aggregate economic framework. This presumption can also be generalized for the measurement of the capital share, instead of the labor share.

One of the most important research about the methodological methods for the estimation of the labor share of income is done by Guerriero (2012). In her research, Guerriero (2012) categorizes different estimation methods for the labor share of income by focusing on a large-scale of literature about this issue. Indeed, all of these estimation methods show that the labor share of income accruing in aggregate national income has different kinds of sources and components. In other words, each estimation method points to the dynamic structure of the labor share of income. Additionally, all of these estimation methods focusing on the labor share exhibit an appropriate theoretical and analytical frameworks for micro-level, firm-level, and macro-level analyses.

Essentially, the share of any income group accruing from the aggregate national income as a result of the production process can be defined as the "income share". Hence, total revenues of labor are included in the labor share of income. However, the capital share is treated as residual in most instances. Although the macro-level determinants have critical importance in the theoretical framework, it incorporates the micro-level components for the firm-level estimations (Ryan, 1996; Wolff and Zacharias, 2007). Therefore, depending to the aggregate macro-level dataset, as Lübker (2007) states that the labor share indicates how much of national income is obtained by labors. In this sense, the basic question is how do we measure the labor share of income accruing in aggregate national income?

First of all, Krueger (1999) investigates the differences in the measurement methods of the labor share of income both in conceptual and practical frameworks. In this context, the decomposition of labor compensation can be evaluated in two distinct categories: (1) raw labor and (2) human capital. However, as Kruger (1999) rightfully argues that the labor compensation can have different kinds of income components. Therefore, it is not straightforward to aggregate different components of labor income into some categorical scheme. For instance, one type of income component of the production can be a labor income in any production process. On the other hand, in any other production process and in different economic structure, it may be treated as a capital income. Thus, Krueger (1999: 10) states that one-by-one distinction between the shares of capital and labor as mutually exclusive categories is no longer a smooth way issue. This argument is also meant that the class-based analyses have different kinds of economic and social dimensions, especially in the context of the distributional issues between capital and labor. If the labor share of income is restricted with only one type of structural framework, it may create biased assumptions for class-based analyses.

Secondly, if income categories change for labor and capital, depending on the economic relations, what are the fundamentals of labor share differing from the capital share? Some of the empirical investigations show that the labor share of income is measured by the compensation of employees as a share of aggregate national income. Exerting the compensation of employees as a unit of measurement for the labor share of income has many advantages in practical dimensions. For instance, the compensation of employees is included the non-wage compensation income categories. Some of these non-wage compensation income categories include commissions, bonuses, tips, allowances for families, contributions to social security programmes for employers and pension schemes (Guerriero, 2012: 5).

Although the compensation of employees includes the non-wage incomes in addition to wages and salaries, it is not completely useful for the estimation of the labor share of income because of the lack of self-employment parameter. For instance, Krueger (1999) and Gollin (2002) basically focus on the inclusion of self-employment revenues into the measurement methods of the labor share of income. According to their arguments, the labor share of income will be much lower than their actual level when the income of the corporate workers is treated alone in the estimation method. In other words, in addition to the payments for corporate workers, the other types of income categories should be included into the analysis on the basis of their roles in the production process. If it is not included then the level of capital income will be much higher relative to its original level because some income categories of labor will be treated as capital income. As Gollin (2002: 459) states that most of the empirical studies are incorrectly considered the labor income of the self-employed as capital income. Additionally, when the labor income shares are adjusted from the capital income shares, the large differences in income shares between rich and poor countries reduce to a much smaller ones (Gollin, 2002: 459).

The distinction between rich and poor countries have critical importance in the consideration of the income categories because the amount of self-employed workers are so high in some countries, especially in the group of developing countries. Therefore, the exclusion of the self-employed workers and household labor from the empirical analysis makes the labor share of income much lower. Guerriero (2012: 5) points out that self-employment includes both the emerging entrepreneurship, business start-up, marginal employment, and disguised unemployment.

According to Gomme and Rupert (2004), the measurement methods for the labor share of income have different dimensions either for gross value added parameter (which includes compensation of employees, corporate profits, rental income, net interest income, proprietors' income, indirect taxes less subsidies and depreciation) or for the compensation of employees parameter[82]. All in all, the following six types of labor share measurements describe the changes in measurement methods, depending on the historical changes of income units, in detail[83].

First, the most preferred measurement method for the labor share of income (LS1) is described as follows. This method can also be called as an unadjusted labor share because it does not include the mixed income parameter. Therefore, it is often criticized based on its underestimated results due to the exclusion of mixed-income category from the analysis (Krueger, 1999; Gollin, 2002; Guerriero, 2012).

---

[82] However, in this case, the limitation on data should be kept in mind because for each country (especially for non-OECD countries), the data on labor share of income is not available in case of all these six measurement methods.
[83] All these six different types of methods of the measurement of labor's share are gathered from the study of Guerriero (2012).

$$LS1(unadjusted) = \frac{Compensation\ of\ Employees}{Value\ Added(-Indirect\ Taxes - Fixed\ Capital)}$$

Depending on this measurement method, it is necessary to focus on two types of indicators in the denominator. First, the indirect taxes are subtracted from the gross value added[84] in the analysis to obtain factor costs. In other words, the aggregate income transforms into factor costs by this simple mathematical adjustment. In this sense, the analytical assumptions of Glyn (2009) are much comprehensive depending to the fact that the indirect taxes are not comprised any kind of property or capital returns, and cannot be treated as non-labor income and thus they are subtracted from the general formula but subsidies are not (Guerriero, 2012: 6). Additionally, the method of Kuznets (1959) is applied in the second step. In order to get a net measure for value added, the consumption of fixed capital is subtracted from the denominator. As a result, the net value added indicator is obtained by the exclusion of these two measures from the denominator (please see Rodrik, 1997; Diwan, 2001; Daudey and Garcia-Penalosa, 2007; Jayadev, 2007).

The second measurement method depends on the theoretical framework of Johnson (1954). According to Johnson (1954), two-thirds of the self-employment income should be calculated as labor income and one-third of this as capital income. In this measurement method, the capital is regarded as residual because the estimation is basically initiated from the labor income. However, the major problem in the context of Johnson's (1954) method is the generalization of the two-thirds of the self-employment income for all periods and estimation units. However, it is not possible to treat as same for all countries from developing and underdeveloped country groups having different labor force structures and modes of production. The theoretical underpinnings of this method are similar to the Cobb-Douglas production function. Therefore, the possibilities through the changing characteristics of the shares of incomes between labor and capital should be considered in the analysis, depending on the economic structures.

$$LS2 = \frac{Compensation\ of\ Employess + \frac{2}{3}Mixed\ Income}{Value\ Added(-Indirect\ Taxes - Fixed\ Capital)}$$

The third measurement method is regarded the total amount of mixed income[85] as a self-employment income and thereby is treated as the labor share of income. As Gollin (2002: 468) states that all the operating surplus of private unincorporated enterprises (OSPUE) are treated as labor income. As a result, this adjustment causes to an overestimation of the labor share of income. In some businesses, self-employed workers may have a substantial amount of capital even in the case of developing countries.

$$LS3 = \frac{Compensation\ of\ Employees + Mixed\ Income}{Value\ Added(-Indirect\ Taxes - Fixed\ Capital)}$$

In the fourth measurement method, the self-employment indicator is totally adjusted from the net value added (Atkinson, 1975). In other words, the mixed income is considered as the same combination of labor income and capital income as the rest of the economy (Gollin, 2002: 468).

---

[84] Value added in these categories depicts the gross value added. The subtraction of indirect taxes and fixed capital from the value added gives net value added.

[85] Mixed income includes self-employment income and capital income.

Thus, both income shares of labor and capital are approximately the same in private unincorporated enterprises, in large corporations, or in the government sector (Gollin, 2002: 468). However, the basic problem in this adjustment depends on the fact that it treats all economic units as homogeneous. However, these units can be divided into different parts: (1) the employment structure; (2) the production system; (3) capital/labor ratio; (4) the scale of production; (5) the type of management; (6) its size in the market; and (7) the income structure. Although this adjustment method has its own deficiencies, it is structured on much robust framework relative to the LS3 method which is treated the incomes of the self-employed workers as mixed income. The advantage of this fourth adjustment method depends on the fact that the mixed-income also includes the capital income as well as the labor income. This adjustment method provides to get rid of this problem emerged in LS3.

$$LS4 = \frac{Compensation\ of\ Employees}{Value\ Added(-Indirect\ Taxes - Fixed\ Capital) - Mixed\ Income}$$

Although, all these three adjustment methods (LS2, LS3, and LS4) have their own methodological underpinnings, they have some limits on the investigation of the practical phenomena and therefore need more data on self-employment income (Guerriero, 2012: 8). Essentially, it is possible to obtain the self-employment data from United Nations (UN) National Account Statistics. The series can be found in two categories as mixed income and OSPUE income. Each category involves the average income of the self-employed workers. The limitation emerges at this point. Although the data on self-employment income is available on the average term, it is not possible to obtain this data for each state and region. For some countries, especially for DCs, the mixed income is created as either in gross term or in net term. However, for other countries, especially for the underdeveloped countries, the data is not available.

All these data deficiencies in mixed-income[86] and OSPUE were tired to be overcome by two kinds of new estimation methods developed by Gollin (2002) and Guerriero (2012). Especially, Gollin's (2002) adjustment is significant for the measurement of the labor share because the data deficiency problem for mixed income or OSPUE can be ceased by using data on the workforce. In other words, according to Gollin (2002), the new kind of adjustment technique can be considered for the estimation of the labor share of income by using this data because the data on workforce composition is available for many countries. If the data on workforce composition is available, the average composition of employees can be measured by dividing the number of employees to the compensation of employees. And then, the average compensation employees is multiplied by the total number of workforce in order to adjust this average to a total number of workforce. All in all, this new adjustment method can be figured out as follows:

$$LS5 = \frac{\frac{Compensation\ of\ Emplooyees * Total\ Workforce}{Number\ of\ Employees}}{Value\ Added\ (-Indirect\ Taxes - Fixed\ Capital)}$$

---

[86] For more information on availability for mixed income all around the world economies please see Appendix C of the study of Guerriero (2012).

According to Gollin (2002: 469), the most important advantage of this adjustment depends on the fact that it provides an additional information for measuring the labor share of income in an aggregate economy even if there are problems in obtaining data for OSPUE; therefore, the analysis can consider the share of self-employed people in different countries. This measurement is also advantageous because it assumes that the employees earn average wages even if they are self-employed or work in informal sectors. However, in this case, the basic problem depends on the exclusion of the comparison of earnings ability for self-employed workers and other formal sector employees. Therefore, the labor share can be higher than 1.0 point which means that there is a methodological issue in the estimation procedure.

In addition to these arguments, Guerriero (2012) makes different kinds of arguments about the pros and cons of Gollin's measurement methods. For the case of pros, in countries where the amount of self-employed workers is high, the results are much robust and consistent for the actual value of the labor share of income. Additionally, the analysis framework for labor share can be extended into much larger extents within the frame of the availability of the data for the composition of the workforce for different countries and time periods. On the other hand, for the case of cons, the analysis of the labor share needs more far-reaching micro-data set, and also it does not consider the qualitative differences between employees and the self-employed workers. As a result, depending to these pros and cons, the labor share of income may result in much higher values than their actual values in this adjustment method.

Finally, Guerriero (2012) introduces a new kind of adjustment method, depending on the same methodological framework proposed in LS5. However, the distinguishing feature of this new adjustment method depends on the fact that it totally removes the incomes earned by the employers. Similar to LS5, the LS6 is also founded on the same theoretical assumption that all self-employed workers earn the equal amount of average wages of employees, however, with one exception that they are not classified as "employers". In this sense, the LS6 can be figured out as follows:

$$LS6 = \frac{\frac{Compensation\ of\ Employees}{Number\ of\ Employees} * (Total\ Workforce - Employers)}{Value\ Added(-Indirect\ Taxes - Fixed\ Capital)}$$

Guerriero (2012) specifies the characteristics of this adjustment method through the labor income in which both employee and employer get at the end of the production process. The adjusted workforce composition from employers yields much robust estimation results because the amount that they receive as a labor income is very small *vis-à-vis* to the total income of employees even though the employers have some labor income. Additionally, the estimation results, based on the adjusted composition of the workforce from the employers, may solve the overestimation problem of Gollin's adjustment method. However, it still maintains the disadvantages peculiar to the measurement method of Gollin (2002). Especially, the difference in earnings ability between self-employed workers and employees are still ignored in this new adjustment method. Furthermore, it does not include the quality differences of workforce between these two kinds of labor-power.

As a result, all these adjustment methods (LS1-LS6) are at least differentiated in a methodological framework from each other. The literature does not have any common adjustment method for the estimation of the labor share of income within the frame of functional income distribution issue. On the one hand, it stimulates to the emergence of different kinds of

new assumptions, arguments, and theoretical perspectives about the components of income distribution. Thus, we can understand different dimensions of the changes in socio-economic and cultural phenomena among countries. On the other hand, it may create limits on the understanding of the distributional dynamics for class-based analyses. As Atkinson (2009: 15) states that the aggregate analysis of distribution requires to focus on both profits and the wages of heterogeneous workers in theory. Therefore, growth theory, macroeconomics, and labor economics are all the combinations of that framework (Atkinson, 2009: 15).

5.5 Two Basic Models for the Determination of the Labor Share of Income

Capital mobility may affect the bargaining positions of labor and capital either by direct or indirect ways. In order to assess the changing position of the bargaining between capital and labor, the factor-prices (i.e., wage rate and profit rate) among classes all should be considered. Therefore, both variables related to factor prices may have either negative or positive effects on the fallback options of labor and capital. It almost depends on the structure of the power relations in a given capitalist mode of production between two classes, namely the capital and labor.

In this case, the extended version of the wage bargaining model of Jayadev (2007) developed from Mezzetti and Dinopoulos's (1991) model will provide important clues and theoretical backgrounds on the bargaining position of capital and labor, depending on the changing factor prices, basically by taking into account of the degree of capital account openness. In this model, however, the theoretical discussions do not focus on the level of financial development. Instead, it makes a simple assumption based on the degree of capital account openness and the factor shares within the frame of the bargaining positions of two classes. In the next sub-section 5.5.2, the model will also consider the effects on the financial development parameter.

All in all, in this extended wage bargaining model of Jayadev (2007), the theoretical point will focus on to show the effects of the liberalization of capital account and the financial development on bargaining positions of capital and labor by taking into account of labor share in aggregate national income. Therefore, other measures will be remained unchecked (e.g., trade openness, government activity, investment level, technological progress, globalization and macroeconomic and structural indicators). Hence, this model depicts the very simple structure between the labor share of income and the capital account openness and financial development. However, it is also useful to understand the theoretical background without considering other measures.

5.5.1 A Wage-Bargaining Model[87]

Essentially, Mezzetti and Dinopoulos (1991) use the efficient bargaining model. In this model, the firms and unions have its own power to jointly bargain over the employment and wage level. Mezzetti and Dinopoulos (1991) provide very simple and linear, one factor, production function for firms:

$$F(L) = L \tag{1}$$

---

[87] This sub-section is basically the replication of the Jayadev's (2007) model developed in his study.

Capital has not an economic role in their theoretical framework. Hence, the capital mobility depends on and thereby is equivalent to two functions: (1) firm mobility and (2) firm's ability to relocate production abroad.

In this model, the competition structure does not perform a perfect manner. Instead, firms compete with each other in the imperfect market conditions. Thus, the revenue function and the profit function exhibit a different context in this imperfect competitive market structure compared to the perfectly competitive market structure, which can be presented as follows:

$$R = P(L) * L \tag{2}$$

and

$$\pi = P(L) * L - wL \tag{3}$$

R is the revenue, π is the profit, $P(L)$ is an inverse demand function, L is the total amount of labor, and w is the wage rate.

Following these two basic functions, the bargaining problem over wage level and employment level can be constructed on the behaviors of unions and firms. The problem emerges due to the dissolution of the negotiations; therefore, firms begin to find ways to relocate their production abroad in order to increase their profit rates.

The important thing in this setup can be put forward as follows: firms have more opportunities to relocate their production abroad in line with more liberalized capital account, by using their threatening option on unions and the labor force. This relocation option of production abroad may not only emerge in real investments such that the construction of new buildings, factories or new types of machinery. Instead, foreign portfolio investments may also lead to the outflowing of funds of firms from domestic country to foreign country. The liberalization process in both trade regime and financial sector, and also the extension of the economic transactions among nations will stimulate an increase in the integration of domestic labor-power around all capitalist and non-capitalists systems. Thus, the removal of barriers on capital and of the controls on capital flows may cause to shift of productions into foreign countries where the wage labor is cheap. That is the basic factor in which the bargaining power reduces between two classes in favor of capital and thereby reduces the power of all wage setters, especially the unions. In this case, the plausible outcome of this process will result in an increase in profit/wage ratio.

Suppose that the return from relocating their production abroad is equal to the amount of p. However, if there are controls on capital flows in the domestic country, foreign country or both, the return from relocating the production abroad is reduced representing by the decline in p. Melkumian (2009: 68) summarizes this process by focusing on the general outcomes of Mezzetti and Dinopoulos's (1991) model by stating that the shift of production abroad as a critical threat option of capital increases domestic profits and lowers the negotiated wage. The limit of profits, or, in other words, the threating option of profit rates to relocating production abroad can be shown as in equation (4):

$$\pi = P(L) * L - wL - \phi p \tag{4}$$

Depending on equation (4), the capital mobility parameter is represented by ϕ where ϕ is bounded in the interval. Hence, the fallback option of the firm is stated as ϕp. This is the firm

profit function in the presence of a threat to shift production abroad. If the actual profit rate is below the expected profit rate due to the negotiated wage level on the employment level, the firm may outsource its production to abroad. While firms focus on the profit rates, the unions only care about the employment level and wage level. Therefore, there should be the utility function in the model under the threaten option of the firm besides the profit function of the firm. In this sense, the utility function, in this setup, can be represented by the following equation (5):

$$U(w, L) = L^{\Upsilon} * (w - w_c)^{\theta} \tag{5}$$

In this equation (5), w is the negotiated wage, w_c is the fallback wage, Υ and Θ are the measures of the weight in which the union places on employment level and on wage level, respectively.

By taking into account of these equations (4) and (5), and their theoretical framework, consider now that the exogenously given bargaining power of the union (or alternatively, the relative bargaining power of the union) is represented by the parameter α. Thus, the model is reached to the generalized Nash problem (the corresponding power of the firm is $(1-\alpha)$, $\alpha[0,1]$) in the following equation (6):

$$\Omega = [P(L) * L - wL - \phi p]^{1-\alpha}[L^{\Upsilon} * (w - w_c)^{\theta}]^{\alpha} \tag{6}$$

The first order conditions with respect to w and L can be shown as follows:

$$\Omega_w = 0 \Leftrightarrow \alpha\theta[P(L) * L - wL - \phi p] = (1 - \alpha) * [L * (w - w_c)] \tag{7}$$

and

$$\Omega_L = 0 \Leftrightarrow \alpha\gamma[P(L) * L - wL - \phi p] = (1 - \alpha) * [w - (P + P_L P)] \tag{8}$$

to maximize,

$$Max_{w,L}\{u^{\alpha}\pi^{1-\alpha}\} = Max\{[(w - w_c)^{\alpha} * L]^{\alpha}\pi^{1-\alpha}\}; \quad 0 < \alpha < 1 \tag{9}$$

By rearranging two equations, namely (7) and (8), and also by taking into account of maximization point, the Nash bargaining framework is produced in the following equation (10):

$$W = \lambda P + (1 - \lambda) * (P + P_L P) - \frac{\lambda\phi p}{L} \tag{10}$$

where $\lambda = (\alpha\gamma)/(1 - \alpha + \alpha\gamma)$.

This derived equation (10) of Nash bargaining position gives two striking results:

(1) If the firms has a higher bargaining power over unions, the wage level will be come closer to the inverse demand function.

(2) If the firm has a lower bargaining power over unions, the wage level will be come closer to the marginal revenue curve.

In this framework, the labor share of income in the firm is represented by wL/PL = w/P. In other words, w/P shows the real wage ratio. If we denote w/P as S, we obtain:

$$W = \frac{\lambda P}{P} + (1 - \lambda) * \frac{(P + P_L L)}{P} - \frac{\lambda \phi p}{PL} \tag{11}$$

which refers that

$$S_\phi = \frac{-\lambda P}{PL} < 0 \tag{12}$$

S_ϕ implies that an increase in capital mobility following the liberalization of capital account creates a decrease in the labor share of income *vis-à-vis* to capital share. In other words, the fallback option of capital develops with the increased openness in the capital account. Thus, by removing the restrictions on capital flows, wage-profit ratio starts to decrease in favor of capital and thereby deteriorates the negotiated wage level with a credible threat of the firm to shift production abroad.

All in all, in addition to this adjusted wage-bargaining power model of Jayadev (2007) from the Cournot duopoly model for a unionized domestic and foreign firms developed by Mezzetti and Dinopoulos (1991), there are also other types of wage-bargaining models based on different kinds of frameworks, in which the relationship between labor and capital can be derived within the frame of capital mobility (Pencavel, 1984; MaCurdy and Pencavel, 1986; Bandyopadhyay and Bandyopadhyay, 1999; Harrison, 2005).

However, one of the most important deficiencies of our model and the others depends on the fact that they do not include the financial development parameter. Therefore, I will develop this wage-bargaining model with the financial development parameter. The following sub-section investigates the extended framework of the wage-bargaining model with the financial development parameter.

5.5.2 Extension to Wage-Bargaining Model: Adding Financial Development[88]

In this new model, I extent the simple efficient bargaining model of Mezzetti and Dinopoulos (1991) which is redeveloped in Jayadev's (2007) paper, by introducing the financial development parameter. Therefore, all assumptions and propositions given in the wage-bargaining model presented in the previous section still prevail.

Essentially, both firms and unions have their own powers to affect and bargain over employment and wage level. Hence the model keeps the democratic process in all markets. However, different from the previous model, the production function for firms now includes three factors which is linear but not simple as depicted in equation (1):

$$Y = f\left(\underset{(+)}{K}, \underset{(+)}{L}, \underset{(+)}{FD}\right) \tag{1}$$

As seen in equation (1), capital plays an important economic role in producing total output. It means that the economic activities are now changed by the behaviors of capital and labor.

However, the functions of capital mobility does not change and comprises of two factors: (1) firm mobility and (2) relocation ability of production abroad of firm.

Although the markets follow the democratic process in bargaining process, the competition structure may change through an imperfect framework. In this sense, the revenue function and the profit function can be presented in equation (2) and equation (3) as follows, respectively:

$$R = P(L)L + rK \tag{2}$$

and

$$\pi = PY - wL - rK \tag{3}$$

where $r = r\left(\underset{(+)}{\phi\rho}\right) > 0$

r shows the fallback position of the firm including both capital mobility option, parameterized by ϕ which is bounded in the interval, and the level of return from relocating production, which is equal to ρ. In this sense, r can also be called as the outside profit opportunities parameter. If the negotiation between the firm and union collapses, then the firm relocates its production abroad where there are more profit opportunities. However, the limit of the relocation of production is based on the presence of capital controls. If the level of capital control is higher in the foreign country compared to the home country, the relocating of domestic firm production abroad may not be profitable, or vice versa. Additionally, in equation (2) and equation (3), R denotes the revenue, π is the level of profit (or alternatively, the threat point of the firm against the unions), $P(L)$ is an inverse demand function, L is the total amount of capital, K is the total amount of capital, w is the wage rate, and r is the outside profit opportunities.

However, the major difference of this model from the previous model is the introduction of the financial development parameter in the profit function of the firm. Therefore, renewed profit function with the financial development parameter can be represented by the following equation (4):

$$\pi = Pf(K, L, FD) - wL - rK \tag{4}$$

or implicitly,

$$\pi = [P(L)L * FD] - wL - rK \tag{5}$$

Although the firm only aims to maximize its profit function, the unions care about the level of employment and wage ratios. Therefore, similar to the profit function of the firm, the union has the utility function comprising of the level of wage and employment. The equation (6) represents the utility function of the unions in the presence of the threat option of the firm:

$$u(\omega, L) = L^{\curlyvee}(w - w_c)^{\theta} \tag{6}$$

where w denotes the negotiated wage, w_c denotes the fallback wage, $\curlyvee$ and θ are the measures of the weights in which the union imposes on the level of employment and the level of wage, respectively.

In the case of profit function of the firm and the utility function of the union, as depicted in equation (5) and equation (6), respectively; equation (7) focuses on the relative bargaining power of the union. α denotes the bargaining power of the union over firm, which is given exogenously. In that framework, the generalized Nash problem[89] can be represented in equation (7) as follows:

$$\Omega = [PY - wL - rK]^{1-\alpha}\left[L^{\gamma}(w - w_c)^{\theta}\right]^{\alpha} \tag{7}$$

where A $= \left[L^{\gamma}(w - w_c)^{\theta}\right]^{\alpha}$ and B $= [PY - wL - rK]^{1-\alpha}$

The first order conditions of equation (7) with respect to w and L is represented in equation (8) and equation (9), respectively, as follows:

$$\frac{\partial \Omega}{\partial w} = [(-L) * (1 - \alpha) * (B) * (A)] + \left[(B) * \alpha(\theta. \alpha. L^{\gamma}. (w - w_c)^{\theta\alpha-1})\right] \tag{8}$$

and

$$\frac{\partial \Omega}{\partial L} = (-w) * (1 - \alpha) * (B) * (A) + (B) * \alpha[\theta\alpha L^{\gamma}(w - w_c)^{\theta\alpha-1}] \tag{9}$$

The generalization of the equation (8) and equation (9) can be easily represented in equation (10) for w and in equation (11) for L as follows:

$$\Omega_w = 0 \Leftrightarrow \alpha\theta[P(L)L * FD - wL - rK] = (1 - \alpha) * [L(w - w_c)] \tag{10}$$

and

$$\Omega_L = 0 \Leftrightarrow \alpha\gamma[P(L)L * FD - wL - rK] = (1 - \alpha) * [L(w - (P + P_L L)] \tag{11}$$

to maximize,

$$Max_{w,L}\{u^{\alpha} * \pi^{1-\alpha}\} = Max\{[(w - w_c)^{\alpha} * L]^{\alpha} * \pi^{1-\alpha}\}^{[90]} \tag{12}$$

In the context of the profit maximization point and derived functions of w and L, the following Nash bargaining framework is produced in equation (13):

$$\dot{w} = \left[\lambda * P * FD + (1 - \lambda) * FD * (P + P_L L) - \frac{\lambda rK}{L}\right] \tag{13}$$

or implicitly,

$$\dot{w} = FD * \left[\lambda P + (1 - \lambda) * (P + P_L L) - \frac{\lambda rK}{L}\right] \tag{14}$$

where $\lambda = \frac{\alpha\gamma}{1-\alpha+\alpha\gamma}$

---

[89] The corresponding power of the firm is (1-α), α[0,1].
[90] α is between 0 and 1.

In $\dot{w}$ function, λP denotes the inverse demand function, $(P + P_L L)$ is the marginal revenue, and $(\lambda r K / L)$ is the bargaining power of the capital.

In the context of the Nash bargaining position which is implicitly presented in equation (14), two major results can be derived as mentioned in the wage-bargaining model presented in the previous section 5.5.1. Additionally, equation (14) provides one more outcome about the general framework for the bargaining positions of firm and union in the presence of the financial development. These critical three outcomes can be listed as follows:

(1) If the bargaining power of firm over union is higher, the wage level converges to the inverse demand function.

(2) If the bargaining power of firm over union is lower, the wage level converges to the marginal revenue curve.

(3) If financial development is higher, the distributional outcomes will favor capital or labor, depending on the bargaining positions of two classes.

Although the profit share is implicitly determined in equation (5), the labor share of income is based on the following equation (15):

$$\frac{wL}{PL} = \frac{w}{P} \tag{15}$$

w/P shows the real wage rate. If the labor share of income (S) is denoted by the real wage, the following equation (16) is obtained in the presence of financial development as follows:

$$S = FD * \left(\frac{wL}{PL}\right) = FD * \left(\frac{w}{P}\right) \tag{16}$$

or implicitly,

$$S = \frac{1}{FD} * \left[\frac{\lambda P}{P} + (1 - \lambda) * \frac{P + P_L L}{P} - \frac{\lambda r K}{LP}\right] \tag{17}$$

The labor share of income equation (17) provides three critical outcomes in order to understand the distributional changes between the capital and labor in the presence of financial development.

First, equation (18) shows that the labor share of income is negatively related to the financial openness. S_ϕ implies that the increasing level of capital mobility in the presence of an increasing scale of liberalization process in financial sector decreases the labor share in favor of the capital share. This result shows that the fallback position of capital is increased in parallel to an increase in the capital mobility. In other words, if the other conditions are given, the higher the openness in capital account, the lower the labor share of income. The major factor behind this decline in the labor share depends on the threat option of the firm's ability to shift its production to abroad. If the bargaining position of the labor is low, the capital can easily reduce the negotiated wage level. If the union challenges to the wage reduction, then firm possibly allocates its resources to abroad. Therefore, the bargaining position is the critical factor in this case.

$$S_\phi = \frac{\partial S}{\partial \phi} = \frac{1}{FD} = \left[\frac{-\lambda r_\phi K}{LP}\right] < 0 \tag{18}$$

Second, the same arguments can be made for the financial development parameter in a given conditions of the socio-economic framework. The more developed financial sector without providing accurate policies in favor of the labor, the lower the labor share of income, as presented in equation (19) as follows:

$$S_{FD} = \frac{-1}{FD^2} * \frac{w}{P * FD} < 0 \tag{19}$$

Third, the extended version of the wage-bargaining model shows that the interaction term of both financial development and the capital account openness has a positive effect on the labor share of income. In other works, the higher capital account openness by simultaneously making accurate policies for higher financial development means higher labor share of income as representing in equation (20):

$$S_{\phi,FD} = \frac{-1}{FD^2} * \left[\frac{-\lambda r_\phi K}{LP}\right] > 0 \tag{20}$$

All in all, the last three equations, (18), (19), and (20), provide critical theoretical insights for further investigations and the following empirical analysis which will be regressed in Part 6. The following section examines the factors behind those theoretical propositions.

5.6 Factors Affecting the Labor's Share in the Neoliberal Era

As the section 5.4 shows that the changes in the distributional dynamics, depending on the capitalist transformations in socio-economic framework all over the world, have created different kinds of estimation methods for the labor share of income. The basic points of these methods of measurements depend on their dynamic structures within the economic and social systems of different countries. It means that each country may develop its own estimation method in an attempt to examine the changes in the labor's share. However, this does not mean that the common method for estimation towards the labor share of income does not possible to establish for all country groups. Instead, the determination of the reasons behind the changing share of labor's income and thereby the investigation of these factors under the conditions peculiar to that period may lead to the creation of a common method for the estimation of labor share of income. This is only possible by making comprehensive analysis about the components of labor under the current period conditions.

Thus, in this section, I will focus on some major factors which are effective on the labor share of income, depending on the policies of the neoliberal era; and then, I will summarize the main characteristics of these factors. However, having said that, the average effects of each factor on the socio-economic and political structure may change among countries. Therefore, this may need much more attention to different kinds of components subject to the conditions of each country. Although these different kinds of characteristics may lead to the emergence of country-specific components in the neoliberal period, the basic features of these period on the basis of changes of the labor share can be generalized into four topics as follows: (1) globalization; (2)

skill-biased technological change; (3) labor market and product market policies; and (4) privatization policies[91].

First, in the opening sub-section 5.6.1, different kinds of perspectives on globalization and thereby the changes occurring in the labor's share will be investigated within the frame of the theoretical structures of thoughts from several schools. In this sense, there are two types of globalization dynamics. One of them is about the effects of more liberalized trade regimes on the labor's share and the other is about the changes in the composition of labor led by financial globalization. Especially, depending on more globalized financial relations, both of the sectoral dimensions and behavioral patterns of labor as a consumer may change in the neoliberal era. It is possible to argue that the transformation of trade regime under the guidance of changing global dynamics may create economic and social changes in the context of international relations and thereby the ability of labor. More specifically, increasing scale of trade relations in international era towards the globalization policies have resulted in the increase of incentives for the use of high-tech production systems and increases for the use of high-skilled workers in each production system. These two factors are comprised the building blocks of the globalization phenomenon in the neoliberal period.

Second, the technology-led production systems are the leading components of the neoliberal economic framework. Thus, technological developments were imposed the skilled-biased labor-power to participate in the production system. Additionally, increasing scale of competition and the expansion of global supply chains all stimulated the use of capital-augmenting technological progress rather than the labor-augmenting technological developments. Therefore, the production system was basically formed on production systems led by high-tech capital formations which were promoted to employ much more high-skilled workers.

Third, although the neoliberal period has changed the composition of labor, it exerted to accommodate this change by adding new kinds of policy tools into the legal structure. Therefore, it is necessary to determine these policies to understand the factors which are effective on the factor shares. In addition to the changes in labor market policies, there were also changes in the product market policies. One of the most important reasons for these changes depends on the increasing scale of mergers and acquisition in line with the increasing level of competition and the scale of monopolization in the market system. The basic factor behind the monopolization depends on the raising motives towards the concentration and centralization of capital in the neoliberal period[92]. It means that the changes in both labor markets and the product markets are mutually affected each other.

Finally, one of the most important phases of neoliberal-led policy transformation is the removal of the restrictions on the sale of state-owned enterprises to the private capital. In the neoliberal period, the extension of privatization policies into the economic, social, and political spheres become wide-spread for each country. Therefore, this case has significantly differentiated the distributional issues between labor and capital in many aspects and thus has changed in favor of capital. For instance, the laying off workers under the policies for a boost in efficiency and the increasing imposition of performance system to their workers were some of the policies that the privatized firms and institutions have used in the market system in the neoliberal period.

---

[91] As stated in footnote 77, the financialization factor can be added into these four categories. For detailed information please see section 3.3.
[92] For a detailed information on concentration and centralization of capital, especially in advanced economies, please see Dumenil and Levy (2004a, 2004b, 2009, 2011).

Indeed, the privatization policies have many dimensions, not just in domestic level, but also in the international level within the frame of the globalized economic system. Therefore, the firms and institutions subject to the privatization process do not transform only by domestic capital. Instead, especially in developing countries, the firms and institutions are also substantially scrutinized by international capital. One of the most important outcomes of that process is the downward pressure on the value of labor-power in line with the increasing level of competition in the labor market. The reason for this downward pressure can be easily seen in an increasing level of competition between domestic and international labors. If the international firm buy the domestic firm or institution in the market, this firm may change the production units of the acquired firm and/or institution according to its own composition of labors. Also, the firm may want to employ skilled workers of the domestic country and to use advanced technological instruments in the production. This situation may lead to an increase in the capital share accruing in aggregate national income by creating downward pressure on wages in line with an increase in the reserve army of labor in the domestic market.

5.6.1 Globalization

The globalization phenomenon is one of the most crucial factors which is overemphasized by the neoliberal agenda. Therefore, the investigation of the facts on globalization needs multi-dimensional perspective, especially for the labor share. For instance, the decreasing trend in the labor share of income from the very beginning of the neoliberal period can be investigated into two parts as follows: (1) the increasing degree of openness to trade and (2) the globalized financial relations.

The globalization, as a concept, does not have any common interpretation in the literature similar to the financialization. As Subaşat (2015: 2) states that the globalization has not a definite explanation and a consistent theoretical basis instead of its common use in practical and theoretical cases, except from its tendency on economic activities to spread beyond national borders.

The point to be noted that the globalization has a large extent descriptions even in this uncertain agreement about its common interpretation. The literature on globalization has expanded and flourished by different perspectives both from pro- and anti-globalization scholars or activists. Therefore, it is not possible to evaluate the globalization phenomenon in one dimension or specific scientific category.

The globalization phenomenon includes different dimensions and perspectives, especially in the economic framework. It contains both market-based and non-market-based categories. Therefore, in this large context, globalization is an extension of the development process that is mostly expressed as a potential factor of financial income distribution (Dünhaupt, 2013: 16). This far-reaching description can be understood by the coherent presumption of Otsubo (1996: 1) which indicates that the globalization is the integration of the world economies in terms of production, distribution, and the use of goods and services. In other words, depending on these large scaled conceptions, it is possible to argue that there are different kinds of factors related to globalization which are very effective on the distributional practices. One of these factors is an increasing degree of openness in trade regime and the other is an increasing degree of financial openness.

First, the theoretical arguments for trade openness are basically founded in Heckscher ([1919] 1949) and Ohlin (1933) within the frame of globalization. According to their traditional trade

theory, the removal of restrictions and limitations on trade regime and the expansion of global trade chains always include the possibility of the emergence of winners and losers in the economic activities. However, this possibility does not mean that the economic actors will gain or loss at the end of transactions in absolute terms. Instead, the trade relations have equilibrium effects in the global scale. In other words, these economic relations, based on trade regime, are depicted as a balancing mechanism for distributional problems among economic agents. Thus, winners and losers emerge under the guidance of this balancing process.

Based on Heckscher-Ohlin model, each country has its own factor endowments. Therefore, tradable goods include different amounts of factor endowments. This amount also shows that in which factor the country has abundant or intensive. For instance, if the country has more abundant in capital, then this country has a comparative advantage on capital-abundant goods. Hence, the countries specialize in the production of goods in which they have a comparative advantage on these goods. As Krugman and Obstfeld (2009: 64) argue that an economy will tend to produce goods with which the country is relatively abundant in the factors in producing of these goods. So, if the country is relatively capital abundant, it exports the capital-intensive goods. The country exports these capital-intensive goods because it has a comparative advantage on that good. In return for the export of that capital-intensive good, the country imports a labor-abundant good from another country where the labor is abundant in the production of their exported goods. As a result, the mutual advantage of trade create a positive effect on income distribution among factors of production and thereby on economic growth. However, relatively scarce factors are not benefited from this process even though this case creates positive effects on income distribution for abundant factors in consequence of international trade. The major dynamic of the changes in factor earnings depends on the changes in the market prices of tradable goods. The trade changes the relative prices of goods and therefore it leads to the changes in the distribution of income. According to Stolper-Samuelson theory, although trade increases the income of relatively abundant factors, it decreases the return of relatively scarce factors. However, it also composes the basic dynamic for "factor price equalization" among countries. In other words, this equalization process for factor prices removes the price differences among factors even if it creates winner and losers in the economic system. As Dünhaupt (2013: 16) states that the capital and labor is regarded as factors of production in the original model, but the modern versions of this model do not consider labors as homogenous and thus distinguish labors as high-skilled and low-skilled.

In the context of both Heckscher-Ohlin model and Stolper-Samuelson theorem, it is possible to emphasize on the functional income distribution. For instance, for countries where the capital-intensive goods are exported, the labor share of income decreases in favor of capital share. In a theoretical context, according to Stolper-Samuelson theorem, the degree of openness in trade makes an equilibrate effect on the prices of factors both in micro- and macro-levels; but, on the other hand, it also creates a negative effect on the distribution of income among factor shares.

The traditional theory has two kinds of problems in a theoretical framework. First, the whole structure of the model is generalized within the frame of the conditions of DCs. However, the specific conditions of the developing countries should be included into this theoretical framework. Second, the model basically focuses on the amount of capital and labor. Therefore, the structural characteristics of the factors are neglected in the model. Besides the economy-wide investigations, the micro-level analysis and the theoretical context for sectoral decomposition should be also included into the model.

Especially, for the first problem, the report of ILO (2011) reveals an important analytical result. According to this report, in nearly three-quarters of the 69 countries, especially from emerging and developing countries, the share of wages declined until the early 1990s (ILO, 2011: 56). In this case, more specifically, the importance of the increasing amount of the reserve army of labor can be specified in the decline of wage shares. The reasons behind this decline depend on the increase in the global supply chains and the transition of socialist countries to the capitalist market system at the beginning of the 1990s. These two factors create downward pressure on wages, especially in case of their effects on the bargaining power of labor. Thus, in all cases, the composition of trade is negatively affected due to a changing structure of economic activities.

There are also other theoretical and empirical studies on the relationship between trade openness and the labor share of income based on the globalization fact. For instance, Guscina (2006) focuses on the investigation of the effects of technology, openness, and the employment protection on the labor share of income for 18 OECD countries over the 1960-2000 period. According to Guscina (2006), the post-1985 era depicts the post-globalization period in which the productivity gains are the major factors behind the boost in profits. Additionally, changes in labor's share during the preglobalization era are mostly driven by productivity increases and, to a lesser extent, by trade (Guscina, 2006: 16). However, in the post-globalization era, productivity gains and the degree of trade openness have been an equal effects on the changes of the labor share of income (Guscina, 2006: 16). The effects of trade openness on income inequality can be examined by looking at the increasing role of highly skilled workers at the expense of low-skilled workers in the production system, depending on the technological progress. While industrial countries make speculative attacks on skill-intensive goods, they all negatively affect the labor share of income in the context of increasing degree of trade openness.

In addition to the empirical findings of Guscina (2006), Jaumotte, Lall and Papageorgiou (2008) find similar results and hence state that the well-equipped globalization measures show that the inequality increase in both developed and developing countries over the past two decades is largely attributable to the changes in the weight of an effect of the technological change. However, different from the results of Guscina (2006), Jaumotte, Lall and Papageorgiou (2008) argue that the increasing openness in trade offsets the negative impacts of the technological progress on the labor share of income.

According to the IMF's (2007) research for the investigation of the effects of the globalization of labor on the labor share of income, there are various kinds of variables using in the empirical analysis such that the trade price changes, offshoring, and immigration. The theoretical model of IMF (2007: 171-173) states that trade price changes have a small effect on the labor's share. The fundamental reason of that depends on the empirical fact that the decline of export prices limit those negative effects of import prices on the labor share of income, as imports that make from developing economies are labor intensive; on the contrary, labor can benefit from declines in export prices due to the export structure of advanced economies having high capital intensity (IMF, 2007: 171).

In addition to the effects of trade prices, there are also other factors related to an increasing scale of globalization and the degree of trade openness such as (a) the intensity of offshoring; (b) the share of immigrants in the domestic labor force; (c) the share of ICT (information and communication technology) capital in total capital; and (d) the measures of labor market policies. The estimation results of IMF (2007)'s model show that the globalization of labor and technological progress affect the labor share of income in a negative manner; however, the labor

market policies have a positive but nominal effect on the labor share of income. Additionally, each channel of the globalization of labor, such as offshoring and immigration, have a small but negative effect on the labor share.

The empirical outcomes of IMF (2007) are also similar to the arguments of the empirical results of European Commission (2007). The former results show that the increasing degree of openness has a significant effect on the income share of medium-skilled workers; however, there is no significant effect on low- and high-skilled workers. In this case, the increase in the degree of openness may have a downward effect on the labor's share because the negative effect in the share equation of the medium-skilled labors are significant and dominant (European Commission, 2007: 258). On the other hand, the most crucial factor in this setup is the downward pressure effects of increasing openness on the wages thence its negative effects on the bargaining power of labor.

Second, the other major parameter for the openness is related with the financial sector in the neoliberal era, besides the globalization-led openness parameter of trade regime. This financial openness indicator[93] can also be called as the financial globalization parameter. The increasing scale of capital mobility comes into prominence as a distinctive factor of this financial globalization phenomenon. The investigation of the effects of increasing capital mobility on the functional income distribution case can be examined through the changes in the bargaining position between capital and labor. This causal relationship can be depicted as follows. The countries having more open capital account and globalized financial relations for international transactions and markets are much exposed to the negative effects of capital flows. Especially, the developing and emerging market economies refer the center points for international capital in line with their high rates of interests and high degree of openness in their capital accounts. In the theoretical framework, this case creates mutual benefits for both investors and debtors in these countries having more financially open account and high rates of returns. In other words, the investors gain interest income and the debtors get necessary resources for their future investments. However, contrary to the theoretical framework, this concept may create two kinds of critical problems in the practical framework because of two reasons as follows: (1) the increasing threat of capital outflows and (2) the increasing speculative motives. These two phenomena also matter for the changes in functional income distribution between capital and labor.

First, the major characteristic of the inflowing of capital into the country where there is a high rate of interest and the opportunity for making an exchange rates arbitrage is its role of flight out of that country in any risk possibility due to volatility in economic activity. The availability of such risks requires for indebted investors by foreign capital to be on alert. In any case of capital outflows, real investor adopts the strategy of decreasing costs of production in order to keep investment scale stable. Principally, it is obtained by the decrease in the level of employment. In order to maintain their profits and other revenues, the capital pursues on layoff of workers. In such a case, the more the bargaining power of labor, the more resistance to the dismissal of workers. However, if the relative bargaining positions are much favored through the capital than the labor, the workers are led to an increasing competitiveness level in the labor market due to a high rate of unemployment. Therefore, the labor share of income accruing in aggregate national income become much lower in the case of high unemployment rate and low level of bargaining power. In other words, the labor share of income is exposed to a negative

---

[93] Because the financial development process of the neoliberal period is theoretically analyzed in section 3.2.2, in this case, I narrow the topic by focusing on increasing mobility in capital account.

effect in proportion to the level of threat of capital outflows and thus the income share of labor decreases in total national income as equal to that level of threat.

Second, the other point in which the capital mobility can affect the labor share under the globalization phenomenon depends on the fact of increasing amount of speculative-led investments in financial relations imposed by international capital. If the capital inflows adopt in many speculative-led investments than real ones, it creates a pressure on the structure of firms and institutions to employ new kinds of investment strategies affecting mostly on the available workforce. Under the increasing level of competition, the high yield but also high-risk and short-term speculative investments preclude the long-term real investments. The labor-intensive policies transfer into the speculative capital-led policies in economic activity which creates imbalances in labor supply and demand in the global labor market in favor of the international capital. Therefore, the speculative motives towards more short-term and risky investments create increasing pressure on the emergence of reserve army of labor by negatively affecting the supply and demand in the labor markets. Additionally, it makes the sensitivity level of international capital much higher to any kinds of risks emerge in markets in the context of speculative investments. The possibility of international capital to flow out from domestic country increases in case of any risks, depending on the role of speculative investments.

These two phenomena have the power to affect the distributional outcomes in parallel to an increase in the capital mobility within the frame of globalization. For instance, the empirical examinations of Harrison (2005) and Jayadev (2007) give important results about these facts. Harrison (2005) theorizes the bargaining positions of labor and capital for the case of profit maximization over the 1960-1997 period for more than 100 countries, both including developed and developing, in the context of imperfect competition. In the inner structure of this theoretical model, Harrison (2005) compares the relocation costs of capital and labor and then shows that the relocation of capital is more profitable than the relocation of labor. Harrison (2005) also states that the labor share of income is negatively affected in consequence of this strategy of capital. Furthermore, the globalization measures have negative effects on the share of labor income. On the one hand, government intervention and capital controls may affect the labor share of income in a positive manner; on the other hand, rising trade shares, FDI inflows, and the exchange rate crises may decrease the labor share of income. All in all, Harrison (2005) argues that these empirical results show a systematic negative relationship between several parameters of globalization and the labor share of income.

On the other hand, Jayadev (2007) examines the determinants between the capital account openness and the labor share of income. In the context of both the pre-neoliberal and post-neoliberal periods, Jayadev (2007) makes a multi-dimensional investigation about the major determinants on labor's share by including different income groups (high, medium and low) into the analysis. In his theoretical framework, the major factor behind the changes in distributional practices between capital and labor depends on their bargaining positions. Additionally, the major fact behind the changes in the bargaining power is an increasing opportunity for capital relocation to other countries in parallel to the increasing scale of capital mobility of firms and institutions which creates a downward pressure on the labor share of income. In countries having a structure for the capital mobility, the threat of capital mobility creates negative pressure on the wage level. The empirical results are highly significant for almost all specifications, especially for the case developed country groups. In other words, the empirical evidences show that increasing financial openness (i.e., by the threat option of firms) affects the bargaining power of labor in a negative manner; therefore, the labor share of income accruing in aggregate national income decreases in favor of capital share. This result is also

significant and robust for the middle-income countries. However, the results are not significant for low-income countries. All in all, as Jayadev (2007: 437) points out that capital account openness has a crucial importance in the changes of the observed decline in the labor share of income in many countries except for low-income countries over the last two decades.

5.6.2 Skilled-Biased Technological Progress

According to the neoclassical approach, the dynamics of income distribution between labor and capital are basically determined by the parameter related to technological progress and economic growth[94]. Therefore, the neoliberal discussions on income distribution essentially focus on technology-led developments by abstracting from the class-based perspectives. In addition to the role of technological developments in aggregate economic activities, the factor endowments can also be included as an important factor for the neoclassical framework.

Given the production function of the economy, the major factor behind the changes in the structure of income distribution is the rate of elasticity of substitution among factors of production. For instance, when the elasticity of substitution is different from one, the technological development is being either capital-augmenting or labor-augmenting, depending on the production function and factor endowments. Therefore, the crucial thing is to know the rate of elasticity of substitution. However, the effects of technological progress on economic performance are not unique to the neoliberal period, but also they can be generalized to the other periods.

The stability of the distributional structure between capital and labor depends on the elasticity of substitution of these two factors to be in unit characteristic. In other words, in mathematical presumptions, the elasticity of substitution between capital and labor should be equal to one. Therefore, the changes in the income shares of capital and labor accruing in national income occurs only by the changes in the factor endowments and the rate of elasticity of substitution different from one. The changing income share of capital and labor depends on the changing size of elasticity of substitution which is based on the changes in factor endowments. On the one hand, if the elasticity of substitution between capital and labor is smaller than one, the labor share of income increases, depending on the increase in the factor endowments, namely in the capital-to-labor ratio. On the other hand, if the elasticity of substitution between capital and labor is higher than one, the capital share increases, depending on the increase in the capital-to-labor ratio. In such cases, according to the neoclassical framework, the technological progress is capital-augmenting as in the 1980s and 1990s. It means that the productivity of capital will be higher than the productivity of labor and hence the capital share will increase to the detriment of labor share in the economic system.

In this theoretical case, there are also two types of effects related to the changes in factor shares. These effects can be listed as follows: (1) the quantity effect and (2) the price effect. First, suppose that the amount of capital increases more than the amount of labor. This quantity increases should be balanced by the relative changes in these two factors. However, if the price adjustment is prevailed, its effect on the elasticity of substitution between capital and labor become increasingly smaller (European Commission, 2007: 247). In this context, the quantity effect will be dominated by the price adjustment (i.e., the price effect), if the elasticity of substitution between capital and labor is less than one. Hence, the labor share relative to the capital share in national income will be increased. Alternatively, suppose that the amount of

---

[94] For detailed empirical and theoretical discussion on the relationship between the technological progress and the economic growth please see Part 4 and section 5.2.4, respectively.

capital grows more than the amount of labor. In other words, suppose that the capital-to-labor ratio increases. In this second case, however, the elasticity of substitution between capital and labor is less than one. Therefore, the price effect will be dominated by the quantity effect and thereby the capital share relative to labor share in national income will be increased. All in all, the neoclassical framework for distributional practices totally depend on the following three factors: (1) the changes in factor endowments (i.e., the capital-to-labor ratio); (2) the elasticity of substitution between capital and labor; and (3) the technological progress. Both of these factors are effective on the distributional outcomes between capital and labor in aggregate national income[95].

Although the developments in information and communication technologies (ICTs) sector and the transformation of the production system and the financial relations in industrial and financial sectors, based on these mentioned-above developments, change the dynamics of elasticity of substitution between capital and labor, it also leads to the emergence of the division between skilled and unskilled workers. According to the empirical analysis of the European Commission (2007), from the very beginning of the 1980s, the low-skilled workers' overall wage bill has been gradually declining in the United States and Japan, depending on two issues, within the frame of neoclassical agenda: (1) globalization and (2) the technological progress (European Commission, 2007: 248). For the technological changes and their impacts on social framework, European Commission (2007: 248) reports that the transition from unskilled labor production system to technology-led production system is characterized by repetitive routine tasks, but also it complements skilled labors in their problem solving tasks. According to this theoretical context, the degree of substitution between capital and labor is differentiated subject to their skills and abilities in the economic activity. Therefore, the changes in the capital-to-labor ratio may have various effects on factor shares, depending on the changes in the level of skill compositions. There are no one-to-one changes in income shares of labor and capital within the frame of the changes in factor endowments and the degree of the elasticity of substitution. However, the increasing developments in the technical components of the production system and the evolution of ICTs were all changed the income shares of different skills of workers. For instance, these two factors have been favored the highly-skilled workers instead of the low-skilled workers in the neoliberal era. This is the case in which the labor income share of highly-skilled workers has been increased; however, the low-skilled workers' income shares have been decreased from the beginning of early-1980s to up to date[96]. The current level of technological progress still stimulates an increase in the substitution incentive of high-skilled workers for low-skilled workers.

Although these straightforward explanations of the neoclassical framework for technology-led developments are still significant in the current economic relations, it simplifies the distributional practices by suggesting that these developments are the major reason behind the changing income dynamics between capital and labor, especially in social and historical dimensions[97]. Indeed, the importance of the technology-based division between high-skilled and low-skilled workers in the economic system may cause to an emergence of many different results under the investigation of class dynamics of income distribution. Within the frame of this class-based perspective, the effects of technological progress on the distributional composition of capital and labor can be examined by three different components: (1) the

---

[95] This theoretical summary is organized from European Commission (2007).
[96] For more information please see Bentolila and Saint-Paul (2003), European Commission (2007), Guscina (2007) and IMF (2007).
[97] In order to get a comprehensive understanding about this case, the reader have an advantage to compare different thoughts on this topic by benefiting from the theoretical discussions of sub-section 5.2.4.

changes in the employment structure of the production system; (2) the shifts in sectoral compositions in employment; and (3) the differentiation in the composition of the workforce.

First, the current effects of technological progress on factor shares depend on the exposure of employment structure to the profit-led regulations of capital. Depending on the transformations in different technological innovations such as ICTs, the capital also increases the capital-to-labor ratio in order to stimulate the rate of productivity in the aggregate production system. The crucial outcome of this process emerges in the substitution of low-skilled workers for high-skilled workers, integrated with the technological progress. The aggregate economy goes through the changes by the increase in demand for high-skilled workers for further developments in the production system. Thus, this economic transformation causes to an increase in the reserve army of labor as result of laying low-skilled workers from the production. In parallel to an increase in the amount of reserve army of labor, the increasing rate of unemployment creates downward pressure on wage bills of low-skilled and unskilled workers. If the volume of low-skilled and of unskilled workers are higher than the high-skilled workers in workforce structure, the labor share will be decreased in the national income in favor of the capital share. The class-based feature of this phenomenon is basically resulted from the high level of ownership of means of production by capital and thereby the appropriation of the outcomes of technological progress as profits.

Although the neoclassical framework concerns much on the results of the distributional problems, it neglects the effects of technological progress in the context of class-based motives and of the ownership of means of production. This case depends on the theoretical framework of the neoclassical paradigm in which each economic agent gains the marginal value of what they produced in the last production unit. Therefore, any case for income inequality among factors of production is not possible in the theoretical structure and the class-based investigations are not necessary to understand the changing dynamics between capital and labor. Additionally, the fluctuations in factor incomes, depending on technological developments, are temporary.

Second, the increasing importance of technological progress and thereby the skill composition in production system differentiate the overall weights of each sector in the total economy. This case is also related to the first presumption which focuses on the increasing rate of unemployment for low-skilled and unskilled workers. Especially, the increasing scale of service sector after the 1980s and its impact on changing employment structure towards more low-skilled and unskilled workers have also close relationship with this second case. The current unemployed workers sustain their living standards by transferring into the service sector as a low-skilled and low-cost workers. And there is something more that the low-skilled and low-cost workers do not only employ in the service sector. They also include in low-cost workings in different production channels of industrial and financial sectors.

Finally, the class-based feature of technological progress on income distribution has also some crucial effects on the political framework. The technology-led neoliberal transformation through the interests of capital requires the changes in the labor force. In other words, each factor in this transformation strictly needs many straightforward policies in parallel to the changes in the labor force in legal framework. Primarily, the major policies used in the Keynesian era should be scrutinized in detail in order to understand the changing policy framework for each market. Second, the major dynamics of the labor market should be transformed into the context of legislative structure. Third, the rights of the unemployed people should be revised in pursuant to the interests of capital. Finally, the legislative framework for

the transfer of extra revenues of the productivity gains into the capital income should be rearranged and the social and economic norms of that transfer should be defined in the legal framework.

All in all, the neoclassical perspectives on distributional problems among factors of production may not apply to the practical framework instead of the theoretical framework in consequence of the exclusion of classes. In other words, the technological progress may have negative effects on income levels of each segment of society if the class-based dynamics are neglected in the production system. There is possible to emerge winners and losers in the society; therefore, the increasing scale of income inequality in society may have an effect on the socio-economic and political system in each point of the neoliberal period[98].

5.6.3 Labor Market Policies and Product Market Policies

The transformation of labor-power as part of the changes in neoliberal policy agenda and the profit-led production strategies of the neoliberal era are formed the other type of impact factor on distribution issue as the changes in the labor market policies and in the product market policies. In the theoretical context, the neoclassical perspective on the reasons for the change in the income distribution is exposed to temporary fluctuations, depending on different socio-economic and political factors, in the context of the assumptions of general equilibrium model and the law of marginal efficiency. Therefore, the negative results of these fluctuations will be short-lived and the income level of each factor of production will be turned back to their actual levels in case of the law of supply and demand. According to the neoclassical perspective, both of the labor and product markets should be performed in perfect competitive structure. However, this case does not be possible because the neoliberal era shows that the centralization and concentration of capital are at higher levels in both industrial and financial sectors. In other words, in each sector, the monopolistic competition, or alternatively, the imperfect market structure is formed the fundamental relations among the production system. Therefore, instead of the neoclassical arguments about the competition structure of the economy, the production creates an extra surplus based on imperfect market conditions. The basic question is how does the extra surplus created by the production system is distributed among economic actors?

For instance, Blanchard and Giavazzi (2001) make two kinds of assumptions about the concept of distribution, depending on the increasing scale of monopolization and the imperfect competition in the markets. The first one is related with the monopolistic competition in the goods market, which determines the sizes of the rents the firms and their workers have; and the second one is related with bargaining structure of the labor market, which determines how much rent is acquired by firms, and how much by their workers (Blanchard and Giavazzi, 2001: 5).

Indeed, it is not possible to understand the neoclassical perspectives on the structure of distribution of income among factors of production without pointing on these two determinants of the neoliberal paradigm. For instance, in the context of product markets, the regulation is basically determined the general structure of two basic factors: (1) the entry costs faced by firms and (2) the degree of competition between firms. In the determination process of these two indicators, the following three factors are also very effective: (1) the elimination of tariff barriers; (2) the standardization measures; and (3) the costs of entries (e.g., the shadow costs).

---

[98] Skilled-biased changes have problems in measurement methods. Three types of variables are used to measure these changes: (1) time trend; (2) factor endowments; and (3) ICT capital. However, these variables may not be correct ones for measuring the skilled-biased technological changes in themselves (please see Stockhammer 2009). Additionally, the elasticity of substitution and factor costs can be included so as to analyze its effects empirically.

On the other hand, the labor market regulation is determined the bargaining power of labors in the case of the existence and the nature of extension agreements, to closed shop agreements and the rules for right to strike (Blanchard and Giavazzi, 2001: 10-11).

Dünhaupt (2013: 18) focuses on two types of models about the policies on labor and product markets and then characterizes the relationship between employment and wages for firms and workers by the looking at the changes in the bargaining power in the context of the following models: (1) "right to manage" model (Blanchard and Giavazzi, 2001) and (2) the "efficient bargaining" model (Bentolila and Saint Paul, 2003). First, under the right to manage model, the bargaining power of wages depends on the cyclical position of trade unions in the socio-economic framework and the power relations between firms and workers. In the long-run, apart from the wage level, the employment decision and the level of employment are determined by firms to the point where the profits of firms are maximized (Blanchard and Giavazzi, 2001). However, in the short-run, given the impact of trade unions on bargaining over wages, the effects of the size of the rents obtained by firms have not significant effect on their employment decision and thus the allocative characteristics of the real wage mechanism is not robust (Blanchard and Giavazzi, 2001: 15). Therefore, the ability of firms to maximize their profits and the positions of trade unions in the determination process of wages are the basic facts behind the changing dynamics of distributional issues of factor shares. Additionally, in the theoretical background, the ratio of elasticity of substitution is the other major determinant of the income distribution between capital and labor.

Second, the efficient bargaining power implies that both firms and workers have an impact on the determination of wages and therefore the absolute power of the firms on the employment level is neglected in the model. In each case, both of these two economic agents act on behalf of the maximization of their interests. The socio-economic and political positions of each agent are also comprised of the major determinants of this issue. In the short-run, as Blanchard and Giavazzi (2001) state that the workers get an extra income in the form of wages from the produced surplus without exposing to the unemployment problem. In other words, the workers are relatively much powerful than the capital if the analysis is constructed on class-based dynamics.

This neoclassical perspective does not adopt classes for their theoretical and analytical frameworks. The changes in the distributional context among factors of production basically depend on the changes in the ratio of elasticity of substitution. In this sense, although the changes in the income shares of factors are in existence in the practical phenomena, the reasons behind this fact cannot go beyond the economic factors. However, the class-based analyses of this structure can be only understood by focusing on the power relations between capital and labor in the production system.

First, the political power of the working class is a crucial determinant in this distributional context. In other words, the pro-working class policy structures play an important role in the distributional process of national income between capital and labor. For instance, the trade unions can be shown as an example of these policy structures in the form of institutional framework. The unionization movements and the class dynamics of the rights of labors imposed by trade unions stress a significant effect on the distribution of an extra surplus emerged in the production process. Second, the legal rights of the working class is another crucial factor of the income distribution. The more powerful legal structure for the rights of working class in societal framework indicates an equal structure for income distribution between capital and labor. Finally, the monopolistic structure of the product markets may create negative fluctuations in

the labor market conditions and the labor policies. Basically, in the context of technological progress, it may increase the ongoing income inequality between high-skilled and low-skilled labors. For the labor market policies, on the other hand, the monopolistic market structure needs to the transformation of pro-working class policies into the policies supporting the interests of capital in the legal structure. Therefore, all these facts show that the distributional issues between capital and labor can be investigated in the much heterodox framework by pointing on both neoclassical and class-based socio-economic and political factors within the frame of labor and product markets. Hence, the bargaining power indicator forms a frame for multi-dimensional investigations for these perspectives. All in all, instead of the theoretical and analytical insights of the neoclassical approach, the distributional issues should be examined in much comprehensive context by focusing on different factors of the socio-economic and political framework such as the globalization, financialization, technological developments, privatization, and deregulation.

5.6.4 Privatization Policies and Structural Changes

The increasing scale of privatization strategies on the appropriation of the state-owned enterprises and the orientation of capital-led privatization policies into the legal framework can be shown as the final factor behind the changing dynamics of the distributional issues between capital and labor. The tendency of the implementation of these privatization policies basically depends on the articulation of state-owned enterprises to the targets of private capital and their profit-led goals. The most crucial results of these policies can be seen by looking at the increasing downward pressure on the employment opportunities and the wage level of workers, depending on the restructuring strategies of privatization policies. For instance, throughout the developing market economies, the privatization policies were considered as a crucial factor for the structural adjustment process that was planned for changing the ongoing economic policy regime indexed to import substitution model that substituted in the earlier decades through a model where the economic activities are predominated by free markets and the private sector (Atiyas, 2009: 101). In addition, the privatization policies were used by policy-makers as a tool for an increase in overall efficiency of the economy, a reduction in public expenditures and the scope of the state, the transformation of inefficient public enterprises, the development of domestic capital markets and the expansion of share ownership by the general public (Atiyas, 2009: 101).

The effects of the socio-economic structure on the labor share of income by the privatization movements of the state-owned enterprises and the collapse of the impact of government activities on the economic activities can be evaluated in two scenarios (Dünhaupt, 2013: 19). First, the changes in the labor share can be affected by the changes in the sectoral composition of total economic activity, depending on the fact that the labor share in low value-added sectors after the privatization process of the state-owned enterprises will be in a negative tendency (Dünhaupt, 2013: 19). Second, if the profit share of the public sector is assumed as zero, then, by definition, the privatization of the public sector will result in a decline in labor share of income in average (Dünhaupt, 2013: 19).

5.6.5 Further Issues on the Labor Share of Income

The share of labor income accruing in aggregate national income and the components of this share have been examined by different types of paradigms, depending on their theoretical and practical assumptions from the very beginning of the capitalist system to up to date. As the previous sub-sections showed that it is possible to argue that there is no common perspective

on the measurement method of the labor share of income. However, the truth is the labor share in favor of capital has been in a declining trend from 1980s to up to date in almost every country groups. Although each adjustment method has its own methodological structure, the results of all these methods show that the labor share has been declining in the context of their theoretical framework. In other words, from Neoclassical to Marxian paradigms, they all accept the presence of this downward tendency in the labor share. Therefore, they theorize their recommendations for the solution against this downward tendency in the labor share, depending on their theoretical frameworks. Therefore, in addition to mentioned-above four different factors which are very effective on the changes of the labor share of income, it is also specifically necessary to focus on some other critical points of these paradigms in order to support the fundamental considerations of the hypothesis of this work.

First, the neoliberal period stimulated by capital-led production have led up different types of innovations in technology by the increasing competition in all economic activities. These technological developments were not limited only to the real sector, they were also changed the general concept of the financial relations and transactions. All these technology-led developments in the economic system were caused to the rearrangements of the labor-power and the labor force structure in parallel to the developments in industrial and financial sectors. Especially, the competition pressure among economic actors was entailed more production for each unit good and was stimulated technology-based production methods by laying off the low-skilled workers from the production for high-skilled workers which were resulted in an increase in the amount of reserve army of labor. Although unemployment rates exhibit a floating process, depending on the country-specific conditions, over the 1980-2015 period, all country groups experience these fluctuations in unemployment rates at high levels. Additionally, if the discouraged workers are included into the unemployed people, the ratio of unemployment becomes even higher than the actual levels. In addition to the unemployment rate, the population size negatively affects the labor share of income. Depending on the developments in technological innovations and the increasing use of globalization and liberalization policies in trade and financial sectors, the traditional family structure was also turned into a much complex framework in parallel to an increasing amount of person for each household. All these increasing trends in population size and the unemployment rate across the countries make a negative pressure on the bargaining power of labor in favor of capital. Therefore, these two fundamental parameters are stood out as one of the most crucial components of the distributional issues between capital and labor.

The other determinant behind the downward trends in the labor share of income is the skilled-biased technological change which was studied in the Section 5.6.2 in detail. Therefore, related to the labor share, the increasing scope of difference between skilled and unskilled labors is being very important factor in order to understand the changing distributional dynamics in the neoliberal period. The most important reason to focus on this factor depends on to understand the increasing scale of demand for skilled labors in parallel to the technological developments and increasing pressure in competition among economic actors. In this context, the increasing incentives of unskilled labors towards more education and the more abilities for employment exist together with the targets of the capital. However, increasing amount of employment in skilled labors is also led to higher levels of competition among these workers and thereby to an increase in the size of the reserve army of labor. Skilled-led employment structure may be also evaluated in the human capital formation. In other words, the skilled-biased technological developments also stimulated the increase in the rate of human capital. However, the presence of an increase in the rate of human capital can affect the distributional issues in favor of capital due to its downward pressure on the labor share in parallel to the increasing rate of

unemployment in high ability workers. This means that the conditions of the skilled labors in the economic framework may decrease to the conditions of unskilled labors in the context of both wages and social statutes.

Finally, the liberalization policies have also significant effects on the distributional issues between capital and labor. Basically, these policies can be evaluated into two different contexts as follows: (1) the trade openness and (2) the financial openness. On the one hand, the liberalization policies related to the trade sector can affect the labor share of income through trade in products; on the other hand, they can change the distributional conditions between capital and labor through the trade of virtual goods and services such as the information, knowledge, and communication. The major point of the distribution of income between capital and labor in trade of real and virtual goods and services can be seen by the effects of changing trade policies in the labor force in both domestic and international spheres. For instance, the commodity trade may have significant effects on the conditions of labor markets and thereby the wage bills of workers, depending on the socio-economic and also the political structures of partner countries. Therefore, the relative differences in factor endowments may not provide the factor price equalization in the context of the labor-intensive and capital-intensive characteristics of goods. This also indicates that the trade channel of the liberalization mechanism is the crucial component of the distributional outcomes. Different kinds of issues such as the concept of "cones of diversification" of Melvin (1968) may be investigated in this sense. Additionally, the analysis can be extended by focusing on 3-factor models in trade which include the "land" factor into distributional issues between capital and labor (Leamer, 1987; Wood, 2002). Or alternatively, the theoretical model of Feenstra and Hanson (1996) about the role of factor intensity using the "sense" factor, can be dealt with as another framework in trade for the analysis of distribution topic between capital and labor. In addition to these complex and multi-dimensional models, there are also other empirical studies focusing on the pros and cons of trade liberalization effects on income inequality (Burtless, 1995; Davis, 1996; Robbins, 1996; Cline, 1997; Arbache, Dickerson and Green, 2004; Krugman, 2008; Harrison, McLaren and McMillan, 2011). However, as Guerriero and Sen (2012: 5) states that in all these empirical studies, not much has been investigated on functional income distribution.

These mentioned-above parameters directly affect the trade regime and thereby the labor share of income. However, there are also other factors that the trade liberalization may have an indirect effect on the labor share. Their direct indicators can be ranged as follows: (1) the imperfect competition between goods and services; (2) the globalization effects; and (3) the outsourcing, offshoring and two-way trade in production (Guerriero and Sen, 2012: 5-6).

First, the increasing scale of international trade may spread the effects of the concentration and centralization impulses of capital to the global scale along with the use of liberalization policies. In other words, the increasing trend in the monopolization of economic activities may be a common fact in the global framework coupled with the spread of liberalization policies in trade regime. The level of competition among economic conditions has a crucial impact on this structure. The increase in the competition level by enhancing the scale of monopolization in the economic framework may create a negative effect on income distribution against the labor share. For instance, the distribution theorem of Kalecki (1938) gives important details in order to understand the dynamics of this phenomenon, especially in the product market. According to Kalecki (1938), there is a positive relationship between the degree of monopoly and the markups on products. In other words, if the degree of monopoly increases in aggregate economic activities, the markups of prices increase. Additionally, the monopolization of economic relations increase the gap between productivity and wages to the detriment of wage

level of labor (Azmat, Manning and Reenen, 2012); and therefore, they lead to the relative decrease of labor share to the capital share. The centralization and concentration of capital also sharpen these distributional problems in favor of capital.

The second indirect channel is the effects of globalization on the bargaining power of labor. The relationship of this channel with the international trade can be understood by focusing on the changes in the labor markets. For instance, according to Rodrik (1997) and Slaughter (1999), the removal of the restrictions on trade may change the income shares of capital and labor by increasing the asymmetries among these two economic agents and by affecting their bargaining positions. The practical investigations of these asymmetries in power for these agents depend on the power of flowing out of the domestic borders. Although the capital and some groups of the skilled workers have opportunities to be involved in international relations, the labors are often lacked from these opportunities because they have nothing to sell other than labor-power. Therefore, the economic dimension of globalization highlights the importance of class dynamics among economic activities. These class dynamics are not only relevant in macro-level but also in micro-level (e.g., in the relationship between skilled and unskilled workers). The reformation of the distributional issues by the globalization-led policies in the international framework cause the demand for the services of labors flatter and also more elastic, because the services of other people have much easier substitutable characteristics through the national boundaries (Guerriero and Sen, 2012: 6). Therefore, the bargaining power of these workers in the production system will be reduced, as well as their wages (Guerriero and Sen, 2012: 6).

The last indirect channel is the effects of outsourcing, offshoring, and two-way trade in production on the labor share of income. Primarily, the results of the effects of this final channel on the labor share are differentiated among several empirical studies (Grossman and Rossi-Hansberg, 2008; Jayadev, 2007; Krugman, 2008). In other words, among the orthodox and heterodox perspectives, there are critical theoretical differences for these indicators. For instance, Jayadev (2007: 425) shows that the firms threaten the bargaining power of labor through capital mobility and the relocation of production abroad owing to use of liberalization policies. Therefore, increasing scale of capital mobility negatively affects the fallback option of labor against capital and creates a downward pressure on the labor share of income. If this case is applied to the trade, in consequence of the relocation of capital abroad, firms also outsource their labor-intensive production to those countries where the wages are low. Therefore, the domestic demand for labor reduces and the wage ratio relative to profit ratio decreases in absolute terms (Guerriero and Sen, 2012: 6). On the other hand, according to Krugman (2008), as a result of an increase in liberalization and the capital mobility across countries, there were no changes in the pattern of trade and specialization in the neoliberal period. Krugman (2008) theorizes his argument on offshore movements of North countries to South countries. The results of this offshoring process show that the developing countries absorb only the labor-intensive products of skilled-intensive industries. Because these developing countries have mostly focused on labor-intensive production in their domestic economic framework, there would be no change in the pattern of trade and/or financial sectors for factors of production. In other words, the trade regime between developed and developing country groups would be stay constant which means that the distributional dynamics among factors of production would not be changed. Finally, Grossman and Rossi-Hansberg (2008) focus on the trade of intermediary goods and their offshoring process. Their empirical evidences show that the offshoring process creates productivity-enhancing effects on domestic labor. The most crucial result of this commodity trade is an increase in innovations and thereby the welfare of workers. On the other hand, the increase in the welfare level does not mean that the income

distribution among factors of production is also affected equally with this increase in welfare. The total income of capital and labor may increase in absolute terms; however, it is also possible to show that the inequality in income distribution may widen in favor of capital in relative terms. Therefore, tradable goods should be evaluated within the frame of their mutual relations in order to understand their effects on the income distribution.

In addition to trade openness, the more open financial accounts are also the leading components of the neoliberal period. Especially, the financial openness indicator may also have a similar impact of the policies of trade liberalization on the labor share of income in the context of different channels. The limits of these effects, on the other hand, depend on the power relations between capital and labor. In other words, the social position of each class has distinguishing effects in the process of the determination of the income shares accruing in total national income. The changes in the social positions are also differentiated, depending on the capitalist development path both in domestic and international scales, which results in the changes in the distributional framework of capital and labor. Therefore, the degree of financial of openness has a crucial impact on the dynamics of the qualitative and quantitative characteristics of distribution between capital and labor in the neoliberal period and should be investigated in detail.

In the neoliberal paradigm, the financial openness may affect the factor shares, especially the labor share, by two different channels: (1) the capital account openness and (2) the speculative motives. First, the studies on the process of capital account openness include different kinds of topics. Especially, the sub-categories of these topics may assist to reveal different dynamics behind the distributional issues. These sub-categories are already studied in the related literature which of them focus on different effects of capital account openness on (a) the labor share of income; (b) poverty; and (c) welfare. Although there are several significant empirical examinations for the effects of poverty and welfare with the degree of openness in the capital account, the investigation topic for the relationship between the capital account openness and the labor share of income is very recent in the literature. For instance, Arestis and Caner (2009) focus on the capital account liberalization within rich and poor income categories and state that there are two different dimensions of the empirical analysis. First, the reduction of information and transaction costs and thus increasing chance to reach external finance by entrepreneurs lead to the improvements in the allocation of capital and the conditions of the poor, following the liberalization process of capital account. Therefore, financial systems function better in consequence of capital account liberalization and financial services are much easier to become available to a larger proportion of the population and the poor (Arestis and Caner, 2009: 298-299). Second, if there is a high degree of political connections between the rich people, the more liberalized capital account and more developed financial system will primarily benefit them. Especially, the benefits of the capital account liberalization such as increasing amount of financial services and credits will be limited to the rich people. Therefore, more liberalized capital account may only accomplish in transferring capital to the few, but most probably not to the poor (Arestis and Caner, 2009: 299).

Arestis and Caner (2009: 299) also note the third factor in addition to those two perspectives. According to this third view, there may be a non-linear relationship between the capital account liberalization and the income distribution. The major dynamic of the non-linear relationship between these two cases depends on the development level of the financial sector and the degree of openness in the capital account. The countries making the capital account more open may have negative effect on the income distribution if their financial development levels are in early stages and not well-improved in which a more wealthy people can only benefit the advantages

of financial markets. In other words, the distributional effects of financial deepening may transform in time, depending on the degree of capital account openness, and each segment of society may benefit from the financial opportunities.

In the literature, the distributional outcomes are investigated in the context of different instruments and empirical parameters, depending on the degree of capital account openness. One part of these studies examines the topic on poverty through the economic growth channel of capital account openness; on the other hand, the other part of these studies investigates the effects of capital account openness on the labor share of income within the frame of the changing bargaining positions between capital and labor. It is possible to range these factors which reduce the income inequality between rich and poor by the economic growth as follows: (a) the capital inflows in domestic country to get higher returns from profitable investment opportunities (Prasad et al., 2003; Henry, 2006; Henry and Sasson, 2008); (b) the attitude toward risk allocation so as to reduce the cost of capital (Prasad et al., 2003); (c) the increase in opportunities for more economic services in favor of the risk diversifications in order to benefit from investments and thereby high return projects (Obstfeld, 1994); (d) the technological progress and improving managerial know-how processes within the frame of increasing efficiency and productivity gains (Agénor, 2002); (e) the development of the banking sector (Prasad et al., 2003); and (f) the increasing "discipline impact" imposed by government sector for more stable macroeconomic environment (Stiglitz, 2000).

In addition to these different kinds of works on distributional issues through the economic growth, there are also other studies investigating the relationship between capital account openness and the labor share of income through the bargaining positions of capital and labor. For instance, Jayadev (2007) and Lee and Jayadev (2003) suggest that the capital account liberalization decreases the bargaining power and fallback option of labor in favor of capital. Therefore, the rents accruing in aggregate national income are distributed in favor of capital. As Jayadev (2007: 423) states that there is a robust and significant negative relationship between the degree of capital account openness and the labor share, which holds for all sub-sample countries, except for low income countries. A plausible explanation depends on the fact that capital account openness changes the conditions of bargaining between labor and capital (Jayadev, 2007: 423).

All these different arguments and assumptions show that the social and political factors in addition to economic factors for the investigation of the changing relationship between the capital account openness and the labor share of income all should be considered. Therefore, the inner structures of sample countries should be examined in detail. Especially for the distribution topic, it is not straightforward to propound a homogeneous outcome. Instead, the heterogeneous characteristics and the different cultural dynamics all should be analyzed without omitting the effects of socio-economic and political factors of sample countries.

Finally, the empirical investigations of the distributional issues between capital and labor need to focus on two additional factors: (1) the development issue and (2) the degree of investment level. The development issue can also be investigated under two sub-topics: (1) the economic development and (2) the financial development. The level economic development basically depends on the level of capital development. Therefore, from technological progress to the agricultural production, the economic development is under the influence of various dynamics of the capitalist system. Additionally, in the context of the structure of capitalist production relations, it may change in different countries, depending on several sociological determinants. All in all, these conditions show that it is not straightforward to analyze the economic

development only by pure economic parameters because each country has its own socio-economic, political, and cultural dynamics.

In the light of all these considerations, there are different kinds of empirical and theoretical investigations devoted to understanding the relationship between the economic development and the labor share of income (Kuznets, 1955; Lewis, [1955] 2013; Kravis, 1959). The general characteristics of these studies show that the major importance of the economic development parameter should be evaluated within the frame of the changes in the labor share. Therefore, they all investigate the importance of this topic by focusing on the level of economic development and the sectoral decompositions of workers. For instance, according to Lewis ([1955] 2013), there are different kinds of dynamics between rich and poor economies, especially in the sectoral base and the labor markets. The production in the agricultural sector is the dominant factor for an increase in national income of poor economies. Additionally, the agricultural production in poor economies employ workers in low-wage rates and the amount of labor supply exceeds the demand for labor. In these conditions, the level of economic development is much higher in rich economies relative to poor economies because the agricultural production per unit is much higher in rich countries. However, in an industrial sector where the technological progress is well-developed in each production system, the amount of supply of low-cost labors are scarce; and therefore, the productivity-wage gap may be high (Jayadev, 2007; Maarek, 2012; Ortega and Rodriguez, 2006). In other words, the gap between the income shares of capital and labor may increase against the labor share of income.

However, the current level of income inequality may reduce a result of an increase in the level of economic development over time. Basically, the spread of capitalist ingredients in social framework stimulate an increase in output per worker in parallel to the technological progress and economic development. The increase in the productivity level then creates a change in the share of economic agents between different sectors. In other words, the modern sectors need more organized wage labor positions for their working structure. Therefore, the workers in the agricultural production may become an organized wage labor in the modern sectors.

The developmental policies for modern sectors and their need for more labor-power in an industry, inherently increase the demand for organized wage labor. While demand increases through the labor force create an upward pressure on the wages, the income share of labor simultaneously gets much higher portions from the aggregate national income. Therefore, in the path of economic development, the distributional shares between capital and labor are adjusted in favor of labor share (Kuznets, 1955; Kravis, 1959).

However, the limit of the economic development is determined by the growth rate and the capital intensity of the sectors. The organization of the wage labor beyond the level of the actual amount that the modern sector needs in production may change the distributional structure in favor of the capital at the advanced stages of the economic development. One of the most important factors behind the capital-led income changes depends on the increasing level of employment and thereby the increasing amount of labor supply in the workforce. Both the population increases and the transformation of the traditional agricultural sector, thus, follow this increases in the amount of wage labor, depending on the increasing relations modern capitalist production. Especially the increases in the level of employment create a negative effect on the bargaining power of labor in parallel to an increase in the amount of reserve army of labor. Additionally, the traditional agricultural sector is tied to the development process of the modern sectors. It means that the agricultural production is obliged to adopt the rules of the labor force, depending on the modern sectors.

All in all, the exploitation relations of the modern sectors are spread into the socio-economic relations of the agricultural sector having an increasing scale of capitalist ingredients. Therefore, the economic development may create downward pressure on the labor share in industrial countries where the capitalist production relations have the greatest impact on the different paradigms of the society. As Daudey and Garcia-Penalosa (2007) state that much different social dynamics and economic factors become the leading impulses for distributional issues in the further stages of economic development. Therefore, the effects of an increasing wage level are much intense at the lower levels of economic development than the levels of economic development.

In addition to the level of economic development, the level of financial development is the other crucial determinant of the economic activities in the neoliberal period. For instance, one of the most distinguishing features of the neoliberal period depends on the shift of capital from real to financial sector following more use liberalization policies in advanced economies after the very beginning of the 1980s and in developing economies after the collapse of the Soviet Union. In this sense, the effects of financial relations and transactions are being the most crucial factor in the determination of each economic activities on the basis of both individuals and firms. The financial effects on the economic relations are experienced in every stage of the neoliberal period. Therefore, in the investigation of the economic systems of developed and developing countries, the liberalization processes of both trade and financial sectors should be assessed in tandem with the financial development issue.

According to Levine (2004: 5), the financial development may create positive effects on different components of the financial system by (1) producing information and allocating capital; (2) monitoring firms and exerting corporate governance; (3) risk diversification; (4) pooling of savings; (5) monitoring investments; and (6) easing exchange of goods and services. In this context, notably the effects of financial development on economic growth, it is possible to find different kinds of studies about the effects of financial development on income inequality and economic stability (e.g., Dabla-Norris and Srivisal, 2013; Demirgüç-Kunt and Levine, 2009; Levine, 2004).

The major points of these works depend to their emphasis on the positive effects of the financial progress on economic growth. If the high rates of the economic growth are retained by increasing the scale of financial development in economic activities, it may result in a more equal structure for income distribution by providing economic stability. However, contrary to this neoclassical perspective, the investigation of financial development, without focusing on liberalization and globalization factors, may create misleading results, especially on the distributional issues.

One reason of this depends on the fact that the single treatment of financial development may highlight the nexus of finance with capital rather than labor. Although the financial development provides an efficient allocation of resources, it may create an upward pressure on the share of capital accruing in aggregate national income in the distribution of these resources because the labor has no property on means of production. Finally, in countries where the level of financial development is low, the using of liberalization policies in the financial sector may create bias in the distribution of financial resources for more unproductive investment activities. Therefore, Svirydzenka (2016: 4) states that there is a multi-dimensional process in financial development.

The financial services and financial systems have transformed into much complex structures and have spread across the globe and have become multi-faceted (Svirydzenka, 2016: 4). For instance, in addition to the traditional banking system, the neoliberal finance creates different kinds of institutions such as investment banks, pension funds, mutual funds, insurance companies, leasing companies, venture capital firms and nonbank financial firms. Furthermore, both of these different kinds of financial institutions and financial markets, thus, become important components of the aggregate economic activity in terms of depth, access, and efficiency, depending on different financial tools.

Table 5.6.5.A: Financial Development Index Pyramid
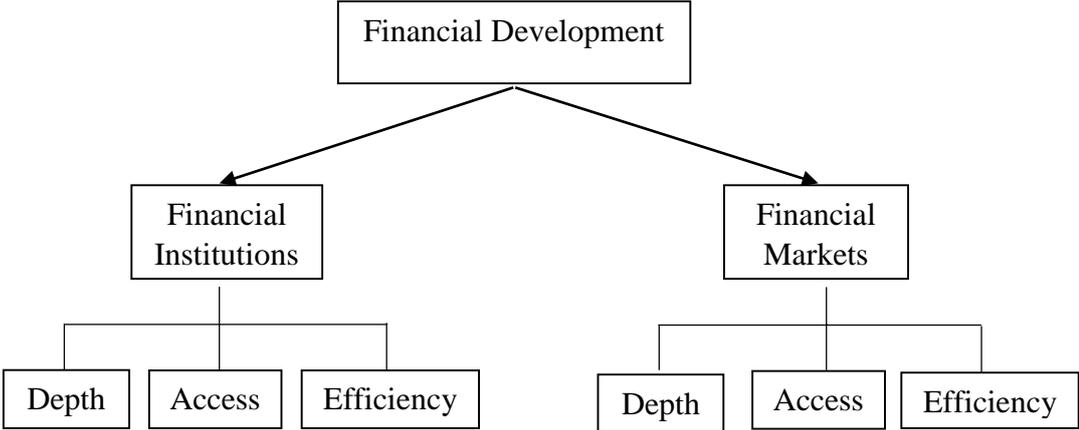
Source: Svirydzenka, 2016: 5

The provision of financial services also provide the diversification of many types assets such as bonds and stocks and also provide the pooling of savings; therefore, they all become an important factor in the total economic framework, depending on the development level of the financial firms and institutions. Although the effects of these increasing scale of financial services on the macroeconomic factors are well-marked, the distributional concepts may differentiate based on the level of financial development. The major component of this case depends on the mutual relationship between the degree of openness in finance and the development of the financial sector. The interaction of these two variables may have unequal effects on the distribution of income between capital and labor. Even if financial development is at high levels and stable, its impact on the distributional outcomes can be unequal and inefficient for both the capital and labor (e.g., mostly for labor in advanced countries).

Finally, the changes in the context of investment can be treated as another crucial component of the distribution of income. For instance, the Kaldorian approach based on the rule of savings in the economic system provide important insights about the distribution of income both theoretically and empirically. According to the Kaldorian approach, the capitalists have high rates of propensity to save relative to labors. Additionally, the finance of the level of investment is adjusted by the factor returns. Therefore, if the demand for real investment increases, the income distribution is adjusted for the level of savings and the extra revenue obtained from the investment shifts to the investors having high rates of saving propensity. As Guerriero and Sen (2012: 9) state that if the marginal propensity to save out of profits become higher than the marginal propensity to save out of wages, an increase in the level of investment may lead to the redistribution from wages to profits and thus to an increase in the profit rate and a fall in real

wage. The profit recipient will be much shifted to favour by the functional income distribution than the workers (Guerriero and Sen, 2012: 9).

If this case is applied to the advanced and developing countries, it may be assumed that there is a negative correlation between the increase in real investments and the labor share of income in practice. In other words, in the context of Kaldorian framework, the theoretical arguments state that the real investments create a positive effect on the capital share accruing in the aggregate national income. This theoretical framework can also be evaluated within the frame of bargaining positions of capital and labor, together with the facts of unemployment and the population growth. In the context of an increasing level of investment, if the labor supply exceeds the labor demand, it then creates a downward pressure on wages and the bargaining power of labor which is ended up with the increase in the profits over wages.

PART 6

EMPIRICAL ANALYSIS

6.1 Sample of the Study

There are several factors affecting the income shares of the society. These factors have also an importance in the empirical context. The accurate identification of these factors forms the basis for the understanding of an analysis of both the short and long-term changes in the income distribution. Therefore, the data structure should be in company with the general framework of the relevant empirical analysis. The econometric scope of the study should complement and support the theoretical base of the research. However, there may be several components which of them may restrict the empirical framework.

The main source of the problem emerging in econometric studies exists at each point of the analysis from the data collection to implementation processes. In that sense, the limits of the study is mainly depended on the variety of the variables using in the empirical analysis. Thus, the empirical study will be based on the panel data method in order to understand the far-reaching characteristics of the income distribution by focusing on a large scale sample countries from OECD and non-OECD having different socio-economic and political determinants. Three main elements should be collectively investigated in this case: (1) the scope of panel data; (2) the selection of variables; and (3) the selection of sample units.

First, the use of panel data method has many strengths and weaknesses when it is compared with time-series or cross-sectional data in the econometric analysis. Therefore, while the use of panel data has many advantages, it also consists of some limitations. Essentially, contrary to time-series and cross-sectional analyses, panel data analysis provides more opportunities to the researcher having different kinds of data sets. In that sense, the number of observations and the degrees of freedom increase and thus the problems occurring in the econometric analyses become reduced. Additionally, the multicollinearity problem among explanatory variables may become much lower and thereby the efficiency and consistency of the econometric estimations may increase. On the one hand, some of the major advantages of the panel data can be listed as follows: (1) more opportunity for including of the variances in units and unobserved heterogeneity in the model; (2) the reduction of forecast bias; (3) the reduction of multicollinearity problem; and (4) making more developed models. On the other hand, the use of panel data in the econometric analysis has also some limitations and disadvantages. They can be listed as follows: (1) the increasing scale of deviation in standard errors; (2) the problem emerging in the data collection process; and (3) the problem occurring in short period of time-series. All of these pros and cons of the panel data analysis will be dealt within the econometric part of this study. Some of those problems will be discussed and solved by way of making consistent and efficient assumptions about economic structures, but the others are adhered to the limits of the econometric method and its major assumptions.

Second, the data context of the study will basically reflect the leading policy tools of the neoliberal framework emerged in the post-1980 period which will be handled in the data selection process. The prominent neoliberal policy components determine the data framework of the analysis which are in harmony with the main hypothesis of the study. As far as data selection is concerned, attempts have been made to select variables that are close to these policy components. Unlike the micro-based data, the macro-based data were used in the empirical analysis. There are two major reasons behind this case. First, the micro-based variables are not

easily obtained for each country when panel data analysis is introduced. Additionally, time periods may be missing even if the data is available to obtain for each country. Hence, it is no proper to use in panel data analysis because the balanced panel structure turns into unbalanced one which in turn creates some critical problems in technical context. Second, the macro-based variables are much far-reaching in terms of their consistency with the neoliberal policy components in order to test the major hypothesis of the study. It can be easily understood by focusing on the sub-variables of these variables using in the study.

Indeed, the major variables using in the empirical analysis consist of several sub-categories in themselves. These variables are the weighted averages of their sub-components. For instance, in this sense, two major variables can be discussed in testing of the fundamental hypothesis in an economic context. These are capital account openness index and financial development index, respectively. Each of these variables has numerous sub-components in itself. Particularly, this case provides a significant advantage to avoid from the omitted variable bias problem. Furthermore, it extends the context of the interaction term of these two variables. The main reason why I use the interaction term of capital account openness index and financial development index in the econometric analysis is to test the major hypothesis of this study which of those two variables include multi-factorial and multifaceted sub-components in themselves. Therefore, it provides a wide-range perspective in the economic sense. Moreover, both of these two variables and their interaction term give a quick response to the changes in the economic framework. Thus, they are easy to update. The sources of each variable basically depend on the database of the major international institutions, namely IMF and WB. This case is also valid for both of the variables using in the empirical analysis. In that sense, they have power to solve the credibility problem and to develop the transparency issue.

However, in addition to these advantages, the data selection process may have some limitations. First, the sub-components of the major variables may not be well-equipped for each country due to their variety in the data. Therefore, they may not be reliable for past periods and least developed economies. The use of weighted averages of these variables in the empirical analysis conceals this problem which may give bias and inaccurate results in the economic sense. Therefore, in panel data analysis, the data sets should be selected for countries where the time coverage and the sample size is possible enough. Second, it is very limited to obtain variables for each time period and each country in panel data analysis. Hence, time limitation is another dimension of the data selection process. For instance, the same problem is still relevant for the capital account restrictions index which is used as a reverse proxy for the capital account openness index. Although it includes different kinds of sub-indices for restrictions on capital account, it may not provide reliable and consistent results for each country group, especially for LDCs. Due to these problems, I limit the time dimension of the data for 1995-2015 period and the sample countries are selected from developed and developing economies. Both of the base specifications and robustness checks follow the same options for data and sample selection method. The data selection for labor share of income and financial regime (i.e., financial openness indicators and financial development) is the major case of the empirical structure.

However, one more factor also play a key in the determination of the time framework: *the emergence of the net effects of the neoliberal policies on the socio-economic and political contexts.* As the next section will focus on the details of this issue by using several graphs for different variables over the 1980-2015 period, it will be easily understood that the year of 1995 is a breaking point in changing socio-economic and political frameworks for almost each

selected variable and country groups[99]. Although the country-specific trends vary over time, the socio-economic and political breaks are relevant for selected country groups in the average, beginning from the mid-1990s. There may be two reasons behind this case. First, the implemented policy components of the neoliberal system gradually emerged in the socio-economic and political frameworks of those selected countries. Second, these increasing upward/downward trends in the variables were reflecting the changes in the socio-economic and political paradigm as a result of the implementing neoliberal policy receipts by the major international institutions following the severe economic crises emerged in the 1990s. However, the changes in the trends of variables are straightforward even if these two reasons have differential effects on socio-economic and political structures, depending on country-specific conditions. Therefore, I use several proxies in the robustness checks instead of the fundamental variables so as to test the further significance of the hypothesis of this study. In the selection of these proxies, either I chose opposite variables to their major ones (e.g., the capital account openness index and the capital account restrictions index) or I use highly correlated variables.

Indeed, in all these two conditions, I try to reach a further development in the data structure. For instance, instead of the unemployment rate and population indicators using in the base specification, I use labor quantity growth and labor force participation rate indicators as proxies for the bargaining power measurements of labor in order to get a higher understanding of the effects of changing labor market policies in the neoliberal period. While the unemployment rate focuses on one side of the effects of bargaining power measurements on the labor's share, it is complemented by the inclusion of labor quantity growth. Additionally, while the population indicator can be used for the analysis of multifaceted dimensions of the labor's bargaining power, the labor force participation rate is used for a specific case of it. However, all these variables have a common logic even if they show us the different aspects of the bargaining power of labor. Alternatively saying that all the variables using in the robustness checks as their proxies of the major variables using in the base specifications are preserved their theoretical logic in the economic sense.

Finally, the selection of sample countries process includes similar types of advantages and disadvantages as in the selection of data process. Therefore, it contains several opportunities and limitations in case of the economic, and more specifically, of the econometric analyses. I use 44 countries in the empirical analysis. The sample are mostly selected from the OECD member countries and the residuals are the non-OECD countries[100]. The categorization of these countries can also be made to their levels of economic and financial developments. However, the classification of these countries as OECD and non-OECD is more favorable than to their levels of economic and financial developments because the political differentiations and the changes in their political powers are reduced to much lower levels. In general, the political tools of the OECD region countries are very parallel to each other. More precisely, the candidate countries to involve in OECD should adopt some major policies which are particularly belonged to the neoliberal objectives. Moreover, this case is not only limited with the political tools. They are converged to each other in economic policies over time. Therefore, the selection of countries

---

[99] In order to make an extensive analysis for an understanding of the breaking points of the variables, I graph these variables from the beginning of 1980 in the following sub-sections.
[100] OECD countries can be listed as follows: Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. Non-OECD countries can be listed as follows: Argentina, China, Colombia, Egypt, India, Indonesia, Malaysia, Russian Federation, Singapore, South Africa, and Thailand. For more information of their classifications for the levels of economic developments please see Appendix A10.

belonging to specific types of institutions or organizations may provide to avoid from several limitations and technical disadvantages, especially in political and economic contexts. Especially, this condition is crucial for the panel data analysis. Thus, the major problem essentially emerges for non-OECD countries, and more specifically, least developed non-OECD countries. In the study, I will try to overcome this problem in the following way: the selection of non-OECD countries with political and economic conditions close to OECD countries.

Indeed, this was not the only determinant in this case. The availability of the major variables (e.g., labor's share, capital account openness index, financial development index, the government activity and bargaining power measurements for labor) is the other fundamental element in the selection process of the sample countries. Therefore, the selected sample has some restrictions for specific countries. Although these restrictions are minimal for member countries of the OECD, they are very common to the non-OECD countries. For instance, LDCs are the major ones. First, the availability of the data for least developed non-OECD countries in panel data analysis is very scarce. This may be also valid for selected time periods. Second, if possible, the data may not be reliable, especially for the data (e.g., the capital account openness index and the financial development index) including several sub-components in themselves.

However, the inclusion of these variables into the analysis is also plausible in some senses because these least developed country groups have not well-equipped and well-developed financial regimes, and more specifically, economic structures. These are the countries where capitalist elements are not fully developed and the agricultural sector is still far beyond the industrial sector. In other words, the methodological distinction between labor and capital is not apparent as in the industrial age. Thus, the main logic of bargaining power does not establish upon the sufficient basis. Additionally, the measurement of labor's share has different kinds of methods because the amount of self-employed people are higher in those countries. Furthermore, the non-market economy components are very common. Thus, the results of the econometric analyses may be biased and insufficient due to these problems. Moreover, it may produce some crucial and technical problems in the econometric methods because the balanced panel data structure may turn into unbalanced one, due to data availability.

All in all, the other economic problems in these countries can be listed as follows: (1) the trends in sectoral value added shares are very different in least developed non-OECD countries; (2) the components of the market economy are not prevalent; (3) the markets are based on imperfect competition; (4) there are differences in labor and capital intensities in the production system in least developed non-OECD countries compared to developed OECD countries; (5) the sectoral imbalances and reallocation of production system may heavily affect the labor share of income; (6) the employment level in the unorganized sector is much larger than the organized sector in least developed non-OECD countries compared to developed OECD countries; (7) the informal employment is very common in those least developed non-OECD countries and thus the fallback position of labors are much lower than the developed OECD countries; (8) the development degree of institutional production network is much lower in least developed non-OECD countries which may create bias results, especially for trade openness and trade-related components; (9) the degree of financial openness is low; (10) the reasons of the economic crises depend on different factors in least developed non-OECD countries; and (11) the substitutability between labor and technology are not easily possible.

Actually, the same problems are also prevalent in the selected non-OECD countries. However, they are not as critical as in the least developed non-OECD countries. One of the main reason behind of it depends on the fact that these selected non-OECD countries are very close to the developed country samples from the OECD group both economically and politically. However, some indicators for selected non-OECD countries are still very different compared to the selected OECD countries. For instance, while the capital account openness index is increasing in average for OECD countries, it follows a non-systematic path with ups and downs for non-OECD countries. Similarly, while the level of output per worker is higher for OECD countries, it is much lower in non-OECD countries and thus follows relatively a smooth path. Additionally, the capital account restrictions are much higher in non-OECD countries relative to OECD countries. However, as the reader can obtain technical details about the variables in the next section, the trends of the variables in most of the graphs are not so different for OECD and non-OECD countries over time.

Figure 6.1.A shows the GDP shares of OECD and non-OECD countries to the world GDP over the 1980-2015 period. Particularly, the GDP share of non-OECD country group has tended to increase from the beginning of the 2000s. On the contrary, the GDP share of OECD country group has been gradually declined after the 2000s. In this framework, it is very apparent to understand that there was a huge amount of resource allocation from OECD to non-OECD countries due to several reasons including both socio-economic and political components. Furthermore, if their levels of economic and financial developments and the role of foreign capital flows into these countries are considered, the major dynamics of these changes in GDP shares of OECD and non-OECD countries can be more easily understood.

Figure 6.1.A: GDP Shares of OECD and Non-OECD to World GDP
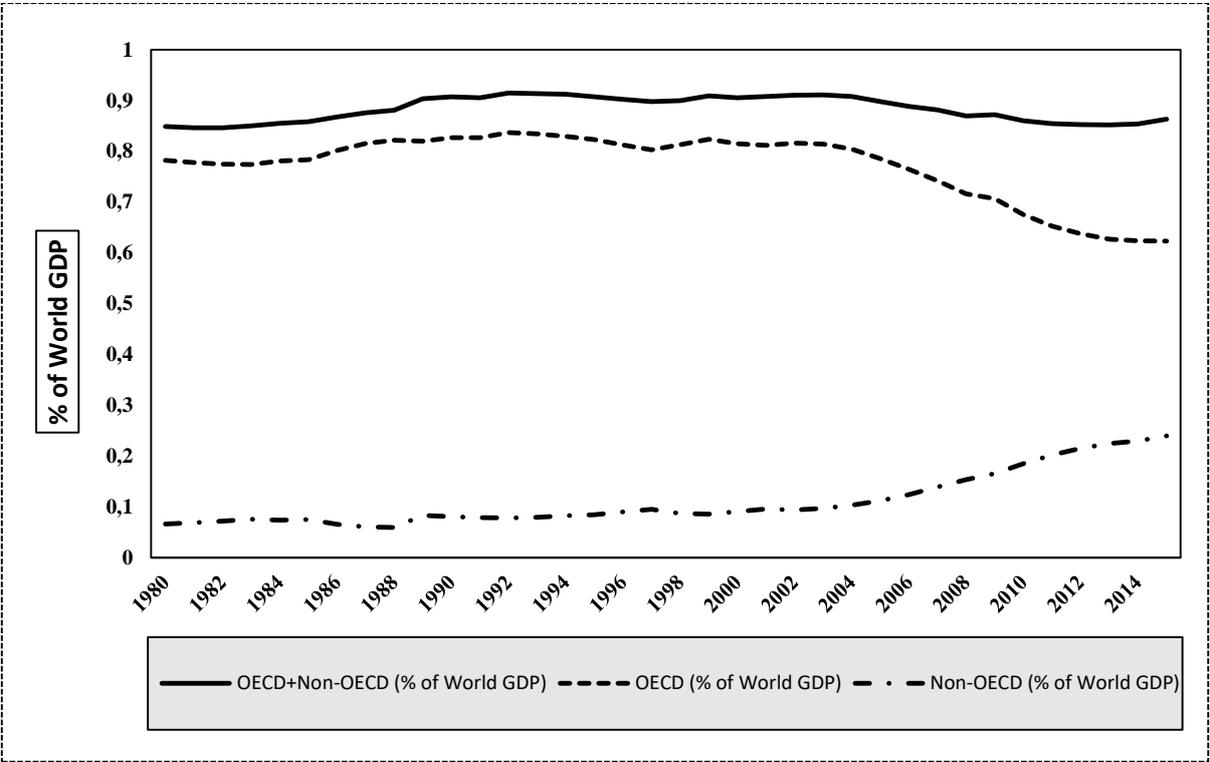
Source: Author's own calculations based on the World Bank, World Development Indicators Database

6.2 Descriptions and Trends in the Variables

The fundamental dynamics of the economic orientations differ in parallel to the changes in the labor share of income. The reduction of the potential role of the Keynesian policies following the stagflation crisis of 1973 has caused to the emergence of new kinds of policies in the labor market. The different types of reflections of these policies both in micro and macro levels have led to the transformations of the relations between capital and labor. Especially, the liberalization process of trade and financial sectors have differentiated in the context of goods and services, depending on the country-specific conditions of the real economy along with the coordinated changes in the financial sector. For instance, the liberalization movements have possessed crucial features in the determination of micro level changes for firm structure and its long-term strategies and macro level changes for production and the distribution of wealth. Although all these factors have different dynamics in their own framework, the distribution phenomenon has revealed a significant change after the neoliberal transformation in socio-economic and political contexts. Therefore, the role of distribution in neoliberal era has obliged to be reinterpreted in the presence of the changing dynamics of capital accumulation in line with the changes in the production system.

It is possible to evaluate the effects of the liberalization processes in both trade and financial sectors from social framework to an economic system in different contexts. The most crucial transformation, related to the distributional objectives, in parallel to the liberalization process, have emerged as a shift of capital accumulation from real sector to financial sector in micro and macro levels. The increase in the number of firms in the financial sector and the increase in the intensity of financial relations and transactions at the individual level were all constituted the critical results of the liberalization process. While the increasing rate of intensity in financial relations was not special to the advanced market economies, their effects have also begun to be an important determinant of the economic mechanism as the portfolio flows and financial assets in developing and emerging market economies. This case was basically the increasing integration of different levels of world economies. In other words, the increasing economic and social integrations were the most striking result of the very newest policies emerged with the neoliberal transformation in parallel to the liberalization process of trade and finance sectors.

However, the multi-dimensional exploration of the effects on liberalization process and the growing focus on the dynamic nature of distributional issues were all left behind at an empirical level. For instance, on the one hand, some of the studies made for financial sector have focused on the openness index; on the other hand, the others have examined the structure of distribution in terms of the development issue. In addition to these studies based on the investigation of financial sector within the frame of different financial indicators, there are also other studies focusing on trade openness and the minimization of the impacts of finance in socio-economic and political frameworks. Yet the basic thing in the first case is to examine the distributional structure, depending on the analyses dealt with the economic and social dimensions. Therefore, this work investigates the relationship between trade and financial liberalization and the labor share of income by taking into account of the mediating role of the country-specific conditions such as financial development, the economic development, the labor market structure (e.g., the factors that affect the bargaining power of labor), the government activity (e.g., the effectiveness of government and its share in the aggregate economy), the globalization parameters, and the standard macroeconomic indicators.

I argue that both of the openness measures for trade and finance sectors have differential impacts on the labor share of income in different countries. Hence, the liberalization of the

financial sector and the trade policies may not be the "correct" policy recommendation for each sample country. In order to understand the dynamics of the distribution of income between capital and labor for any country-based analysis, we argue that the economic, political and social factors all should be considered.

It means that all together use and implementation of these variables without providing a stable socio-economic environment may negatively affect the distributional conditions. For instance, the liberalization of the socio-economic environment (e.g., the increase in the degree of openness to international transactions of capital) and making the conditions to be more open for foreign market players without providing a full-fledged development in the financial sector and trade regime may create a negative effect on the labor share of income. In other words, it is necessary to ensure the consolidation of the inner structure for financial development and the trade policies as much the providing of the degree of openness in those sectors. This argument establishes the basic theoretical hypothesis for the empirical investigation. Therefore, in the empirical analysis, I interactively use variables in order to understand their mutual relations as well as their unique effects. The major reason that I use the interaction of the variables depends on the argument that one factor may create a negative impact on the labor share of income; however, under the impact of the interaction of that factor with one another may create many different results. Hence, the extent of the interactions among factors may have crucial effects on the labor share of income in analytical examinations. Furthermore, the second point is the investigation of the effects of both trade openness and the financial openness on the bargaining power of labor. It is necessary to understand the dynamics and the effects of the free mobility of capital and goods and services on the labor market within the frame of the bargaining power.

The measurements for labor share of income in micro level and the income distribution in macro level include different types of dynamics. In addition to the economic dimensions of these dynamics, the social and the political dimensions should be also included into the analysis. Furthermore, besides their simple own effects among each other, the interactive effects of these variables all should be considered. The most important reason of that depends on the increasing possibility of biased empirical results in the globalized neoliberal period. This means that the neoliberal era represents the period in which different parameters are intertwined both for macro and micro levels in terms of trade and finance. For instance, while one parameter does not have an impact on other parameters in the short-run, this framework may become reversed in the long-run. Alternatively, while the effect of one parameter exhibits an insignificant structure per se, it may potentially be effective in an interaction of other variables and thus may exert significant results. Therefore, these details should be discussed in the analysis of the labor share.

The main mechanism of this work develops on three basic data categorizations which include the following economic and social factors: (1) finance; (2) trade; and (3) government activity. In general, although the degree of openness for trade and finance increased in both developed and developing market economies during the period between 1995 and 2015, the government activity followed a sluggish pattern until the crisis of 2008[101]. However, two major details should be specified in this case. Contrary to an increase in trade openness in a linear form for each sample country, it is not possible to show that the capital account openness increases for all countries in a homogenous structure. Although Figure 6.2.2.A depicts that the degree of capital account openness increased for OECD countries in an aggregate form over the 1980-2015 period, they are not as open as in the non-OECD countries. Even though the degree of openness in financial indicators was differentiated between developed and developing country

---

[101] Please see Figure 6.2.5.H: Trends in government expenditures as a percentage of GDP across country groups.

groups, it turned to be a more open structure from the early 2000s to the 2008 crisis following the significant changes in the level of both economic and financial developments. Hence, the measures for both the level of developments in finance and the factor endowments should be added into the analysis which significantly affects the dynamic structure of the capital account within the frame of the measurement of the labor share.

The basic question is this in that framework: In which direction does the level of financial development affect the capital account openness and what are the possible impacts on the labor share of income within the frame of capital-labor contradictions? For instance, the degree of financial development may change the functions of trade in terms of its effects on the factor shares. Therefore, the openness factor for the capital account may be interactively dealt with the financial development parameter. Another critical feature of the financial development indicator is its different effects on the labor share of income as well as the effects on the capital account. For instance, the changes in depth, access, and efficiency of financial resources both for financial markets and the institutions may diversify the patterns of individual behaviors. This diversification, therefore, may change the dynamics between factors of production, depending on the level of availability to the financial resources and to the income levels for the current and future economic activities.

Moreover, besides these two basic frameworks, it is necessary to investigate the effects of government activity on the basis of economic, social, and political indicators in order to understand the changing dynamics of the labor share of income. Therefore, I consider two types of parameters on the government sector. On the one hand, the empirical analysis deals with the share of government as a percentage of GDP to show its changing structure in the neoliberal era; on the other hand, the empirical analysis discusses on the effectiveness of the government to analyze the political considerations in the institutional context. However, similar to the interaction terms of the financial development with the liberalization parameters, interactively use of these two parameters may provide profound outcomes to understand the reciprocal relationship between the socio-political and economic determinants in terms of the government sector. In other words, the empirical examination of the government activity may create unbiased, consistent, and efficient results for the analysis of changing factor shares, especially after the period of the collapse of the Soviet Union.

As a result, these three mechanisms uncover the dynamics behind the changing labor share of income related to several control variables and the other distinguishing features of the socio-economic and political factors. The examination of the factor shares may create insignificant results without incorporating these three mechanisms into the analysis. In other words, the degree of openness in trade and finance; the transformation of the government sector and the changing level of financial development are all effective on the distribution of factor shares along with the internationalization of capital in the neoliberal period. However, the scale and the impact of this effectiveness should be assessed within the frame of its level of effects on the power relations between capital and labor. In other words, the class dynamics between capital and labor should be strictly considered in the neoliberal period.

6.2.1 Measuring Labor's Share

The measurement of the labor share of income consists of different types of methods in the literature (see Guerriero, 2012). Although many of these methods change, depending on various sources of the dataset of institutions (e.g., Annual Macroeconomic Database of the European Commission (AMECO), OECD, Penn World Table, UN) for the measurement of the labor share

of income, there is no common estimation method. For instance, Jayadev (2007) makes his analysis by using the UN data set which is regularly announced until 1968. In Jayadev's (2007) methodology, the labor share of income is calculated by the compensation of employees as a share of GDP which is also prevailing in other studies (Rodrik, 1997; Diwan, 2001; Daudey and Garcia-Penalosa, 2007).

However, this measurement method for the labor share includes its own deficiencies. First, the data for this method are basically collected from the formal sectors and therefore the data from the informal sectors are not included in the labor share of income. As Jayadev (2007: 426) states that the exclusion of the informal sectors causes to be reported either more or less for labor share of income, especially in the context of the developing economies.

In addition, Krueger (1999) and Gollin (2002) exert a different point for the measurement of the labor share. Although the wage parameter of the formal employment is included in the labor share data, the self-employment income is excluded from the measurement of the labor share or is assumed as a capital share. However, this issue makes the share of capital much higher in the national income and the share of labor much lower than their actual levels. Especially this case is more relevant for emerging and developing countries where the self-employment ratio is higher relative to DCs. However, for the panel data series, the data for self-employment which is called as mixed income, are not calculated because the parameters are not available for all countries and relevant time periods.

In the following models, the analysis of the labor share will be based on the dataset of the Penn World Table 9.0 which is calculated as the share of labor compensation in GDP at current national prices. This dataset, especially, remarks the importance of the self-employment issue which is adjusted for the labor's share. The method for the measurement of the labor share of income is similar in Penn World Table 9.0 as in Penn World Table 8.1, especially for developed and developing countries[102] (Feenstra, Inklaar and Timmer, 2015).

---

[102] According to Feenstra, Inklaar and Timmer (2015), different from the labor income of workers, it is not possible directly to observe the labor income of self-employed workers. The major reason depends on the fact that their income includes the compensation for both their labor supply and capital they may have. Therefore, in PWT 9.0, Feenstra, Inklaar and Timmer (2015) construct new adjustment method by increasing the range of countries and extending time period covered, instead of methods done by Krueger (1999) and Gollin (2002), including modest set of countries. The distinctive feature of this new adjustment method is the inclusion of mixed income (i.e., the total income earned by self-employed workers) and the evaluation of this income category depending on the economic structures of countries. The results of their estimations show that a single adjustment approach for the labor's share is not appropriate for all countries, especially for countries where the agriculture sector is the leading sector in the economy. Therefore, PWT 9.0 builds a "best estimate" labor share based on three rules. First, if it is available, the use of mixed income data in the adjustment of labor's share is preferable which is directly related to the income of self-employed workers. Second, whenever the income labor of self-employed workers is available, the naïve labor share never exceeds 0.66. If it is higher than 0.7 in data of any country, it is reasonable to assume that the share of labor income is already included the mixed income; therefore, the naïve share is used directly (this case is mostly related to the low income countries where the agriculture sector is very important in the economic system). Third, the adjustment estimations show that there is a greater chance of overestimating the share of labor income than underestimating the labor's share. In the context of these three rules, the results show that there is a great variation in the labor's share. In addition to the reasons of Karabarbounis and Neiman (2013) who propound the cheaper investment goods to enlighten the declining trends in labor's share over time, Feenstra, Inklaar and Timmer (2015) also propose new channels to understand these downward trends in the share of labor income: (1) capital-based technological change; (2) international trade; and (3) increased financialization. All these factors are analyzed in the empirical investigation and the results can be obtained from Table 6.4.A, Table 6.5.A, Table 6.5.B, Table 6.5.C, Table 6.5.D, Table 6.5.E and Table 6.5.F. Moreover, in addition to these channels, the empirical analysis also focuses on much different factors related to the declining share of labor income.

Although Penn World Table 9.0 focuses on these issues, the analytical results show that the measurement of the labor share of income is different for developed and developing countries[103]. Because the correlation ratio is very high in the updated version when it is compared with the version 8.0, it does not statistically create any problem for the empirical analysis. However, the correlation ratio may change among LDCs where the agricultural sector is the leading sector in comparison to other sectors. Hence, different types of statistical dynamics may prevail in the model.

In this sense, the data for labor share includes so many different kinds of income measures earned by workers such as gross wages and salaries, cash allowances, overtime pays, commissions, social contributions, the income of students from paid works, the income received by shareholders, and income by outworks. However, it excludes the value of unpaid voluntary work, income from self-employment, the income of the unemployed, income of those are not in the labor force, unpaid family workers, property income, and some expenditures made by employers[104].

Figure 6.2.1.A: Labor share trends across country groups
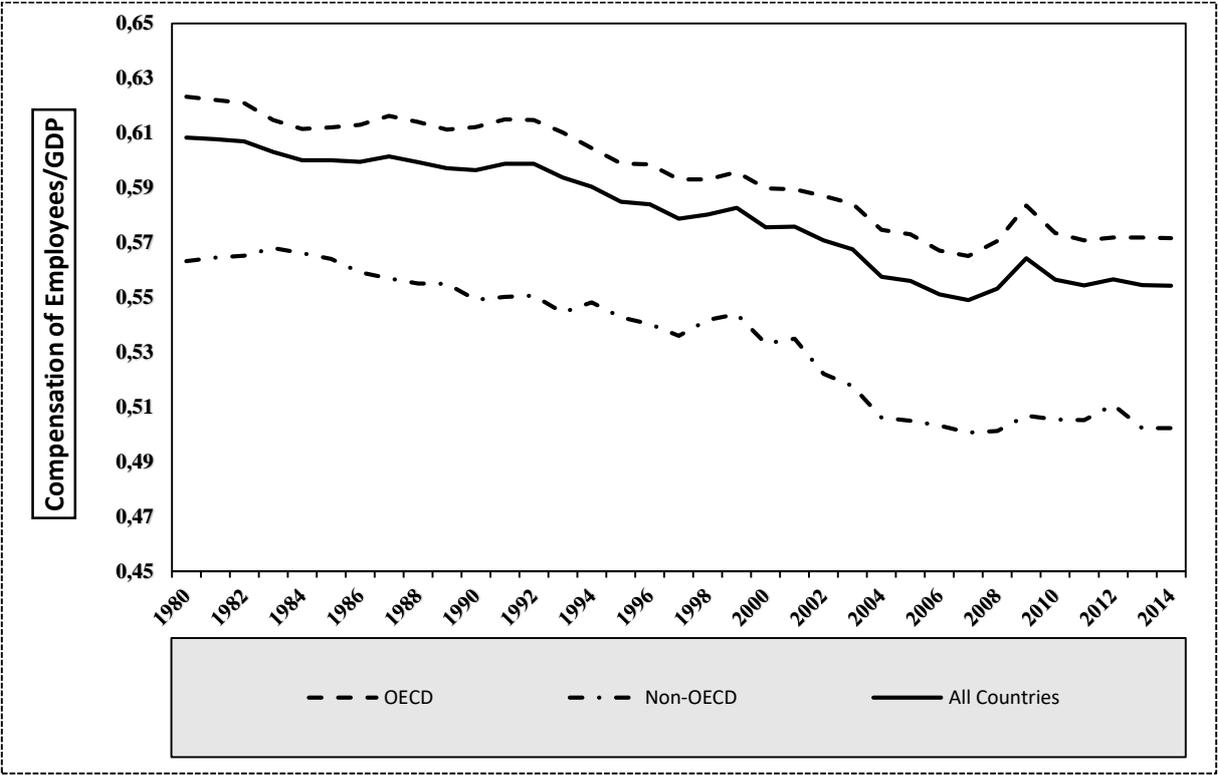
Source: Penn World Table 9.0

---

[103] In technical sense, Penn World Table version 9.0 is an extended and on-going data structure of the Penn World Table versions 8.1, 8.0 and the older ones. Therefore, both of these versions exhibit a close relationship in the context of theoretical and methodological framework. Because the labor share has a great importance in the empirical analysis, the differences between the selected older versions and the new one can be evaluated by the comparing each other. For instance, the correlation ratio between the labor share datasets of Penn World Table 8.0 and Penn World Table 9.0 for the sample countries and the period is very high approximately at .90.

[104] Note that this dataset for the labor share of income in Penn World Table 9.0 is very similar to the measurement method of UN data, especially for the components of the compensation of employees and the statistical analyses.

231

6.2.2 Measuring the Capital Account Openness

To measure the extent of openness of the capital account transactions, newly developed and updated capital account openness (KAOPEN) index produced by Ito and Chinn (2016) will be used in the following models in order to understand the effects of liberalization in the financial sector on labor share of income. Similar to other indices for financial openness using in the literature (Quinn, 1997; Kraay, 1998; Rodrik, 1998; Williamson and Mahar, 1998; Klein and Olivei, 1999; Edwards, 2001; Rajan, 2003; Lee and Jayadev, 2005; Kose et al., 2006), KAOPEN index is based on the information about the capital mobility from the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) to incorporate the extent and intensity of capital controls. As Chinn and Ito (2008: 310) state that AREAER is very beneficial to get an information about the rules and regulations governing external account transactions for a wide cross-section of countries.

The KAOPEN index also bases on the first principle component of four binary variables in the IMF's AREAER which indicates that higher values of the index depict more open financial regimes. The binary variables can be described as follows: k_1 variable shows the presence of multiple exchange rates; k_2 variable shows restrictions on current account transactions; k_3 variable shows the restrictions on capital account transactions; and k_4 shows the necessary points of the surrender of export proceeds (Chinn and Ito, 2006: 169). Based on these four binary variables, the KAOPEN index covers of all the sample countries data for the 1995-2014 period. By making comprehensive outlook of the general conditions of the economic situation, the last sample year can also be generalized for the following year. As Chinn and Ito (2008: 314-317) mention that the key advantage of the KAOPEN index depends on its relative transparency in the way of construction, ease of updating, and wide coverage across countries and time. In KAOPEN index, the openness value is ranged between [-1.86] and [2.46]. The most financially open value is 2.46 and the least financially open value is -1.86.

Figure 6.2.2.A: Capital account openness over time across country groups
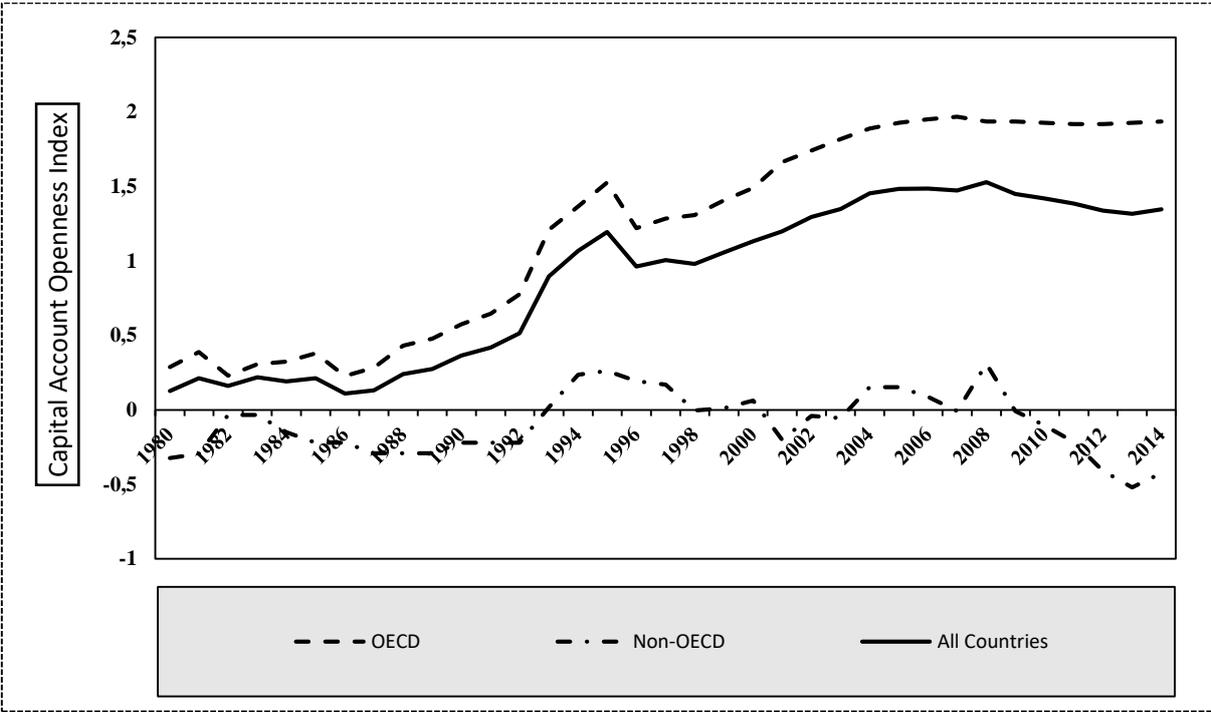
Source: Chinn-Ito KAOPEN Index

In capital account transactions, the range and the volume of the openness degree are not so easy to measure for the economy-wide level (Edison et al., 2002). In this context, the measurement method should be divided into two types of measures: (i) *de jure* measure of financial openness and (ii) *de facto* measure of financial openness. The KAOPEN index is categorized as de jure measure for the extent of the measurement of financial openness because it takes into account of regulatory restrictions on capital account transactions. Therefore, the KAOPEN index can be assumed as different from de facto measures of financial openness which are based on prices of factors.

The pros and cons of these two measures on financial openness are different. For instance, Arestis and Caner (2009: 303) state that the de jure measure cannot lead to a higher cross-border transactions even if the controls on the transactions are relaxed for both domestic capital and international capital, depending on several factors such as the investment ratios, the degree of economic development, labor markets and policies. However, it is also proper for the analysis on the basis of the investigation of the regulatory framework of capital controls. On the other hand, de facto measure may also create biases towards price-based measures because the private sector may create different ways to fade away from barriers and restrictions on capital account (Edwards, 1999). This de facto measures may also cause to another drawback which can give false indicators for macroeconomic conditions, even though they make no changes in the regulatory framework of the capital account.

The importance of the financial development parameter shows its significance in the inner structure of the KAOPEN index in the empirical analysis. In the theoretical structure of Chinn and Ito (2002, 2006, and 2008) and Ito and Chinn (2016) for the determinants of financial development, the bilateral relations between financial development and the financial openness come out surface. According to Chinn and Ito (2002, 2006, and 2008) and Ito and Chinn (2016), this issue is basically related to the conditions of capital controls and the barriers on capital, measured by the private credit creation and the stock market activity as a proxy for the financial development. The unique benefit of a higher financial openness on the development of equity markets depends only on the existence of the threshold level of institutions, especially for emerging and developing markets. Therefore, the KAOPEN index in measuring of labor share in the neoliberal era in line with the effects of financial development will provide a comprehensive agenda for further analyses of financial openness.

Besides the KAOPEN index, there is also another index developed by Lee and Jayadev (2003). Actually, it has different structure than the KAOPEN index because it is not based on the information from the IMF's AREAER. Rather, the methodological structure of their openness index is developed by new technique introduced by Quinn (1997). According to Jayadev (2007), the other measures for capital openness have some problems. The major reason for Jayadev (2007: 426) depends on the problem of evaluating the degree and the intensity of restrictions to the capital mobility. Therefore, Quinn's (1997) index is much robust than the other indices because it takes into account of the degree and the intensity of the restrictions on capital mobility (Lee and Jayadev, 2003), because it codes the intensity of controls in balance of payments benefiting from the data on statutory restrictions (Jayadev, 2007: 426).

6.2.3 Measuring the Financial Development

The complex structure of the economic and social relations in the neoliberal period requires the including of different parameters, especially the indicators measuring the level of financial development. It is necessary for the measurement of their several categories of these parameters

in the aggregate economic framework, more specifically, in the analysis of the distribution of income. The major reason behind the use of the financial development parameter in the empirical analysis depends on the fact that a big part of the economic relations is connected to the movements of financial sector following the neoliberal transformation towards the removal of barriers and restrictions upon the capital mobility.

The increasing role of the financial sector in the neoliberal era in line with the increase in the level of development in finance can be divided into two different parts. On the individual basis, it may appear as a dependence on the consumer credits to compensate for decreasing wage levels. On the firm level, however, it may arise due to firm's demand for higher resources in the context of an increasing competition in the markets. In this sense, all of these different kinds of dependency factors indicate a crucial point: "*the developing structure of the finance at all*". These mutual relations between individuals and firms in the context of increasing level of financial development not just transformed the economic subjects and agents but also the financial motives and relations. Indeed, they created pressure on financial mechanisms to stimulate an increase in innovative technologies in the context of an increasing scale of financial relations, motives, and transactions in the aggregate economy. In addition to these technical issues, the changing structure of finance has provided a scientific basis for new kinds of policy decisions within legal terms. Therefore, the infrastructure of the mechanisms of financial development should be arranged to meet the increasing demand of financial sector as the case of an increasing degree of capital account openness. Therefore, the practical issues have stimulated to focus on multi-dimensional parameters for measuring the level of financial development rather than single-factor analysis. Thus, I constitute the empirical structure on the bilateral investigation of the financial development with both measures of trade openness and the capital account openness, respectively.

To measure the extent of this financial development indicator, in the empirical model, I will use a new broad-based index developed by Svirydzenka (2016) from the National Bureau of Economic Research (NBER) database. This index involves a number of sub-categories about how developed financial markets and institutions are in terms of depth, access, and efficiency which is all covered in the financial development index. The sub-categories of the financial development including the financial markets and institutions can also be divided into two cases: (1) financial institutions cover banks, insurance companies, mutual funds and pension funds and (2) financial markets cover stock and bond markets. All in all, Svirydzenka (2016: 5) summarizes the financial development index in the context of these sub-categories as follows: (1) depth (size and liquidity of markets); (2) access (ability of individuals and companies to access financial services); and (3) and efficiency (ability of institutions to provide financial services at low cost and with sustainable revenues, and the level activity of capital markets).[105]

Although the financial development index shows an increasing momentum during the period between 1980 and 2013, it may create different effects on the income distribution, and more specifically, on the factor shares under the control of other variables. In other words, the increasing access to financial resources does not mean that these resources provide efficient

---

[105] Financial institutions (FI) index measures access to financial institutions (bank branches per 100,000 adults, ATMs per 100,000 adults) efficiency of these institutions (net interest margin, lending-deposits spread, non-interest income to total income, overhead costs to total assets, returns on assets, return on equity), and depth of these institutions (private sector credits, pension funds assets, mutual fund assets, insurance premiums). Financial markets (FM) index measures depth of financial markets (stock market capitalization, stock trading, debt securities), access to capital markets (market capitalization, debt issuers), and efficiency of financial markets (stock market turnover ratio). Financial development (FD) index is a weighted average of FI and FM indices, where the weights are obtained using principal component analysis. For more information please see Svirydzenka (2016).

and equal use to each economic agent as a result of the financial development. Furthermore, these resources do not mean that they create the same opportunities for each economic issue.

Rather than access to resources, this shows that the main problem is the reasons behind the increasing demand for these resources. In other words, the increasing demand for financial services and financial transactions should be investigated in more detail, especially for analyses such that the practices on households. Do they demand to access the resources for their individual investments or due to the problems occurred in their incomes? These two different question patterns have critical importance to understand the nature and trends of income distribution and the changing nature of the factor shares. Therefore, in addition to the determination of the level of financial development, different kinds of economic paradigms including the degree of the openness measures for both trade and finance, all should be included into the analysis. The outcomes may be misleading without implementing the necessary parameters for models both in theoretical and empirical frameworks.

Figure 6.2.3.A: Financial development index across country groups
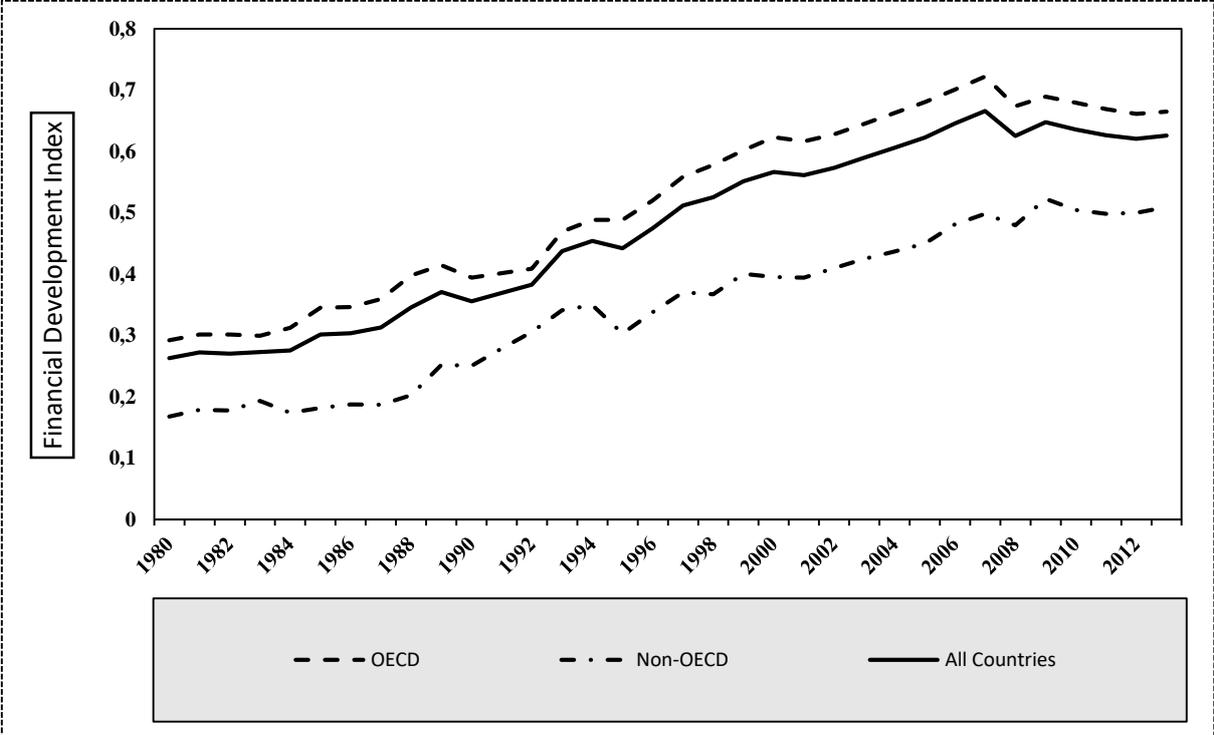
Source: Svirydzenka (2016)

6.2.4 Measuring Trade Openness

In the empirical analysis and the further checks for the estimations, the model will use several variables. Therefore, in addition to the financial development index and the financial openness, the measure for trade will be also evaluated in the openness context as a proxy for the trade liberalization. In other words, the measurement for the overall liberalization will be analyzed with two broad-based measures including the trade openness and the capital account openness. We will use the traditional method for the measurement of the (nominal) trade openness developed from the WDI database of WB.

Basically, the model emphasizes the theoretical argument that the widening gap between factor shares, and in particular, the differences in the labor share between developed and developing countries, can be reduced by higher integration in trade. This integration can be achieved through tariff reductions, the abolition of quotas, or the application of laws to regulate trade relations in world economies. In the context of the Heckscher-Ohlin model, labor-abundant countries provide employment to capital-intensive countries if countries increase trade integration by liberalizing and deregulating their trade regimes, thus, capital-intensive countries provide more capital to labor-intensive countries needed for economic development.

On the other hand, while the share of labor in capital-intensive countries decreases, it increases in labor-abundant countries. However, the model may include different kinds of problems. One of them is about the being of the bargaining power among factors. According to some empirical analysis (e.g., Ortega and Rodriguez, 2001; Harrison, 2005), the liberalization of trade channels puts a downward pressure on the bargaining power of labor in favor of capital and thereby decreases the labor share accruing in the aggregate national income.

Figure 6.2.4.A: Trends in nominal trade openness index across country groups
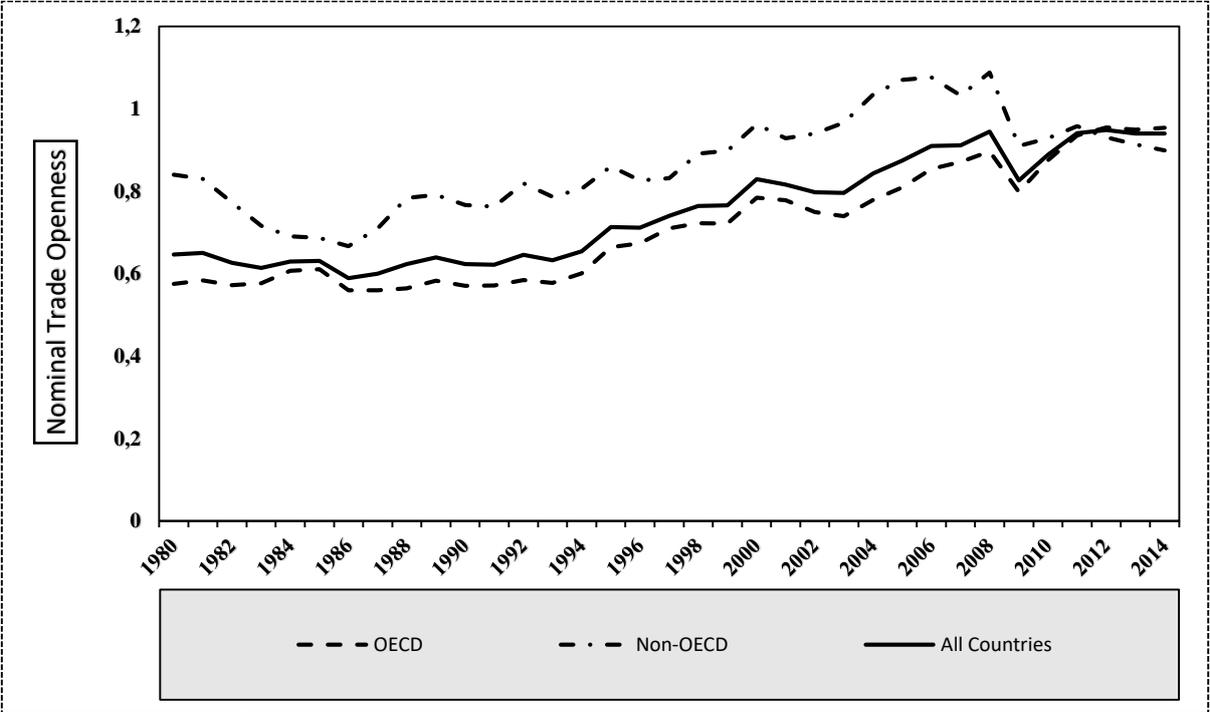
Source: Author's own calculations based on the World Bank, World Development Indicators Database

In addition to these studies based on bargaining power, different methodological issues can be raised for the empirical structure. For instance, if the model follows the method of Alcala and Ciccone (2004), it gets an argument that the traditional (nominal) openness measure is based on downward-biased estimates. The reason depends on the extent of the tradable and non-tradable sectors. Suppose that the trade has a positive impact on productivity, but the productivity gains are much higher in the tradable sector than in the non-tradable sector. If this is the case then the relative price of non-tradable goods increases and the trade-to-(nominal) GDP ratio decreases, depending on the condition that the demand is relatively inelastic for non-tradable goods and services. Hence, trade-based productivity increases would process in line with a decline in the trade-to-(nominal) GDP ratio. In order to circumvent this issue, Alcala and

Ciccone (2004) use another trade indicator to measure the degree of openness in which the nominal term is adjusted by the deflator. In this new measurement, the nominal trade is divided by GDP at Purchasing Power Parity (PPP). It is called as real trade openness because the international price differences for non-tradable goods and services are corrected for the denominator.

In the robustness check, I also use this measurement method for trade liberalization in an attempt to analyze the real effects of trade on the labor share of income so as to assess that whether it changes the significance or the insignificant character of the nominal trade openness. Therefore, the adjusted trade openness measure (i.e., real trade openness) will be used in the robustness checks analysis which is simply calculated as the multiplication of the price of GDP (GDP in exchange rate US\$ divided by GDP in PPP US\$) with the unadjusted trade openness measure (i.e., nominal trade openness). The literature for features of the trade openness also point on the advantages of real openness measure and the method of the measurement is used in many other empirical studies[106] (Rodrik, Subramanian and Trebbi, 2002; Dollar and Kraay, 2003; Herzer, 2013).

Figure 6.2.4.B: Trends in real trade openness index across country groups
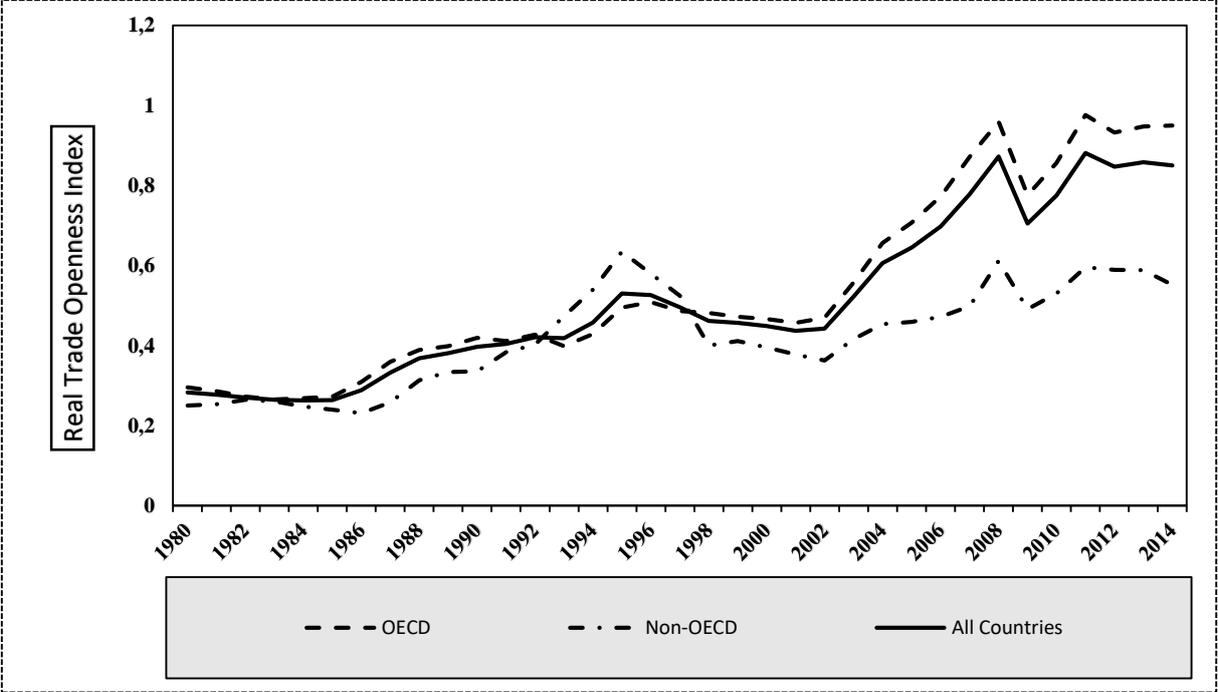
Source: Author's own calculations based on the World Bank, World Development Indicators Database and Penn World Table 9.0

6.2.5 Control Variables

For further robustness checks of the empirical analysis, the model will also use the following variables. Primarily, the government expenditure as a share of GDP is another important criterion in addition to the openness variables for trade and finance and the financial development index. Therefore, the role of government activity in a total economy will be used

---

[106] In addition to these two major trade openness measures, for other indicators in order to assess the trends in the openness of trade regime, please see Yanikkaya (2003).

as a parameter so as to understand its effects on the labor share of income. However, the government effectiveness in policy-making have also become an important indicator in the neoliberal era for both the globalization and the liberalization contexts.

The reasons behind this importance can be investigated in three different topics. First, the degree of effectiveness of the government may decide the legislative framework of the distribution of resources behind the increases in trade and financial relations. Second, it may determine the quality of outcomes factor shares, depending on an increase in the privatization policies, especially in developing and emerging economies. Finally, it may affect the rules of income distribution by limiting the profits of capital accruing from the government-led investments using legal force on policies.

These three factors indicate that the neoliberal government activities all should be interacted with the factor of government efficiency. In other words, the one-way analysis of government share without any investigation of government efficiency may create biased information toward an increase in the share of capital. In this sense, in the empirical analysis, the model will use an interaction term of the following two variables related to the government activity: (1) the ratio of government expenditure as a share of GDP and (2) the degree of government effectiveness.

Finally, in addition to openness measures for trade and the capital account, financial development and the government sector, Table 6.2.5.A shows the other explanatory variables toward the investigation of the changes in the labor share of income. Table 6.2.5.A also classifies these variables according to their economic categories.

Table 6.2.5.A: The Control Variables

LABOR MARKET	TECHNOLOGY AND HUMAN CAPITAL
❖ Unemployment Rate ❖ Logarithm of Total Population ❖ Growth of Labor Quantity, Log Change ❖ Labor Force Participation Rate	❖ Logarithm of GDP per Capita ❖ Logarithm of Output per Worker ❖ TFP at Constant National Prices ❖ Human Capital Index ❖ Human Development Index
GOVERNMENT SECTOR	OPENNESS
❖ Government Share ❖ Government Effectiveness	❖ Real Trade Openness ❖ Capital Account Restriction Index
MACROECONOMIC VARIABLES	GLOBALIZATION
❖ Real Effective Exchange Rate ❖ Investment Share	❖ Overall Globalization Index

In all these control variables, the bargaining power measurements indicate the intermediary mechanism between the base variables and the labor share of income. The major effects of the openness in trade and finance on the income share are mainly the result of changes in bargaining power measures in the neoliberal period.

The fundamental hypothesis can be summarized in the following logical framework. The increasing scale of liberalization of trade and financial sectors, especially after the collapse of the Soviet Union, have consolidated the relations between the real and the financial capital

following the increases of development path of financial activities and the tradable goods in both domestic and international realms. In other words, it has led to the shift of capital from real sector to financial sector, depending on the increasing degree of openness in trade and finance. Capital has turned to new investments to increase demand for financial speculation, which has put downward pressure on the level of employment. Therefore, it has led to the decrease in investments, and more specifically, caused to follow a sluggish pattern in average but with ups and downs in the long-run for each country groups between 1980-2015 periods.

From Figure 6.2.5.A to Figure 6.2.5.M, I present the trends in these control variables which will be used in the empirical investigation. The whole period from 1980 to 2015 provides to see the big picture of the trends in different parameters related to both labor share of income and income distribution between capital and labor. In these figures, almost all trends of parameters show a coherent path with the logical assumptions of the hypothesis of this work. Therefore, the following figures will provide an initial important statistics in order to understand these determinants.

In addition to these figures, there are time trends for labor share of incomes considering these parameters in Appendix A7. In these trends, I first take the average of parameters for all countries and time period, and then, categorize the countries as above mean and below mean. However, the time trends are restricted for the 1995-2015 period. The major reason depends on the fact that time trends give much more accurate and coherent perspectives for the hypothesis of this work. Therefore, each case will provide significant logical outcomes before the empirical analysis.

Figure 6.2.5.A: Unemployment rates across country groups
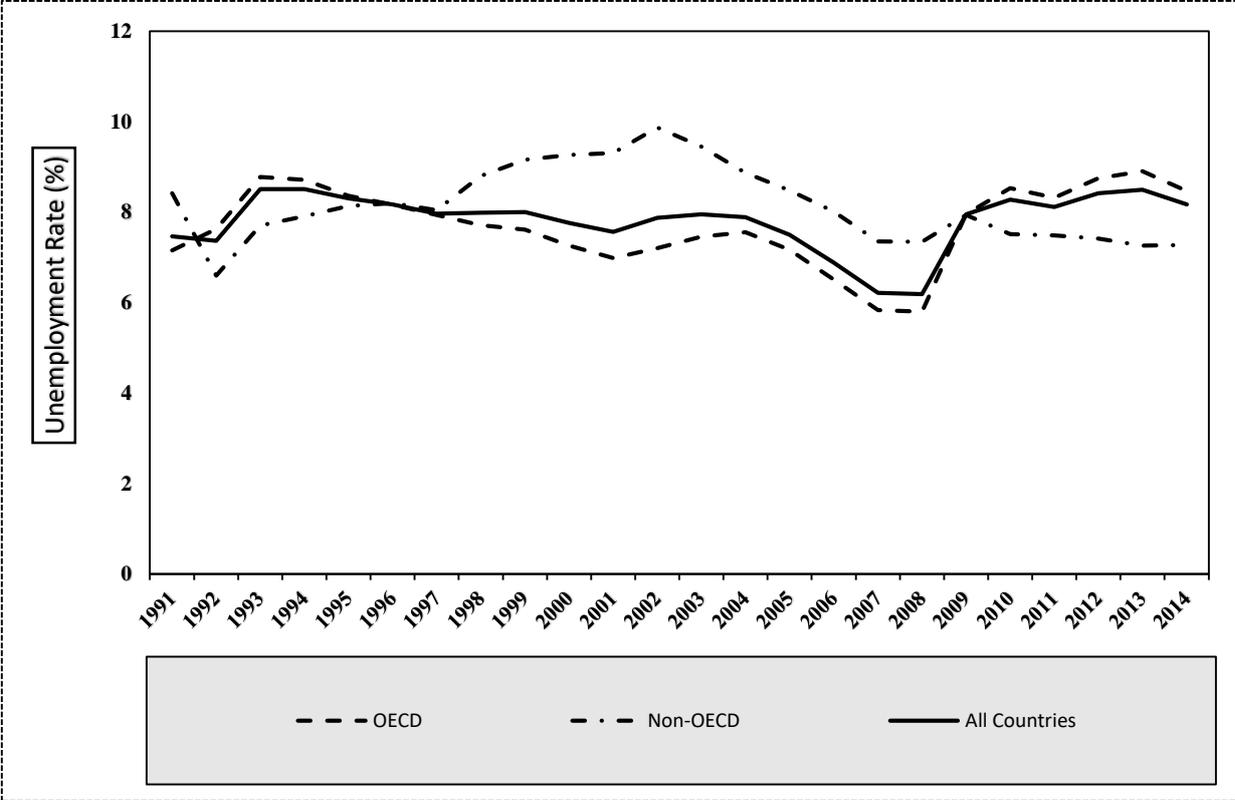
Source: ILO KILM Database

Figure 6.2.5.B: Labor quantity growth across country groups
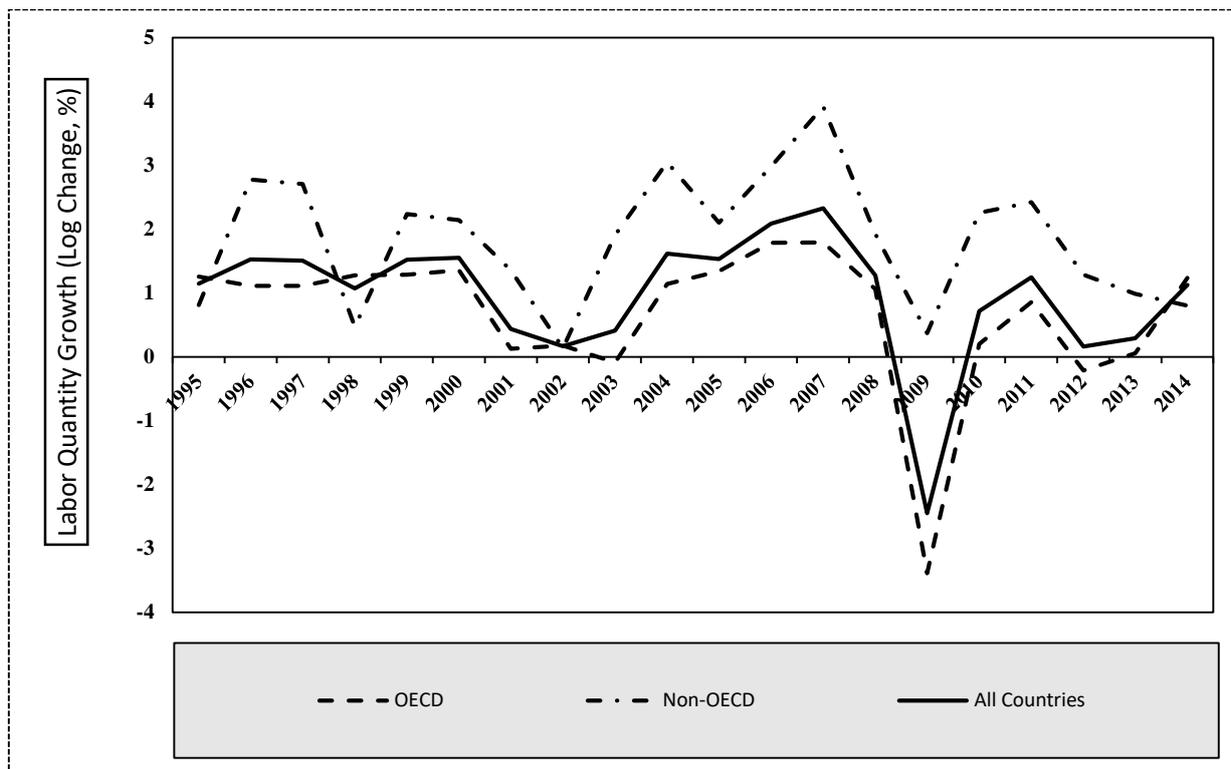
Source: Conference Board, Total Economy Database

Figure 6.2.5.C: Trends in labor force participation rates across country groups
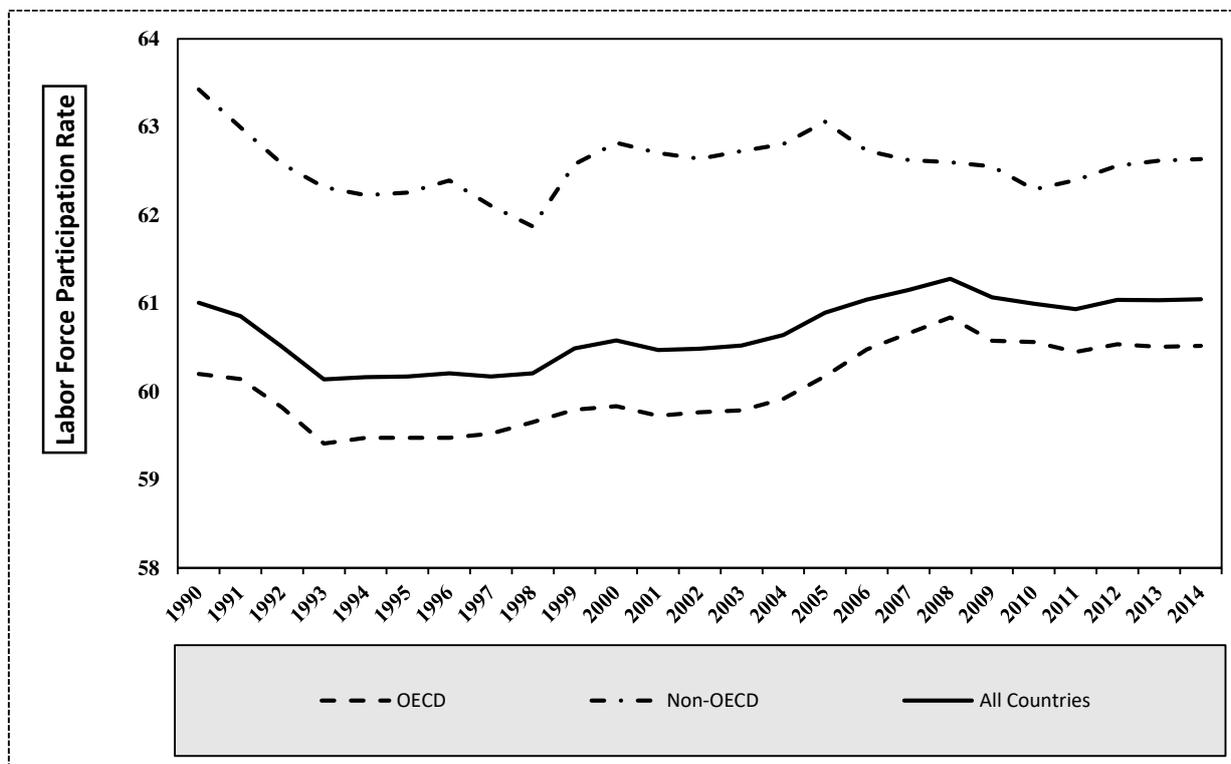
Source: ILO KILM Database

Figure 6.2.5.D: Output per worker (constant 2005$) across country groups
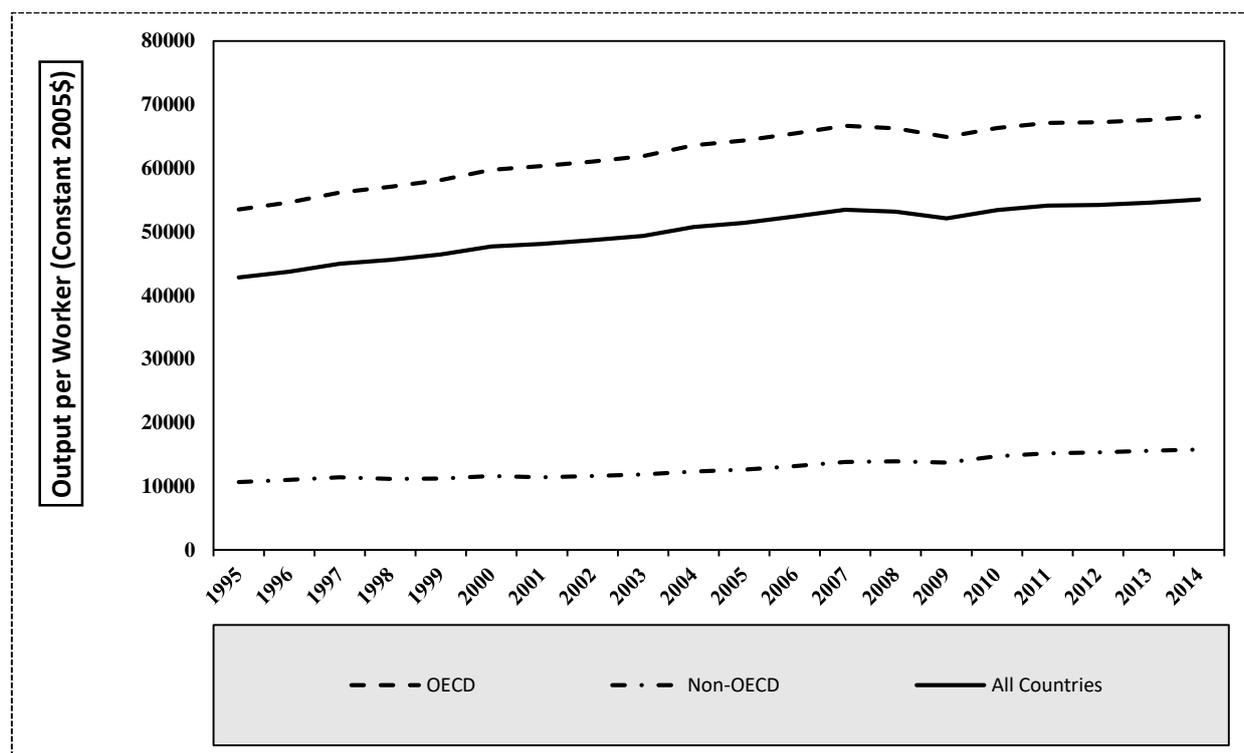
Source: ILO KILM Database

Figure 6.2.5.E: GDP per capita (constant 2010$) across country groups
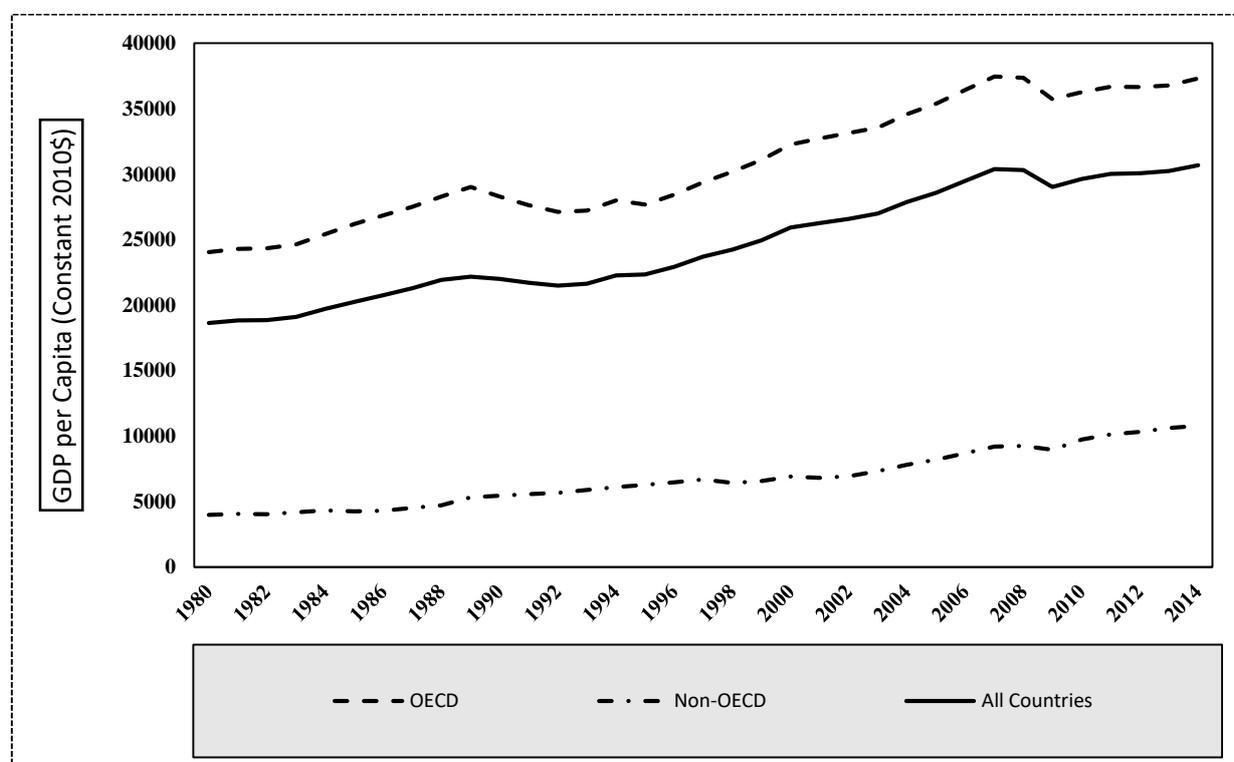
Source: World Bank, World Development Indicators Database

Figure 6.2.5.F: Human capital index across country groups
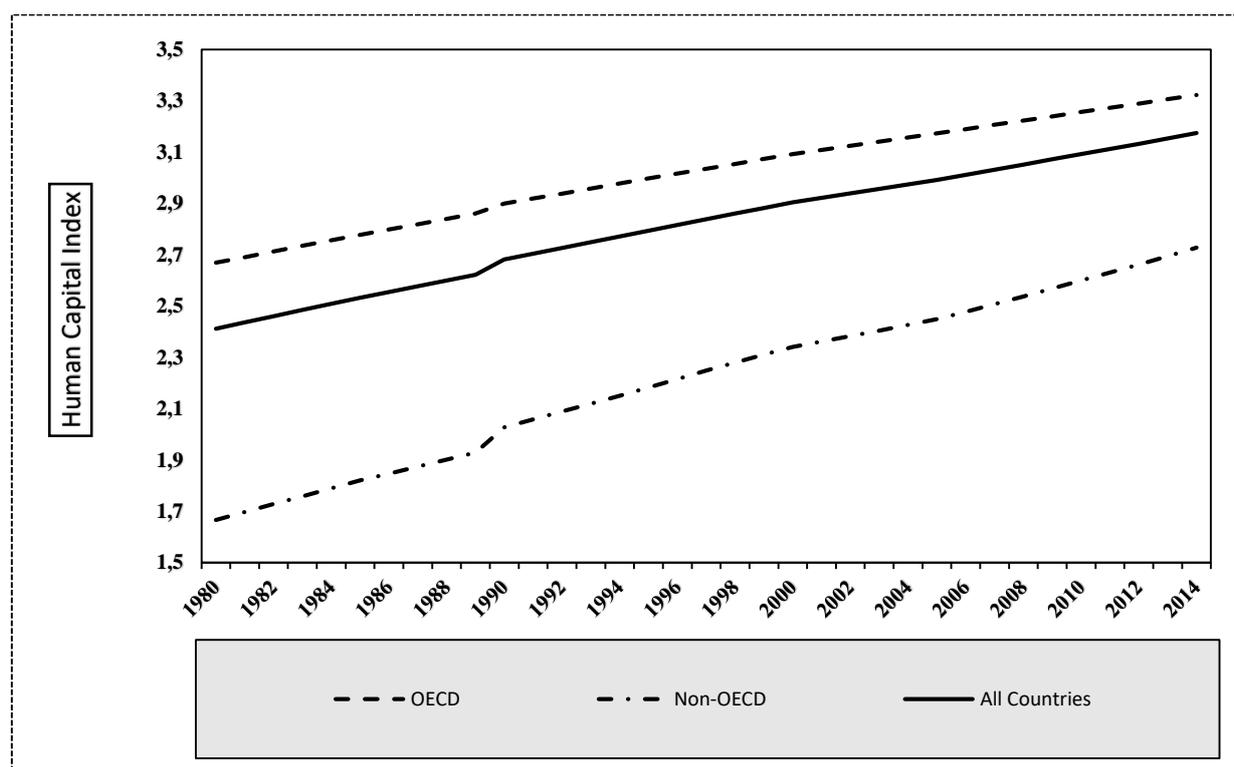
Source: Penn World Table 9.0

Figure 6.2.5.G: Capital account restrictions index across country groups
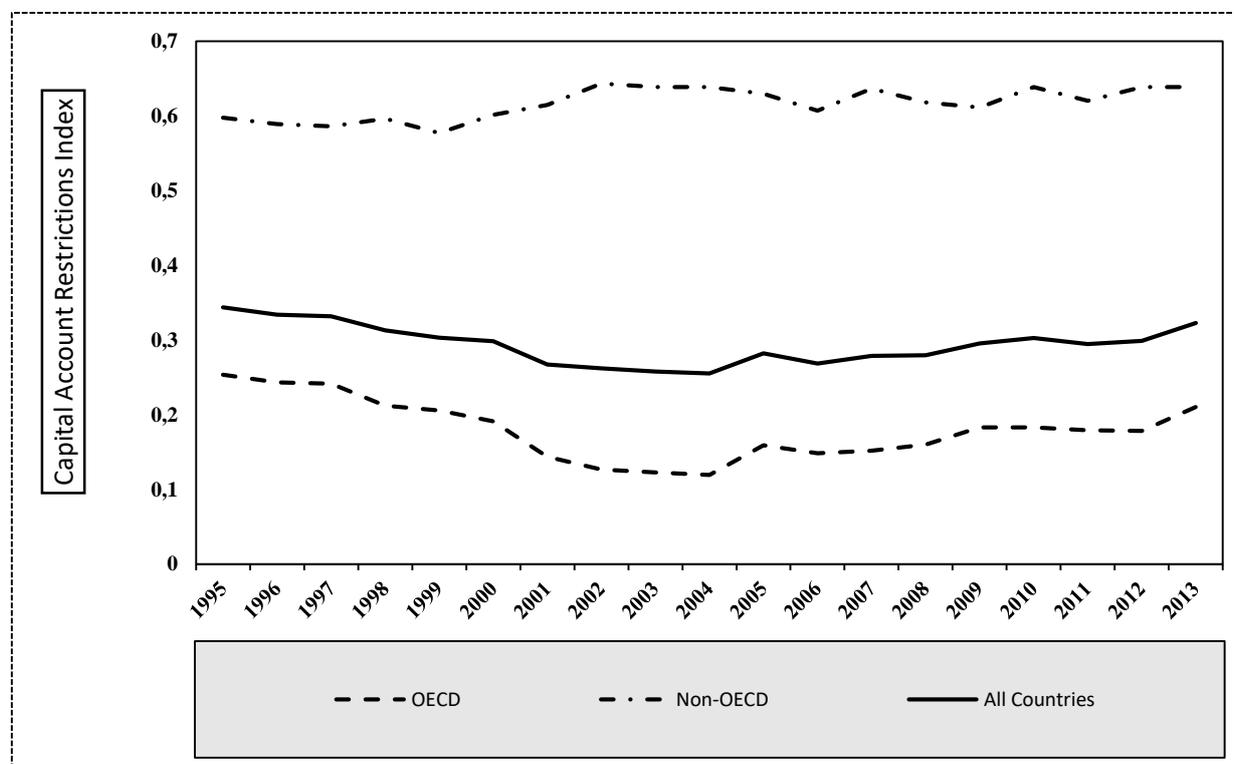
Source: Fernández et al. (2015)

Figure 6.2.5.H: Trends in government expenditures as a percentage of GDP across country groups
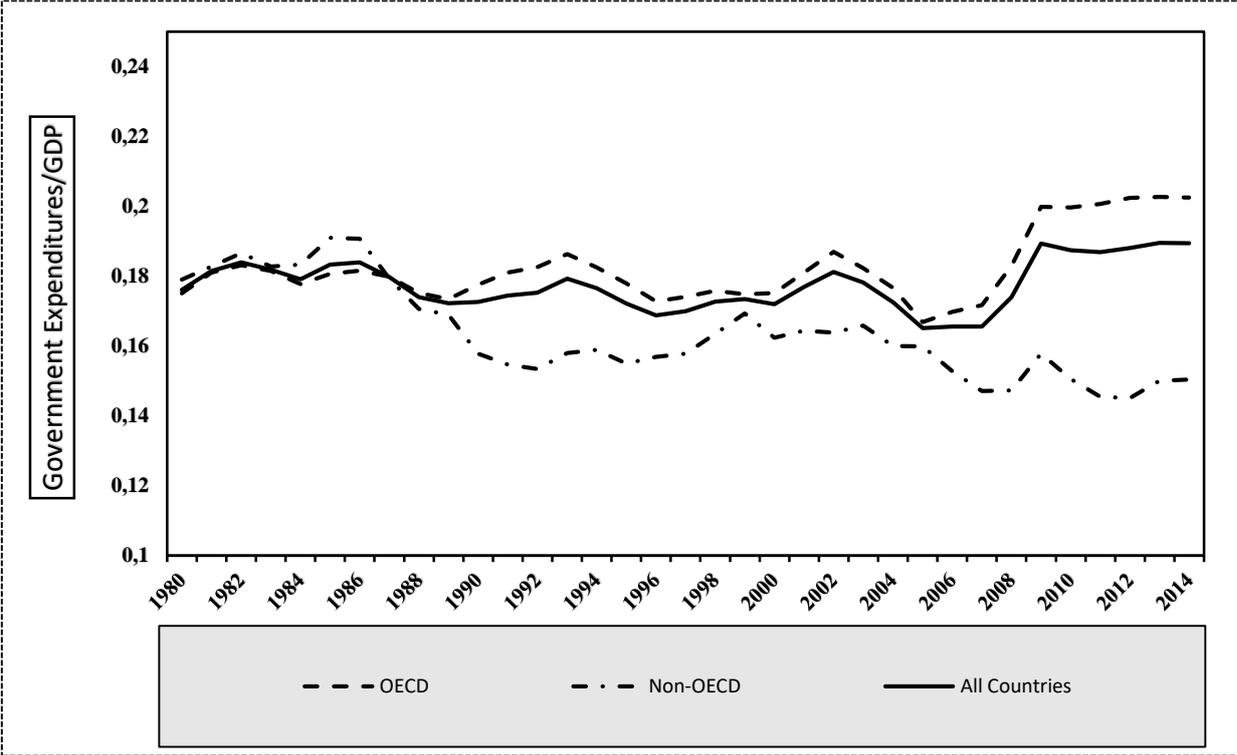
Source: Penn World Table 9.0

Figure 6.2.5.I: Overall globalization index across country groups
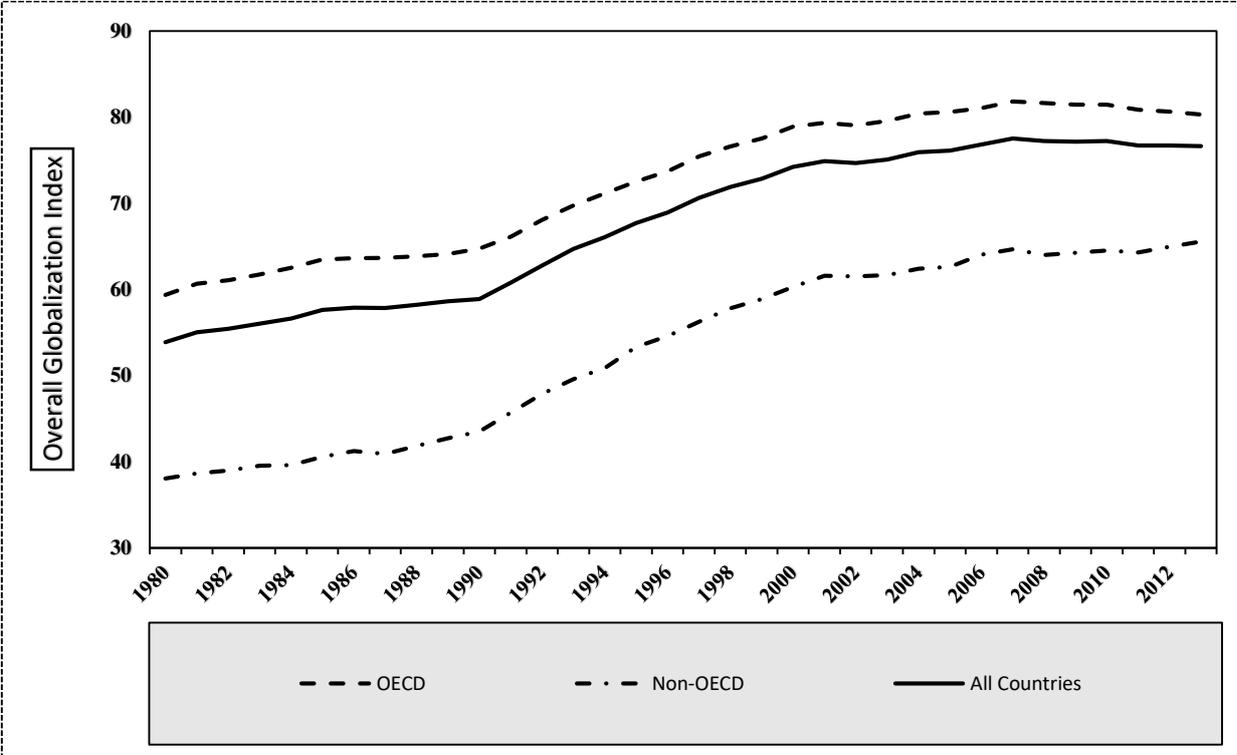
Source: KOF Globalization Index

Figure 6.2.5.J: Trends in total investment as a percentage of GDP across country groups
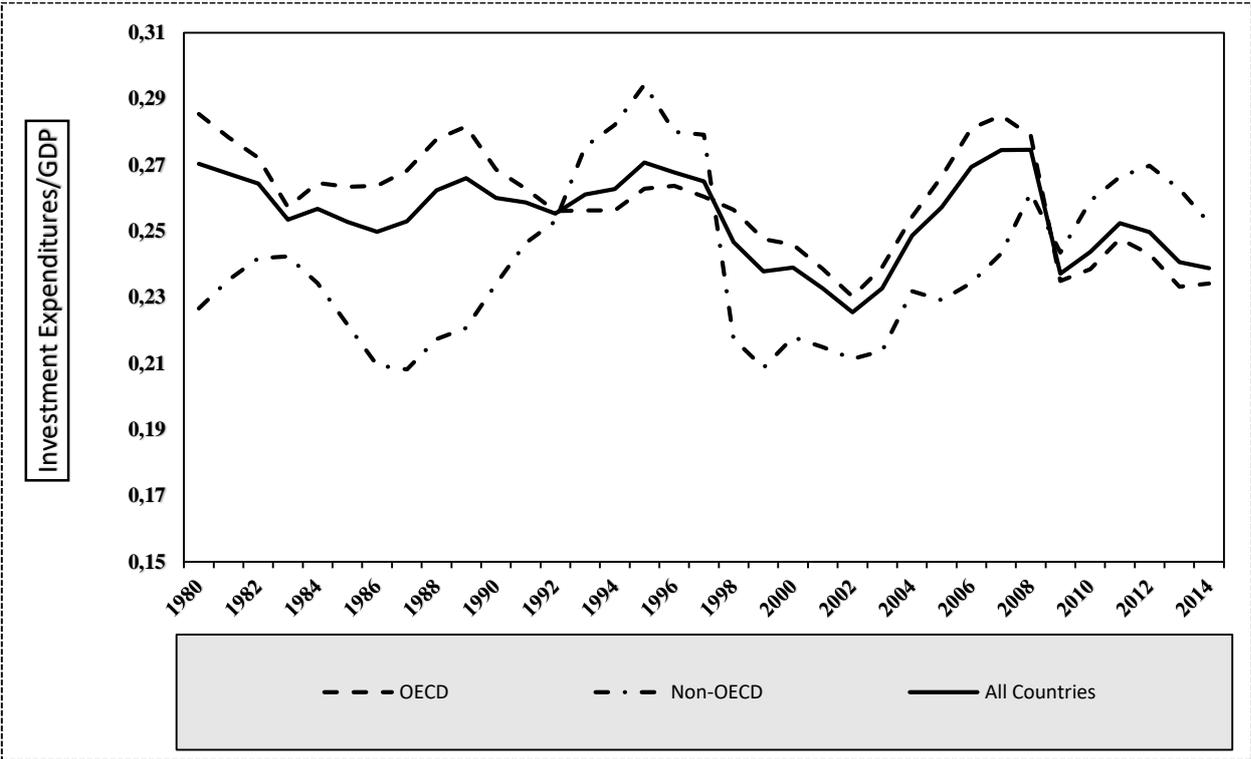
Source: Penn World Table 9.0

Figure 6.2.5.K: Trends in total factor productivity (TFP) index (2011=1) across country groups
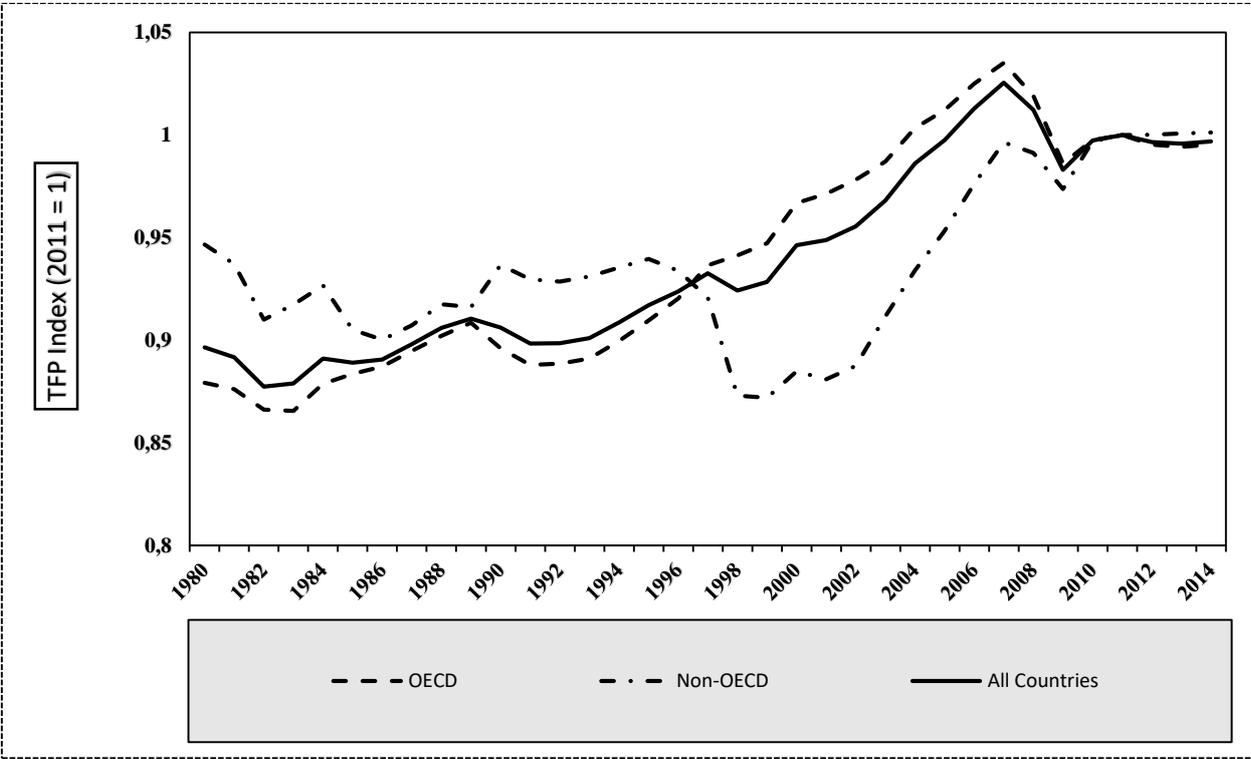
Source: Penn World Table 9.0

Figure 6.2.5.L: Welfare-relevant TFP index (2011=1) across country groups
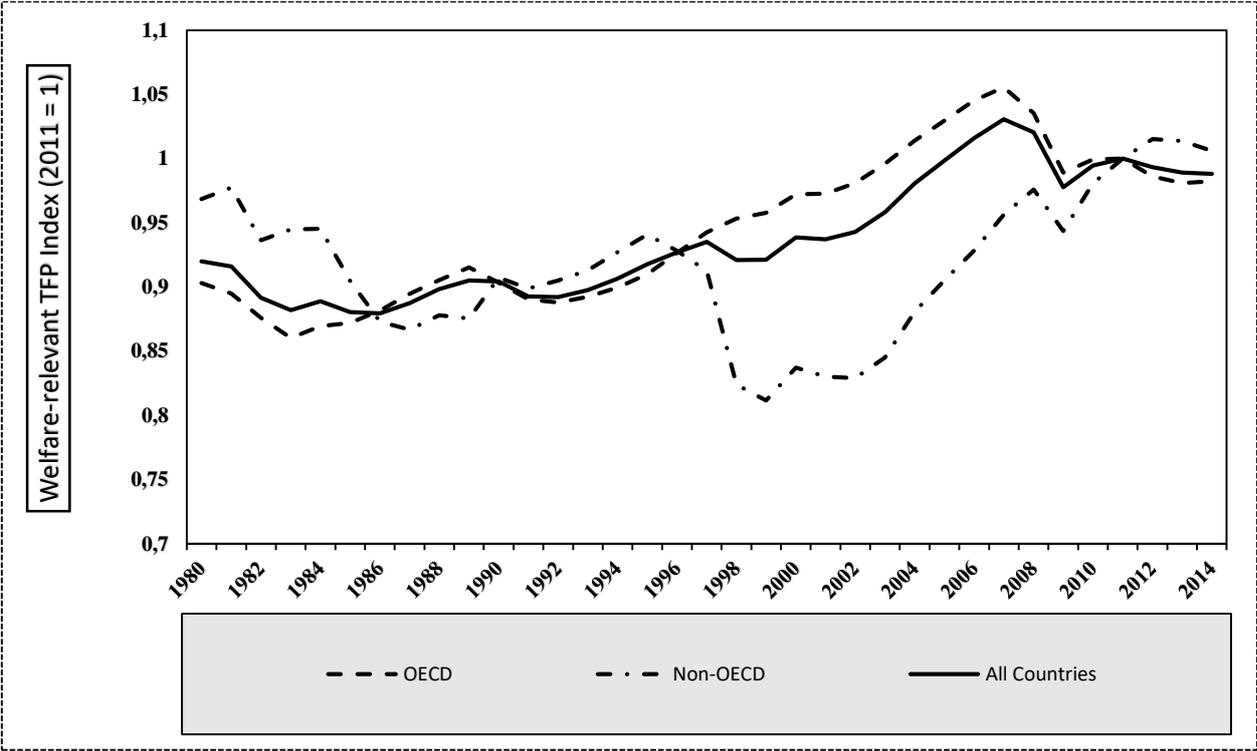
Source: Penn World Table 9.0

Figure 6.2.5.M: Real effective exchange rates (2010=100) across country groups
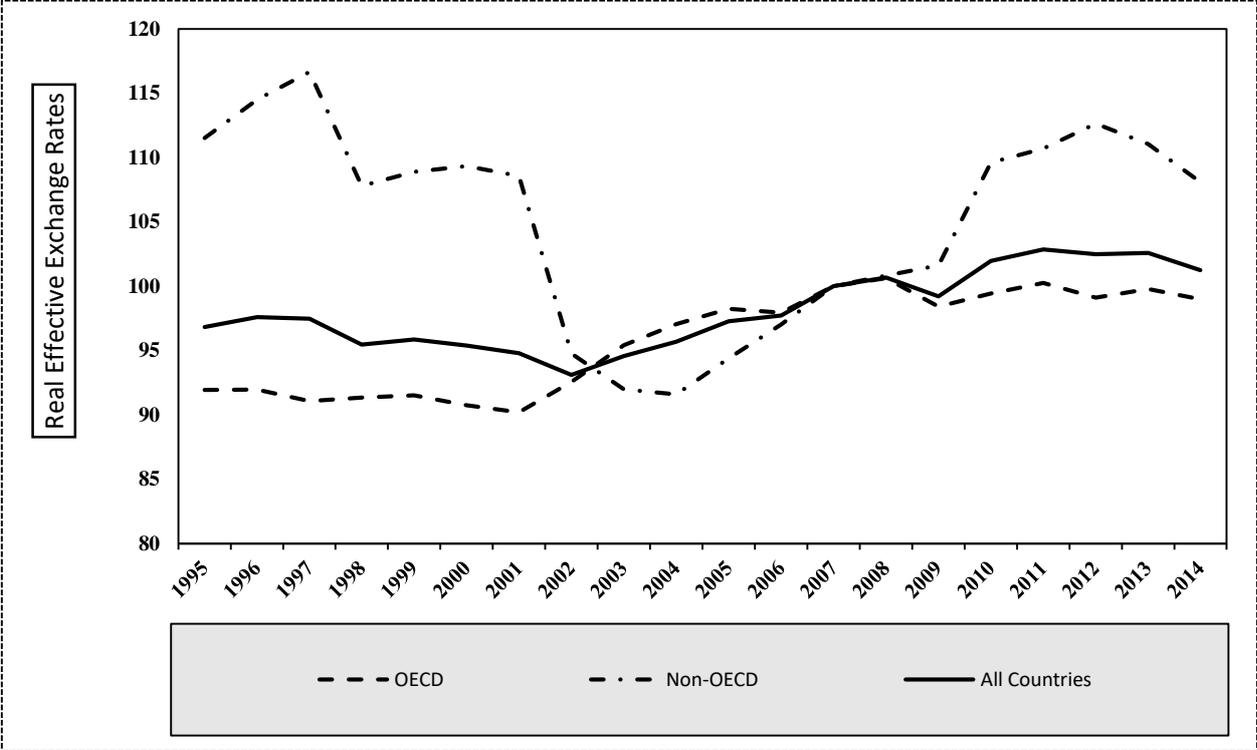
Source: Bruegel REER Database

Both of the technological developments and the integration of capital all over the world have caused to a negative pressure on the labor market in different frameworks and thereby on the unemployment rate against the increases in the productivity rates (as proxied by the output per worker in the empirical analysis) in the neoliberal period. Therefore, the high rates of unemployment in total labor force should be included into the model which may create downward pressure on wages in the presence of different channels theoretically and practically. In addition to the effects of unemployment rates on the wages, and more specifically, on the labor share of income, the increasing population ratio may also create negative pressure on the bargaining power of labor by creating the "reserve army of labor" for production. Ultimately, all these processes may cause to the shift of a higher share of labor income into the capital share accruing in the aggregate national income. Table 6.2.5.B summarizes these indicators for all periods.

Table 6.2.5.B: Summary Statistics

Variable	Observations	Mean	Standard Deviation	Min	Max
Labor Share	880	0.565	0.085	0.320	0.757
Nominal Trade Openness	880	0.844	0.594	0.166	4.39
Capital Account Openness	880	1.28	1.38	-1.89	2.38
Real Trade Openness	880	0.641	0.543	0.049	4.83
Capital Account Restrictions	798	0.294	0.311	0	1
Financial Development	836	0.585	0.202	0.100	1
Government Share	880	0.176	0.053	0.059	0.419
Government Effectiveness	880	1.06	0.787	-0.888	2.43
Overall Globalization	836	74.67	12.44	37.46	92.62
Unemployment Rate	924	7.78	4.70	0.699	27.3
Log (Population)	924	7.36	0.720	5.42	9.13
Labor Quantity Growth	924	0.997	2.51	-17.90	14.22
Labor Force Participation Rate	924	60.73	6.44	44.74	78.92
Real Effective Exchange Rate	924	98.19	17.48	50.78	234.48
Investment Share	880	0.250	0.066	0.090	0.655
Log (GDP per Capita)	880	4.26	0.452	2.79	4.96
Log (Output per Worker)	924	4.52	0.470	3.10	5.12
TFP	880	0.972	0.085	0.673	1.21
Human Capital	880	2.98	0.500	1.60	3.73
Human Development Index	880	0.807	0.097	0.462	0.944

6.3 Econometric Model

In the econometric analysis, I will test the hypotheses explained in Part 5 by using the following model:

$$LS_{it} = \beta_o + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 AFTERCRISIS_t + \alpha_i + \varepsilon_{it} \tag{1}$$

where i represents the country (i=1,2,…,44) and t represents the year (t=1,2,…,22). In this equation, LS shows the economy-wide labor share in country i and year t; the vector X_{1it} refers to the set of major variables, namely the (nominal) trade openness, capital account openness index, financial development index, interaction term of capital account openness index and financial development index, government share, government effectiveness, interaction term of government share and government effectiveness, unemployment rate, logarithm of total

population, overall globalization index, human capital index, interaction term of overall globalization index and financial development index, interaction term of overall globalization index and human capital index, interaction term of (nominal) trade openness and human capital index, and the after crisis dummy which is equal to 1 for each year including the 2007-2008; and the vector X_{2it} refers to a set of control variables, including the proxies for bargaining power measurements and macroeconomic variables, namely real trade openness, capital account restrictions index, interaction term of real trade openness and human capital index, interaction term of capital account restrictions index and financial development index, logarithm of output per worker, interaction term of logarithm of output per worker and human capital index, logarithmic change of labor quantity growth, labor force participation rate, investment share, total factor productivity, interaction of investment share and total factor productivity, logarithm of GDP per capita and its squared, human development index and its squared.

The model is estimated by fixed effects method because there might be omitted variables which change across countries but do not vary over time within a given country. In this method, it is assumed that something within the unit may impact or bias the coefficient of the explanatory variable and thereby should be controlled for this. Fixed effects method eliminates the effect of time-invariant but not controlled characteristics; and therefore, the net effect of the explanatory variables on the outcome variable can be easily analyzed. Additionally, in fixed effects regression model, each unit has n different intercepts which are presented by a set of explanatory variables which of those are very influential on the outcome variable.

Equation 1 represents the fixed effects regression model in which α_i is known as unit-fixed effects. The changes in the unit-fixed effects comes from omitted variables that vary across units but are constant over time. One major way to remove the unit-fixed effects, α_i, is to use first differencing method. However, the alternative method, which depends on certain assumptions, is known as the fixed effects (within) transformation. By using the within transformation estimation technique, the unobserved effects, α_i, will be eliminated. Before going into details of Driscoll-Kraay standard errors predicted by fixed effects (within) regression, this method first transforms the variables in a way which provides to estimate the models by OLS (Hoechle, 2007: 288).–The OLS estimator that is constituted on the time-demeaned variables is also known as the fixed effects estimator or the within estimator (Wooldridge, 2000: 442). However, the estimation by OLS method needs to provide some major assumptions in fixed effects models. Indeed, there are five assumptions for the panel data regression model with unit-fixed effects which are as follows (Stock and Watson, 2007: 365):

1. $E(u_{it} \mid X_{i1}, X_{i2} \ldots X_{it}, \alpha_i) = 0$: the error term having conditional mean zero.

2. $(X_{i1}, X_{i2} \ldots X_{it}, u_{i1}, u_{i2} \ldots u_{it})$, i=1, 2 … n are independently and identically distributed.

3. (X_{it}, u_{it}) have nonzero finite fourth moments: Large outliers are unlikely

4. The perfect multicollinearity should not exist.

5. $\text{cov}(u_{it}, u_{is} \mid X_{i1}, X_{i2} \ldots X_{it}, \alpha_i) = 0$ for t≠s: there should be no serial correlation among errors for a given unit over time, conditional on the regressors.

The first assumption is about the error term having conditional mean zero, given all T values of X for that unit. In other words, it means that all Xs are exogenous variables. Therefore, no collinearity exists between the error terms and explanatory variables.

The second assumption says that the variables for one unit are independently and identically distributed (i.i.d) to variables of the other unit; that is, the variables are i.i.d across units. This assumption holds if units are selected by simple random sampling from the population. The Section 6.1 provides more explanations for this assumption in the context of the sample selection process.

Violation of the first and second assumptions in the fixed effects regression, can be a reason for the exogeneity condition not to hold. First, the model might have reverse causality, or the simultaneity bias. Therefore, the explanatory variables that are determined simultaneously with the dependent variable might be correlated with the error term. However, this is a very common problem in the regression models estimated by OLS and the determination of the direction of the bias in the coefficients is generally complicated. Second, the model might have omitted variable bias which may result in misspecification of the models. If a relevant variable is excluded, the model is not only poorly specified, but also any estimated OLS parameters are likely to be biased. Both of the direction of the bias and the size of the bias are important. However, a small bias of either sign (i.e., positive or negative) need not be a cause of concern (Wooldridge, 2000: 88).

Indeed, the estimation results from the fixed effects model presented in Table 6.4.A, Table 6.5.A, Table 6.5.B, Table 6.5.C, Table 6.5.D, Table 6.5.E and Table 6.5.F, there might be such a problem that the error terms are correlated with the explanatory variables. Therefore, I estimate several models by using many different control variables in order to be sure that the estimated parameters are robust to alternative specifications.

The third assumption for fixed effects regression depends on the fact that large outliers should not be existed[107] .

And fourth assumption states that there should be no perfect collinearity among explanatory variables $(\text{rank}[\sum_{t=1}^{T} E(\ddot{x}_{it}' \ddot{x}_{it})] = K \text{ where } \ddot{x}_{it} \equiv X_{it} - \bar{X}_t)$. If X_{it} contains time-invariant variables, the corresponding element in $\ddot{x}_{it}$ will be zero. Thus, $\ddot{x}_{it}$ comprises of columns with all zeros, rank will be collapsed and thereby this fourth assumption will not be realized. This is an alternative way to argue that why the variables having unit-fixed effects are not allowed to use in fixed effects analysis[108] (Tatoğlu, 2016: 88).

Finally, the fifth assumption states that the errors in the fixed effects model are assumed to be uncorrelated over time, conditional on the regressors. However, the diagnostic results show that there is a serial correlation in each model[109]. Therefore, the errors are correlated over time. In addition to that the disturbance variances are equally distributed and there are spatial and temporal dependence in regressions which results with the biased coefficients. Therefore, I correct these diagnostic problems by using Driscoll-Kraay standard error correction method in which the corrected estimation results are presented in Table 6.4.A, Table 6.5.A, Table 6.5.B, Table 6.5.C, Table 6.5.D, Table 6.5.E and Table 6.5.F.

---

[107] In Appendix A5, I draw country-specific time trends of variables for each unit over 1995-2015 period.

[108] The Appendix A2 and Appendix A3 show that the multicollinearity test results which show that the fourth assumption is hold for the fixed effects model. In each regression, including base specifications and robustness checks, the degree of variance inflation factor (VIF) does not exceed the critical value of 10.

[109] Please see Appendix A4.

The econometric analysis will be based on fixed effects linear regression model estimated by Driscoll-Kraay (1998) method[110] using time-series cross-sectional data[111]. The employment of the data including iterative time-series samples on fixed, cross-sectional units is very general in several empirical analysis. However, these panel data series might possibly be characterized by complex error structures which means that the disturbances are likely to be heteroskedastic and contemporaneously correlated across panels. As Chen, Lin and Reed (2006: 2) states that exercising of OLS to data with nonspherical errors causes to obtain an inefficient coefficient estimates and biased estimates for standard error. Although these diagnostic problems were previously corrected by the use of two methods, namely the generalized least squares (GLS)[112] and Panel Corrected Standard Errors (PCSEs)[113], they are only suitable for pooled OLS or random effects. Therefore, the use of Driscoll-Kraay (1998) method will provide to solve those kinds of diagnostic problems in fixed effects method.

For instance, although the PCSE model developed by Beck and Katz (1995) is a very effective method to solve above explained problems emerged in the regression, it is only used in pooled OLS models. Additionally, the PCSE and GLS (or feasible generalized least squares, FGLS) methods are not reliable when N is higher than T. Therefore, the standard error estimators of the Driscoll-Kraay method give more reliable results; and therefore, provides consistent estimates for fixed-effects estimations. The method of Driscoll and Kraay (1998) contains standard errors robust to problems such as heteroskedasticity, autocorrelation and cross-sectional dependence for both pooled and fixed-effects models[114].

When the time period is large enough, Driscoll and Kraay (1998) show that the standard non-parametric time-series covariance matrix estimators can be developed for all general forms of spatial and periodic correlations as robust. The methodology of Driscoll and Kraay (1998) is based upon the Newey-West type of correction for the average cross-section series. The corrected standard error estimators obtained by using this method are guaranteed the consistency of the covariance matrix estimators, independent from the cross-sectional dimension of N (e.g., even when $N\rightarrow\infty$). Thus, the method of Driscoll and Kraay (1998) is derived as an alternative to the PCSE method and/or to the method of Parks-Kmenta because these latter two methods produce weak robust covariance matrix estimators in large-scale microeconometric panels in terms of N and also only produce significant estimators when T is large enough. The covariance matrix estimators produced by the method of Driscoll and Kraay (1998) are consistent even in the presence of heteroskedasticity when there is large T and N, and produce robust standard errors when there is spatial and cross-sectional dependence.

The fixed-effects method[115] can also be used as follows even when the assumptions are based on that the error terms are heteroskedastic, autocorrelated, and cross-sectionally correlated:

$$\hat{\beta} = (XX')^{-1}XY' \tag{1}$$

---

[110] For more technical information please see Hoechle (2007). Also, Appendix A6 summarizes the major components obtained from Hoechle (2007) for the selection of models that produce robust standard error estimates for linear panel models in Stata.

[111] In this section, some of the technical details are obtained from Tatoğlu (2016).

[112] For more information please see Parks (1967) and Kmenta (1986).

[113] For more information please see Beck and Katz (1995).

[114] Please see Appendix A6 for the differences between linear panel models and their characteristics.

[115] The following equations for understanding the theoretical basis of the Driscoll-Kraay method are obtained from Tatoğlu (2016). Additionally, for more technical details please see Hoechle (2007). The Xs represent the independent and control variables, Y represent the dependent variable.

On the other hand, the standard errors of parameter estimators, which are produced by Driscoll-Kraay method, are obtained by means of the square roots of diagonal elements of asymptotic (robust) covariance matrix:

$$\widehat{V(\beta)} = (XX')^{-1}\hat{S}_T(XX')^{-1} \tag{2}$$

where

$$\hat{S}_T = \hat{\Omega}_0 + \sum_{j=1}^{m(T)} w(j,m) \, [\hat{\Omega}_j + \hat{\Omega}_j'] \tag{3}$$

m(T) denotes the lag period for autocorrelation and the Barlett weights, which is produced as w(j, m(T)=1-j/(m(T)+1), and provides that $\hat{S}_T$ is positive and also ensures that high-order lags are emerged in low weights in the sample autocorrelation function. On the other hand, (K+1)*(K+1) dimensional $\hat{\Omega}_j$ matrix is defined as follows:

$$\hat{\Omega}_j = \sum_{t=j+1}^{T} h_t(\hat{\beta})h_{t-j}(\hat{\beta})' \tag{4}$$

where $h_t(\hat{\beta})$ is equal to $\sum_{i=1}^{N(t)} h_{it}(\hat{\beta})$.

Each unit of $h_{it}(\hat{\beta})$, which is equal to the square of t moment conditions, is measured for all *N* having different time periods, *T*. With this little adjustment, the covariance matrix estimator of Driscoll-Kraay method is also used for unbalanced panels. The orthogonal conditions for units in pooled OLS estimations, $h_{it}(\hat{\beta})$, are the (K+1)*1 dimensional moment conditions of linear regression. For instance, this case can be depicted as follows:

$$h_{it}(\hat{\beta}) = X_{it}\hat{u}_{it} = X_{it}(Y_{it} - X_{it}'\hat{\beta}) \tag{5}$$

The covariance matrix estimator of Driscoll-Kraay method, which is produced in equation (3) and equation (4), is similar to the Newey-West type (e.g., used for cross-sectional average of time-series of $h_{it}(\hat{\beta})$) robust covariance matrix estimator in the presence of heteroskedasticity and autocorrelation. By way of this method, which depends on cross-sectional average, the standard error estimators are consistent irrespective of the dependence of units to the cross-sectional dimension, N. The Driscoll-Kraay method also shows that the consistency is still significant even if N goes infinity. Furthermore, the standard errors obtaining from the estimated covariance matrix is valid for the general forms of spatial and periodical correlations.

6.4 Estimation Results of Base Specifications

Table 6.4.A estimates the linear panel regression model by the fixed effects method for all sample countries over the 1995-2015 period in which all fixed effects regression assumptions are hold.

Column (1) shows the coherent relationship of trade openness and capital account openness with the labor share of income for the largest possible sample. In Column (2), the fundamental variable of this study, namely the financial development index, is introduced in order to understand the broad-based dynamics of the distribution of income between capital and labor, in a synthetic relationship with the capital account openness. These two columns show the

necessity of a synthetic analysis of capital account openness index with the financial development index for the investigation of the socio-economic structure of the neoliberal era, especially for an investigation of the changes emerging in the labor share of income.

The logic behind these two regressions depends on the fact that if the sample countries liberalize their capital account without strengthening their financial structure and institutional framework, it may create a downward pressure on the labor share of income in the interest of capital. The major factor behind the increase in the labor share of income only depends on the full development of the financial markets and institutions. Therefore, both conditions for openness measures of finance and trade and for the financial development should be measured in tandem, depending on the conditions of a given sample countries.

In Column (3), I add two more variables which are the government share and the government effectiveness with their interaction term into the analysis. Column (3) can also be denoted as the major base specification of all models. Thus, the general context of the model is established in the case of the neoliberal era for the sample countries. The following task is to show the semi-mechanisms of the relationship between the labor share of income and the major explanatory variables within the frame of bargaining positions of the labor.

In Column (4), I, thus, introduce the simple bargaining power measurement, namely the unemployment rate. The Column (5) strengths this measurement by introducing the total population measured in a logarithmic term. In addition to these two measurements, I also test the models by adding the macroeconomic and structural measure such as the real effective exchange rates in Column (6) in tandem.

In the last three columns, namely Column (7), Column (8) and Column (9), I initiate two different kinds of variables related to the macroeconomic framework and the development of human capital. These variables comprise of the overall globalization index including both economic, social, and political globalization components of the neoliberal era, and the human capital index including both returns to education and schooling indicators, respectively.

First, in Column (7), I repeat the same specification regressed in Column (6) by introducing the interaction term of trade openness and human capital index. The individual development has become a principal component of the labor force in the neoliberal period, depending on the development dynamics of the capitalist system. Therefore, instead of unqualified labor, the increasing amount of "reserve army of labor" equipped with human capital have started to play a key role in the labor market in parallel to an increasing supply of educated and well-equipped labor-power following the neoliberal period after 1980s. It became evident after the collapse of the Soviet Union and the changing class dynamics in favor of capital in line with the expansion of the capitalist market system all over the world economies. In parallel to the technological developments, the labor equipped with the tools of human capital has reduced to the conditions of the unqualified labor. In other words, the ratio among labors who have educated and the others have not, have become relatively converged to each other, especially in developed countries. Therefore, in Column (7), I test the relationship of the interaction term of human development index and trade openness with the labor share of income. The main rationale behind this regression model is to test the relationship between the (nominal) trade openness and human capital index. In the presence of the liberalization process of trade regime for sample countries, the correlation coefficients are expected to be positive and statistically significant for their interaction term, but negative for their single estimated parameters. Column (7) is also

depicted the ultimate specification in order to evaluate the robustness of the research hypothesis and its different dynamics emerged in the neoliberal period over the 1995-2015.

Second, in Column (8) and Column (9), I repeat the same specification regressed in Column (6) by introducing the overall globalization index. The overall globalization index includes all the sub-categories of the globalization phenomenon. These sub-categories involve both the economic, social and political globalization indices. By using this overall index, I analyze the effects of weighted averages of these three sub-categories of globalization phenomenon on the labor share of income. However, one specific feature of this variables depends on the fact that it also includes trade openness and capital account openness measures. Thus, I drop both of these two major openness variables in order to avoid from the multicollinearity problem. Additionally, I interactively use the globalization variable with the financial development index and human development index in Column (8) and Column (9), respectively, as a proxy for the interaction term of capital account openness index and financial development index, and also the interaction term of (nominal) trade openness and human capital index.

All in all, the estimated coefficients of the major variables are statistically significant and the results are coherent with the hypothesis of the study. Although there are missing information on variables for some periods and some countries due to the scarcity of data in the panel structure, adding more explanatory variables do not lead to large reductions in the sample size. Therefore, even if there are declines in the number of degrees of freedom, the standard errors do not being affected critically due to the mild reduction in the sample size. The estimated coefficients are thus largely statistically significant in the following regression models estimating in each column.

Column (1) - (9) present the major results of the fixed effects estimation. In each Column, all estimated coefficients of the openness measures for the capital account and trade are negative and statistically significant at the one percent level for a given sample countries. First, increasing the trade openness by one percentage point results in a decline by about 2 to 4 percentage points in the labor share of income within the frame of the effects of different variables in regression models[116]. The negative correlation between (nominal) trade openness and the labor's share may depend on several reasons. For instance, the liberalization of trade regime in those sample countries from OECD and non-OECD regions may only beneficial for the interests of export-oriented technology-based firms. Alternatively, in countries where their trade imbalances are very high, the increasing level of imports may negatively affect the production system and capital accumulation in case of domestic competition, which may result in a reduction in the employment level of domestic firms. Additionally, more liberalized trade regimes may increase the competition level in goods market; and therefore, it may negatively affect the employment structure by way of making the competition imperfect in those markets. It may then lead to an increase in the concentration of production in specific sectors by creating sectoral imbalances and fragile employment structure. Related to the trade imbalances, for specific firms whose production scale is very close to the production scale of imported goods produced by foreign competitors may cause to the emergence of privileged sectors in the context of domestic markets, which create further imbalances in different sectors affecting the employment structure in a negative manner in favor of the capital. Moreover, in the context of an increasing scale of trade or concentration level in the trade regime, the governments may

---

[116] Except for Column (7) which tests the effects of interaction term of trade openness and human capital on the labor share of income. In this regression, the single effect of trade openness on the labor's share is very high. The major reason behind this result depends on the existence of the human capital indicator and its role in the goods market related to the trade regime.

need more flexible labor markets and thus may create negative pressure on labor costs in order to keep domestic economy stable in an increasing scale of competition with the world markets.

Second, increasing the capital account openness index by one unit results in a decline by about 0.7 to 1.8 percentage points in the labor share of income, depending on different components of the specifications. Similar to the (nominal) trade openness, this negative relationship between the capital account openness and the labor's share may depend on many reasons. First, in countries where the economic development level is very low, the liberalization of capital account may create new ways for capital to involve in speculative motives instead of being inclined to involve in productive investments. Second, for the interest of capital, the available resources obtained from more liberalized capital account may not be allocated to long-term real investments which of them may create more employment opportunities, but may be allocated to short-term and speculative-based investments. Third, the reason behind this negative correlation may depend on the conditions of indebted households. The increasing scale of capital may be used to finance these high level indebted households in order to get higher returns through high rates of lending. Finally, if there is a large deficit in the current account, the more open capital account may increase the debt burden of a country. Therefore, the available capital may be devoted to pay interests rather than to enhance the level of productive investments.

These two broad and central results differ from the empirical results of the econometric studies based on this same issue. Several studies suggest that the increasing scale of liberalization in trade regime is positively related to the labor share of income in the presence of different types of macroeconomic and structural indicators. Additionally, the empirical findings of other studies focus on the positive correlation of financial openness with the labor share of income in order to prove that the liberalization policies include the most relevant factors for the neoliberal agenda implemented in the market system which result in an increase in the labor share of income accruing from the aggregate national income[117].

However, the literature basically shrinks away from the investigation of the mutual relationship between the openness measure of capital account and the financial development. The estimated coefficient of interaction term of the financial liberalization measure proxied by the capital account openness index and the financial development index is statistically significant and positive in all specifications. It means that, without making the financial markets and institutions more developed in terms of their depth, access, and efficiency, the increasing degree of the capital account openness may create a downward pressure on the labor's share in favor of the capital's share. In other words, this hypothesis can be alternatively summarized as follows: *promoting more liberal policies towards the financial sector without establishing the legal structure for policies in the development of the financial relations and services will create downwardly biased outcomes for the labor share of income*. The financial development should be the first aim before opening capital account to the foreign capital. When countries ensure the development in finance, they also procure the necessary structure for depth, access and efficiency for capital both for markets and institutions in parallel to a more liberalized capital account. In other words, providing of institutional development or implementing strong institutional structure in finance, both for markets and institutions, should be the major aim in order to create relatively much fair distribution of income in favor of the working class[118].

---

[117] For more information about these studies please see Part 4 and Part 5.
[118] Please note that these positive effects of interaction term of capital account openness index and financial development index on the labor share of income should be evaluated in the absolute terms. In the relative sense,

Although there are several empirical findings on the relationship between capital account openness and the financial development, they basically focus on the bilateral relations among each other in the context of the economic growth.

Table 6.4.A initiates further estimations by including the variables on economic and political roles of the government sector and macroeconomic (and structural) indicators. For instance, in Column (3), without including any multi-dimensional variables into the specification, the estimated parameter of government activity, as proxied by the interaction of government expenditure share as a percentage of GDP and the government effectiveness, is positive and statistically significant at one percent level. However, in all models ranging from Column (3) to Column (9), the single results of estimated coefficients of government share and government effectiveness are also statistically significant in several regression but are negative[119].

This interaction term of government share and government effectiveness gives a critical information. In the neoliberal era, if the government effectiveness increases without exerting the government share in the legal framework, the labor share is negatively affected in almost all models even if the estimates are statistically insignificant, depending on several reasons such as corruption, illegal revenues from the government activities, speculative attacks on government bonds and stocks, and theft. The major reasons can be extended to each countries' own structure and history. Therefore, in the neoliberal period, the government activity is highly significant with the establishing of the structural base for an understanding of the mutual relationship between government expenditure and government effectiveness.

The major emphasis in these models is constituted upon the changes in the bargaining power of labor. The specifications for the bargaining power of labor give critical understandings on the semi-factors for the changing dynamics of labor's share. From Column (4) to Column (9), two major indicators (i.e., the unemployment rate and the logarithm of population) related to the bargaining power of labor are used to show that the labor share of income declines in parallel to the changes in the bargaining position of the labor. The results of those specifications prove that if the bargaining power of labor declines *vis-à-vis* capital, the labor share of income decreases as well. This central hypothesis is strong and statistically significant in almost all specifications. For instance, if the population ratio increases, the capital may use the threat option on labor as a result of the changes in the working status by hiring cheap labors instead of currently working labor force. Therefore, the capitalist may create downward pressure on the wages of the laborers by increasing the competition in the labor market. Or alternatively, using the globalization fact, she/he can outsource or offshore her/his capital into other countries where the labor-power is cheaper than her/his own country's labor-power. The high rates of unemployment may also create similar negative effects as in the increasing rates of population. High rates of unemployment basically create a "reserve army of labor" in which the wage rates of the labor force are negatively affected in the general framework. Therefore, more unemployed people can also mean to more downward pressure on wage rates, and more specifically, on the social conditions of labors.

However, these two bargaining power measurements are different between each other due to their inner structure. Both of these measures depend on the idea that the increase in their rates or sizes make a negative impact on the bargaining power of labor by creating more "reserve

---

the distributional practices may be still negative for labors. However, this issue is not the case of this study. In further investigations, it will be evaluated in details.

[119] Please note that the estimated parameters of government share are statistically insignificant in almost all models, except for Column (3) and Column (8).

army of labor" in the markets. Thus, it creates a downward pressure on the labor's share because firms may choose to lay off or fire workers instead of low-cost workers by using their increasing scale of threat option and disciplinary tools. Although these main structure is relevant for both of these two measures, they are different from each other. The main rationale depends on the fact that the unemployment rate shows the legal side of the labor markets which is officially measured by the government; however, the total population includes illegal components of the labor markets such as child labor, over 65 population workers, immigrant workers, and household workers. In other words, the unemployment rate may give biased results in some cases in order to understand the whole relations emerging in the labor markets and to analyze the changing structure of the threat option of capital.

In Column (7), I also introduce the human capital index interactively with the (nominal) trade openness. In this ultimate specification, the estimated coefficient of human capital as a single indicator is negative and statistically significant. One possible reason behind this outcome may depend on the increasing level of education, especially in the developed country groups. The capitalist system needs more educated and qualified workers in the neoliberal era comparing to the previous periods due to an increasing speed and the level of technological developments. Therefore, the amount of skilled workers have increased incurred to the conditions of the unskilled workers in the 1995-2015 period. However, the results of the estimated parameter of the synthetic analysis of human capital with (nominal) trade openness is positive, robust, and highly statistically significant. The major logic behind this interaction term depends on to assess the increasing degree of effects of human capital on the labor's share in parallel to an increasing degree of openness in trade regimes altogether with the increasing labor mobility and technological progress all over the world economies. Indeed, the human capital is much more related to the goods and labor markets contrary to the financial markets. Hence, it is much relevant and effective to assess the ongoing developments in human capital with an increasing scale of trade flows pursuant to an increasing scale of technological progress and the increasing pressure in competitiveness in the world markets. In countries, where the level of human capital is high, the firms may export human capital intense goods, or namely high-skilled produced goods. Therefore, the prices of these goods increase in these countries in parallel to an increase in the wages of high-skilled workers employing in those sectors. This may occur because of two main reasons emerged in the capitalist dynamics. First, the transformation of the production system both in developed and developing country groups may lead to an increase in the demand for skilled workers in the presence of an increasing scale of competition in trade. Second, the less competitive market structure for the demand of skilled workers, especially in tradable goods and services, may have a positive effect on the labor share of income.

Besides the measurements of the bargaining positions of labor and the role of human capital in trade regime, I also introduce the variable for estimating the overall globalization index in substitution for (nominal) trade openness and the capital account openness index which is as important as the openness measures for financial sector and trade regime. Essentially, it complements the liberalization motives in order to understand the broad-based macroeconomic relations in socio-economic context. Overall globalization index, measured as a weighted average of economic, social, and political categories, adheres to model with negative coefficients, estimated in Column (8) and Column (9). The results of the estimated coefficients of the overall globalization index do not considerably different from the results of the estimated coefficients of the openness variables for capital account and trade regime. However, its impact is much lower than these two other openness measurements. Additionally, the effects of the interaction term with the financial development index is also lower than the interaction term of capital account openness index and financial development index. The same results are also valid

for the impacts between interaction term of (nominal) trade openness and human capital index and the interaction term of overall globalization index and human capital index. The second interaction term is much lower effect on the labor's share in comparison with the first one. In other words, the interaction term of (nominal) trade openness and human capital index is highly correlated with the labor share of income in contrast to the interaction term of overall globalization index and human capital index.

In addition to these fundamental estimations, I also introduce real effective exchange rate in order to understand the effects of macroeconomic and structural changes on the labor's share and to test the significance of base specifications measured from Column (6) to Column (9), especially within the context of the changes in the bargaining power of labor. Additionally, I use the real effective exchange rate so as to assess the effects of the changes of the price of one country's currency in relation to another on financial relations and development and thereby on the distributional framework between capital and labor. This variable may be used for a wide variety of purposes, especially in macroeconomic context. However, in the distributional framework, some specific factors should be pointed out related to the financial sector and trade regime. An increase in the real effective exchange rate makes the prices of imported goods lower but the prices of exported goods become higher in the general economic structure. Therefore, it may create cost competitiveness relative to its principle competitors in the international markets because the imported raw materials now become much cheaper. However, changes in cost and price competitiveness depend not only on exchange rate movements but also on cost and price trends in the world economies. Decreasing in product prices, especially in imported goods, increase the purchasing power of labor in relative terms. Additionally, the capital may inflow into a domestic country in order to benefit from the currency arbitrage in parallel to the decreasing level of risks emerging due to fluctuations in exchange rates. All these factors create more saving opportunities and thereby more productive opportunities. If these savings canalize into productive investments, the production and thus the employment level may increase in the medium and long terms. Therefore, in absolute terms, the labor's share may increase against the capital's share. In almost each specification[120], the estimated coefficient of real effective exchange rate has statistically significant and positive although the correlation with the labor share of income are very small.

Consequently, together with the crisis dummies for controlling the time-fixed effects, all specifications give a detailed information about the general conditions of the income distribution, and more specifically, of the labor share of income, depending on leading indicators of the neoliberal era. As it can be easily seen that the major propositions of the neoclassical paradigm are not significant for the 1995-2015 period. For instance, the income shares of both capital and labor do not exhibit a constant trend. Therefore, the marginality principle of the neoclassical thought should be questioned in practical and theoretical frameworks. Although the aggregate economic income is increasing in all these country groups, the income shares are not equally distributed among classes. In other words, the increasing share of income is mostly redistributed in favor of the capital. Although the estimation results show that the interaction term of the financial openness and the development is positively correlated with the labor's share, it is repressed due to decreasing level of the bargaining power of labor. The use this semi-factor (i.e., the changing degree of bargaining power of labor) in order to test the correlation between the openness variables and labor share of income is the fundamental way to understand the major changes occurring in the distribution of income

---

[120] Except for Column (7).

between capital and labor. The next sub-section 6.5 further advocates this assumption by using other bargaining power measurements.

Table 6.4.A[121]: Base Specification Results[122]: Dependent Variable: Labor Share of Income

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trade Openness	-0.028**	-0.031***	-0.036***	-0.035***	-0.034***	-0.030***	-0.202***		
	(0.013)	(0.010)	(0.010)	(0.011)	(0.009)	(0.009)	(0.028)		
Capital Account Openness	-0.007***	-0.018***	-0.017***	-0.016***	-0.016***	-0.018***	-0.013**		
	(0.001)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.005)		
Overall Globalization								-0.004***	-0.008***
								(0.001)	(0.002)
Financial Development		-0.103***	-0.116***	-0.132***	-0.112***	-0.115***	-0.060**	-0.374***	
		(0.019)	(0.021)	(0.023)	(0.018)	(0.018)	(0.023)	(0.121)	
Kaopen*FinDev		0.029***	0.030***	0.028***	0.027***	0.029***	0.018**		
		(0.003)	(0.005)	(0.007)	(0.006)	(0.006)	(0.008)		
Ovglob*FinDev								0.004***	
								(0.001)	
Government Share			-0.122**	-0.074	-0.030	-0.024	0.009	-0.081*	-0.028
			(0.051)	(0.049)	(0.047)	(0.044)	(0.037)	(0.043)	(0.054)
Government Effectiveness			-0.056***	-0.057***	-0.052***	-0.055***	-0.068***	-0.050***	-0.048***
			(0.009)	(0.009)	(0.008)	(0.008)	(0.007)	(0.009)	(0.010)
Govshare*Goveff			0.286***	0.277***	0.244***	0.248***	0.296***	0.272***	0.231***
			(0.039)	(0.042)	(0.042)	(0.040)	(0.036)	(0.051)	(0.053)
Unemployment Rate				-0.002***	-0.002***	-0.002***	-0.002***	-0.001**	-0.001**
				(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)
Log (Population)					-0.207**	-0.190**	-0.162**	-0.106	-0.046
					(0.074)	(0.074)	(0.076)	(0.068)	(0.066)
Real Effective Exchange Rate						0.000**	0.000	0.000**	0.000**
						(0.000)	(0.000)	(0.000)	(0.000)
Human Capital Index							-0.096***		-0.142***
							(0.017)		(0.035)
Tradeopen*HumCap							0.057***		
							(0.009)		
Ovglob*HumCap									0.002***
									(0.000)
After Crisis (Dummy)	-0.012**	-0.006	-0.009	-0.009*	-0.003	-0.005	-0.004	-0.006	-0.009
	(0.005)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.005)	(0.006)
Constant	0.603***	0.652***	0.690***	0.707***	2.213***	2.063***	2.120***	1.701***	1.511**
	(0.008)	(0.014)	(0.013)	(0.016)	(0.552)	(0.550)	(0.542)	(0.525)	(0.545)
Within R-squared	0.1749	0.2208	0.2696	0.2909	0.3114	0.3219	0.3952	0.3462	0.3443
Observations	880	836	792	792	792	792	792	792	792
Number of countries	44	44	44	44	44	44	44	44	44

---

[121] Please note that the simplified names of the variables using in Table 6.4.A, Table 6.5.A, Table 6.5.B, Table 6.5.C, Table 6.5.D, Table 6.5.E and Table 6.5.F depict the following variables: ***Kaopen*FinDev***=Interactions of Capital Account Openness and Financial Development; ***Ovglob*FinDev***=Interactions of Overall Globalization and Financial Development; ***Karest*FinDev***=Interactions of Capital Account Restrictions and Financial Development; ***Govshare*Goveff***=Interactions of Government Share and Government Effectiveness; ***Tradeopen*HumCap***=Interactions of Trade Openness and Human Capital Index; ***Ovglob*HumCap***=Interactions of Overall Globalization and Human Capital Index; ***Rtradeopen*HumCap***=Interactions of Real Trade Openness and Human Capital Index; ***Outperwor*HumCap***=Interactions of Logarithm of Output per Worker and Human Capital Index; ***Invshare*TFP***=Interactions of Investment Share and TFP; ***After Crisis (Dummy)***=Dummies for the period after global crisis including years of 2007 and 2008. Please also note that the standard errors will be in parentheses in Table 6.4.A, Table 6.5.A, Table 6.5.B, Table 6.5.C, Table 6.5.D, Table 6.5.E and Table 6.5.F in which ***p<0.01, **p<0.05, *p<0.1.

[122] The dataset used in the work is available in its entirety by the authors upon request.

6.5 Robustness Checks

Following the results of the fixed effects panel data method, this sub-section generalizes the base specifications in control of other variables in order to test the significance of the models whether the research hypothesis is true or not. In other words, in this sub-section, I focus on different kinds of robustness issues to show that the basic estimated parameters are consistent, efficient, and statistically significant in the case of changing regression structure in line with several variables, especially with the measures of the bargaining power of labor. Thus, Table 6.5.A, Table 6.5.B, Table 6.5.C, Table 6.5.D, Table 6.5.E and Table 6.5.F exert other specifications, depending on proxies and extensions to the base model specifications estimated in Table 6.4.A. Although the robustness issues depend on different kinds of dimensions, it is possible to categorize them within the frame of factors including socio-economic and political components.

First, I introduce the real trade openness variable instead of the traditional (nominal) trade openness variable estimating in Table 6.5.A. In this model, I test the extent of the relationship between tradable and non-tradable sectors within the frame of productivity gains. However, as in one of the major base specification of Column (7) presented in Table 6.4.A, I test the real trade openness variable in an interaction with the human capital index. The logic is similar to the previous case regressed in Table 6.4.A. Therefore, the results of the estimated coefficient of real trade openness are expected to be close to the estimated coefficient for the (nominal) trade openness presented in Column (7) of Table 6.4.A.

Second, in Table 6.5.B, I replace the capital account openness index with its reverse dynamic, namely the capital account restrictions index. The major aim of using this restriction index is to show that the reverse case of an increasing degree of openness in the capital account may give totally different outcome. Although the increase in the degree of capital account openness, or alternatively saying, more liberalized financial sector, has a downward pressure on the income share of labor, imposing restrictions on capital account are positively correlated with the labor's share. However, the most crucial result depends on the fact that if these restrictions on capital account impose while there is an increase in level of development in the financial sector, it may create a negative impact on the labor share of income on behalf of the capital. This estimation result indicates a different dimension than the results of the interaction term estimations between capital account openness and the financial development presented in Table 6.4.A.

Third, the issues around financialization have vigorously experienced in advanced and developing market economies beginning from the neoliberal period. This phenomenon can be summarized as a decrease of the effects of real capital relative to the financial capital in the aggregate economy. The distinctive example about this topic is the decline of the share of gross capital formation in the total GDP. However, this factor is just a one case; and therefore, the topic can be investigated in different contexts, especially within the frame of the distributional issues. For instance, the level of technological intensities in the production system and the other factors related to the technological progress should be included into the analysis measuring for the gross formation of fixed capital. Thus, the interaction term of these two factors, namely the investment share and technological progress, may provide much more robust results in the regression model. Therefore, in Table 6.5.C, I test this case. Additionally, in the same regression, I include another variable for measuring the bargaining power of labor, which is the labor quantity growth, together with the unemployment rate. In this specification, the estimation results do not significantly change in coefficients, especially for (nominal) trade openness and for the interaction term of capital account openness index and financial development index.

Fourth, the increase in the rate of human capital can be estimated with the increase in the output per worker to understand the dialectical relationship between the educational development and the changing technological scale. The empirical analyses for human capital may give biased results without assessing the effects of the changes in output per worker over time. The major reason behind this case depends on the fact that the labor force loses its homogeneous character in parallel to the changes in the technological progress, and more specifically, to the innovations in the capitalist system within the neoliberal era. Hence, the increase in the rate of human capital is one of the most important response of these innovations and the technological developments in the labor market. Therefore, I interactively test these two basic and highly correlated variables in Table 6.5.D.

Fifth, the neoliberal era has witnessed to the case that the supply of organized wage labor has increased in almost each category of the advanced and developing market economies. However, the distributional conditions as a result of this increase in the supply of organized wage labor may vary for the estimation outcomes, depending on several economic issues. In this context, the neoliberal transformation in the case of the economic development should be evaluated by several variables. Therefore, I use two major macroeconomic variables, namely the logarithm of GDP per capita and human development index. I introduce the logarithm of GDP per capita in order to test the effects of factor endowments and accumulation, namely the economic development, in Table 6.5.E. Alternatively, I use the human development index as a proxy for the GDP per capita in Table 6.5.F. These two estimation outcomes obtained in Table 6.5.E and Table 6.5.F prove that the arguments of Lewis ([1955] 2013) and Kuznets (1959) are robust for selected advanced and developing country groups when all these countries in the sample are examined homogeneously. In other words, the selected advanced country groups may produce robust outcomes for the hypothetical structure of Kuznets (1959) which states that the increase in the level of economic development creates a downward biased in the labor share due to an increase in the organized-wage labors stimulating a further decrease by creating downward pressures on their bargaining positions in favor of the capitalists[123]. However, in the following stages of the economic development, income inequality become lower in parallel to an increase in income per capita.

All in all, in parallel to the base specifications presented in Table 6.4.A, introducing the other types of measurements for bargaining power of labor and economic indicators in order to test the significance of the semi-mechanisms between financial relations and labor share of income and to show that the research hypothesis does not lose its significance even if the specifications change in parallel to the changes in the control variables: *the negative changes in the level of bargaining power of the labor is one of the most fundamental determinants behind the reduction of the labor share of income in the 1995-2015 period.*

In Table 6.5.A, I estimate the coefficient of the interaction term of real trade openness and human capital index in control of the bargaining power indicators and macroeconomic variables. Depending on the first regression result presenting in Table 6.5.A, the estimated coefficient of the interaction term of real trade openness and human capital index is positive and statistically significant at the one percent level in the final/base regression. However, as a single variable, real trade openness and the human capital is still statistically significant but negative. Increasing the degree of openness for trade adjusted from the impacts of productivity gains in the context of the relationship between tradable and non-tradable sectors by one percentage point results in a decline by about 12 percentage points in the labor share of income,

---

[123] This is the case for further analyses.

in control of the other variables in the regression. These results show that the effects of trade liberalization either in nominal or real terms do not significantly different from each other. However, the estimated coefficient of real trade openness are more effective on the labor share of income, in contrast to the (nominal) trade openness. However, the estimated coefficient of the interaction term of real trade openness and human capital index is positive and statistically significant. This is similar to the regression result for the interaction term of (nominal) trade openness and human capital index estimated in Column (7) of Table 6.4.A. Therefore, the same arguments can be made for this new result regressed by the real trade openness and human capital index. It strengthens the hypothesis behind the model for previous specification and the current one.

Besides the changes in real trade openness measure, I repeat the base specification estimated in Column (6) of Table 6.4.A by changing the capital account openness indicator with an overall restrictions index in Table 6.5.B. In this specification, the estimation for restrictions on capital account gives totally different results than the results of the estimations for capital account openness. While the increasing degree of openness on the capital account is negatively correlated with the labor share of income, the imposition of financial restrictions on capital flows is positively correlated with the labor share in this model. For instance, Harrison (2005) finds similar results for capital controls estimated by the dummy variables. The estimation output of Harrison (2005) shows that there is a positive effect of capital controls on the labor share of income around 1 to 2 percentage points. In the context of my estimation results, increasing the level of restriction on the capital account by one unit for both inflows and outflows results in an increase by about 7 percentage points in the labor share of income, depending on a given specification variables.

However, the striking outcome emerges in the interaction of capital account restrictions with the financial development. While the estimated coefficient of the interaction term of capital account openness and financial development is statistically significant and it is positively correlated with the labor share of income, the estimated coefficient of the interaction term of capital account restrictions and financial development is also statistically significant but negative. For example, imposing restrictions on financial transactions in parallel to the developments in the financial markets and institutions in case of their depth, access, and efficiency, create a highly significant downward pressure on the labor share of income in favor of the capital share. Therefore, I conclude that the financial development only matters for the distributional issues when the financial sector is fully liberalized. On the other hand, I also note that the inner structure of the financial relations and the transactions may change for the sample countries in micro contexts such as for the exchange of stocks and bonds.

The estimation results for the variables of bargaining power of labor in the base specifications depicted in Table 6.4.A show that any decrease in the bargaining position of labor in favor of capital is negatively correlated with the labor share of income. However, there are also other proxies for the estimation of the bargaining power of labor in order to understand the changing dynamics of the labor markets after the collapse of the Soviet Union. It means that the changes in the labor market should be investigated in detail along with the changing policy implications in favor of a more liberalized structure for trade regime and financial sector. Especially, the factors that affect the labor market policies all should be considered within the neoliberal policy context. In addition to the factors used in the base specification, I also exert other variables to test the robustness of the hypothesis about the role of bargaining position for the changing income distribution between capital and labor.

From Table 6.5.A to Table 6.5.F, the robustness checks give several results about these new measurements estimating the level of bargaining power of labor which is proxied by the logarithmic change of labor quantity growth and labor force participation rate. In Table 6.5.B and Table 6.5.D, I use the labor force participation rate variable in case of the capital account restrictions and the output per worker, respectively. Additionally, the logarithmic change of the labor quantity growth is used with other bargaining power measurements in different models presented in Table 6.5.C and Table 6.5.F. In all specifications, even if the major or control variables differentiate, a unit increase in the logarithmic change of the labor quantity growth is negatively correlated with the labor share of income and also the estimated coefficients of this variable are statistically significant. On the other hand, the estimated parameters of the labor force participation rate are also statistically significant and it is positively correlated with the labor's share[124].

The other distinguishing characteristic of the neoliberal era is the commitment of the role of transformation in socio-economic conditions as a result of the technological developments. The analysis of this issue for the labor share of income may thus needs to deal with different dynamics in macro dimension. In that sense, I estimate the technological progress indicator (as proxies by TFP) in relation to the investment share in Table 6.5.C. The estimation results in Table 6.5.C show that both single correlations of the investment share and the technological development variables with the labor share of income are negative and their estimated coefficients are statistically significant. However, the estimated coefficients of the interaction term of these two variables are still statistically significant at the one percent level but are positively correlated with the labor share of income.

The reason behind this outcome depends on two facts. On the one hand, if the firms use more technology-based capital in their production system without making necessary adjustments in the labor force, the employment opportunities become scarce; and therefore, it may create downward pressure on the labor share of income as a result of an increase in the "reserve army of labor" and thereby a decrease in the bargaining power of labor against capital[125]. On the other hand, the technological progress has negative effects on the labor share of income because the technology-led machines and tools in the new kinds of the production system may cause to the reduction of the demand for labor. Therefore, it may result in upward shifts of employed people into the unemployed positions which increase the rate of unemployment and negatively affect the bargaining position of labor in favor of the capital interests. As the result shows that the estimated parameter of technological progress is statistically significant at the one percent level and it is negatively correlated with the labor share of income regressed in Table 6.5.C.

I also repeat this specification by introducing the labor productivity variable as proxies by the logarithm of the output per worker interactively with the human capital index in Table 6.5.D. The estimated coefficient of logarithm of the output per worker is negative and statistically significant at the one percent point. A one unit increase in the logarithm of the output per worker decreases the labor share of income by about 24 percentage points. However, the correlation coefficient of interaction term of logarithm of output per worker and human capital index is statistically significant and it is positively correlated with the labor share of income.

---

[124] One exception is depited in Table 6.5.D. The coefficient of labor force participation is still positive but statistically insignificant in Column (7), Column (8), and Column (9).

[125] The same theoretical arguments can also be made for the case of economic development in the theoretical context.

Finally, in Table 6.5.E and Table 6.5.F, I introduce the economic development variables in the following models as single variables and then I test the significance and robustness of the base specifications for the major variables regressed in Table 6.4.A. In all these following two specifications, the estimated parameters on economic development proxied by the logarithm of GDP per capita and human development index are statistically significant at the one percent level and they are negatively correlated with the labor share of income. First, in Table 6.5.E, I introduce the logarithm of GDP per capita in order to test the effects of factor endowments and accumulation, namely the economic development. The estimated coefficient of logarithm of GDP per capita is negative and statistically significantly in the specification replicated for the base model regressed in Table 6.4.A. The empirical estimations in Table 6.5.E show that increase the GDP per capita by one unit results in a decrease by about 59 percentage points in the labor share of income, depending on the condition of the other control variables. However, the further developments in the economic system are positively correlated with the labor share of income[126]. However, this further correlation is not so powerful even if it is statistically significant. Second, in Table 6.5.F, I alternatively use the human development index in order to test the significance of factor for estimating the endowments and accumulation in the economic development. The estimated coefficient of human development index is negative and statistically significant as in the previous specification. The empirical estimation in Table 6.5.F shows that while the human development index is negatively correlated with the labor's share at the initial stages of the economic development, the further periods show that this negative trend turns into positive by way of making economic system much relevant for employment.

---

[126] For more theoretical investigation please see Kuznets (1959).

Table 6.5.A: Extension to Base Specifications Results: Dependent Variable: Labor Share of Income

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Real Trade Openness	0.003	0.005	0.005	0.004	-0.000	0.002	-0.124***
	(0.007)	(0.006)	(0.006)	(0.007)	(0.006)	(0.005)	(0.023)
Capital Account Openness	-0.019***	-0.019***	-0.017***	-0.017***	-0.020***	-0.019***	-0.015***
	(0.002)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.005)
Financial Development	-0.105***	-0.114***	-0.131***	-0.112***	-0.116***	-0.104***	-0.067***
	(0.020)	(0.023)	(0.023)	(0.014)	(0.014)	(0.018)	(0.016)
Kaopen*FinDev	0.028***	0.028***	0.026***	0.024***	0.028***	0.027***	0.015**
	(0.003)	(0.005)	(0.006)	(0.005)	(0.006)	(0.006)	(0.007)
Government Share		-0.121**	-0.071	-0.029	-0.024	-0.026	0.008
		(0.049)	(0.048)	(0.048)	(0.044)	(0.040)	(0.037)
Government Effectiveness		-0.052***	-0.054***	-0.049***	-0.053***	-0.052***	-0.054***
		(0.010)	(0.010)	(0.010)	(0.009)	(0.009)	(0.009)
Govshare*Goveff		0.272***	0.263***	0.230***	0.237***	0.233***	0.227***
		(0.048)	(0.049)	(0.051)	(0.047)	(0.049)	(0.045)
Unemployment Rate			-0.002***	-0.002***	-0.002***	-0.002***	-0.002***
			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Log (Population)				-0.206**	-0.186**	-0.132	-0.158*
				(0.085)	(0.081)	(0.086)	(0.080)
Real Effective Exchange Rate					0.000***	0.000***	0.000**
					(0.000)	(0.000)	(0.000)
Human Capital Index						-0.028	-0.064***
						(0.017)	(0.015)
Rtradeopen*HumCap							0.040***
							(0.006)
After Crisis (Dummy)	-0.010	-0.014*	-0.013**	-0.007	-0.008	-0.006	-0.006
	(0.006)	(0.007)	(0.006)	(0.006)	(0.006)	(0.006)	(0.005)
Constant	0.629***	0.659***	0.678***	2.177***	2.011***	1.687**	1.969***
	(0.011)	(0.007)	(0.009)	(0.625)	(0.588)	(0.612)	(0.570)
Within R-squared	0.2008	0.2429	0.2662	0.2864	0.3033	0.3077	0.3469
Observations	836	792	792	792	792	792	792
Number of countries	44	44	44	44	44	44	44

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6.5.B: Extension to Base Specifications Results: Dependent Variable: Labor Share of Income

	(1)	(2)	(3)	(4)	(5)	(6)
Trade Openness	-0.041***	-0.043***	-0.040***	-0.040***	-0.039***	-0.035***
	(0.010)	(0.010)	(0.010)	(0.008)	(0.009)	(0.008)
Capital Account Restrictions	0.064***	0.062***	0.053***	0.057***	0.056***	0.068***
	(0.011)	(0.014)	(0.016)	(0.014)	(0.013)	(0.013)
Financial Development	-0.033	-0.045**	-0.068***	-0.053**	-0.060***	-0.057***
	(0.023)	(0.019)	(0.022)	(0.021)	(0.018)	(0.017)
Karest*FinDev	-0.121***	-0.139***	-0.124***	-0.127***	-0.119***	-0.134***
	(0.018)	(0.030)	(0.031)	(0.030)	(0.026)	(0.028)
Government Share		-0.191***	-0.139***	-0.109**	-0.114**	-0.117**
		(0.031)	(0.037)	(0.044)	(0.047)	(0.049)
Government Effectiveness		-0.071***	-0.072***	-0.067***	-0.062***	-0.065***
		(0.011)	(0.010)	(0.010)	(0.010)	(0.011)
Govshare*Goveff		0.330***	0.316***	0.290***	0.293***	0.301***
		(0.038)	(0.041)	(0.045)	(0.043)	(0.042)
Unemployment Rate			-0.002***	-0.002***	-0.001**	-0.001**
			(0.000)	(0.000)	(0.001)	(0.001)
Log (Population)				-0.183**	-0.203**	-0.192**
				(0.073)	(0.075)	(0.074)
Labor Force Participation Rate					0.002*	0.002*
					(0.001)	(0.001)
Real Effective Exchange Rate						0.000*
						(0.000)
After Crisis (Dummy)	-0.007	-0.010*	-0.009*	-0.004	-0.004	-0.005
	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Constant	0.619***	0.681***	0.700***	2.038***	2.073***	1.972***
	(0.017)	(0.010)	(0.015)	(0.539)	(0.546)	(0.539)
Within R-squared	0.2197	0.2837	0.3024	0.3185	0.3278	0.3343
Observations	798	756	756	756	756	756
Number of countries	42	42	42	42	42	42

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6.5.C: Extension to Base Specifications Results: Dependent Variable: Labor Share of Income

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Trade Openness	-0.031***	-0.036***	-0.035***	-0.032***	-0.027**	-0.029***	-0.022***	-0.025***
	(0.010)	(0.010)	(0.011)	(0.010)	(0.009)	(0.009)	(0.007)	(0.008)
Capital Account Openness	-0.018***	-0.017***	-0.016***	-0.015***	-0.018***	-0.018***	-0.017***	-0.014***
	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)	(0.004)
Financial Development	-0.103***	-0.116***	-0.132***	-0.130***	-0.131***	-0.132***	-0.120***	-0.117***
	(0.019)	(0.021)	(0.023)	(0.022)	(0.022)	(0.020)	(0.019)	(0.020)
Kaopen*FinDev	0.029***	0.030***	0.028***	0.027***	0.030***	0.030***	0.027***	0.023***
	(0.003)	(0.005)	(0.007)	(0.006)	(0.006)	(0.007)	(0.006)	(0.007)
Government Share		-0.122**	-0.074	-0.066	-0.056	-0.099*	-0.165***	-0.205***
		(0.051)	(0.049)	(0.044)	(0.039)	(0.051)	(0.055)	(0.053)
Government Effectiveness		-0.056***	-0.057***	-0.049***	-0.052***	-0.053***	-0.053***	-0.061***
		(0.009)	(0.009)	(0.010)	(0.010)	(0.011)	(0.011)	(0.014)
Govshare*Goveff		0.286***	0.277***	0.244***	0.247***	0.240***	0.265***	0.304***
		(0.039)	(0.042)	(0.041)	(0.039)	(0.042)	(0.042)	(0.059)
Unemployment Rate			-0.002***	-0.002***	-0.002***	-0.003***	-0.003***	-0.003***
			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Labor Quantity Growth				-0.001***	-0.001**	-0.001*	-0.001*	-0.001*
				(0.000)	(0.000)	(0.000)	(0.000)	(0.001)
Real Effective Exchange Rate					0.000***	0.000***	0.000***	0.000***
					(0.000)	(0.000)	(0.000)	(0.000)
Investment Share						-0.081**	-0.079**	-0.739*
						(0.035)	(0.035)	(0.358)
TFP							-0.054***	-0.217**
							(0.013)	(0.092)
Invshare*TFP								0.669*
								(0.358)
After Crisis (Dummy)	-0.006	-0.009	-0.009*	-0.010*	-0.011**	-0.010**	-0.009**	-0.010**
	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)
Constant	0.652***	0.690***	0.707***	0.704***	0.682***	0.709***	0.754***	0.923***
	(0.014)	(0.013)	(0.016)	(0.015)	(0.011)	(0.011)	(0.013)	(0.088)
Within R-squared	0.2208	0.2696	0.2909	0.3035	0.3158	0.3286	0.3355	0.3458
Observations	836	792	792	792	792	792	792	792
Number of countries	44	44	44	44	44	44	44	44

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6.5.D: Extension to Base Specifications Results: Dependent Variable: Labor Share of Income

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trade Openness	-0.031***	-0.036***	-0.035***	-0.034***	-0.032***	-0.028***	-0.015	-0.016	-0.020*
	(0.010)	(0.010)	(0.011)	(0.009)	(0.009)	(0.009)	(0.010)	(0.010)	(0.010)
Capital Account Openness	-0.018***	-0.017***	-0.016***	-0.016***	-0.015***	-0.017***	-0.015***	-0.016***	-0.014**
	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.005)
Financial Development	-0.103***	-0.116***	-0.132***	-0.112***	-0.112***	-0.115***	-0.084***	-0.090***	-0.084***
	(0.019)	(0.021)	(0.023)	(0.018)	(0.018)	(0.018)	(0.026)	(0.028)	(0.026)
Kaopen*FinDev	0.029***	0.030***	0.028***	0.027***	0.022***	0.025***	0.021***	0.022***	0.015*
	(0.003)	(0.005)	(0.007)	(0.006)	(0.005)	(0.006)	(0.006)	(0.007)	(0.008)
Government Share		-0.122**	-0.074	-0.030	-0.029	-0.023	-0.171***	-0.189**	-0.156**
		(0.051)	(0.049)	(0.047)	(0.056)	(0.052)	(0.055)	(0.068)	(0.057)
Government Effectiveness		-0.056***	-0.057***	-0.052***	-0.047***	-0.050***	-0.054***	-0.055***	-0.050***
		(0.009)	(0.009)	(0.008)	(0.008)	(0.009)	(0.009)	(0.010)	(0.009)
Govshare*Goveff		0.286***	0.277***	0.244***	0.246***	0.250***	0.298***	0.309***	0.277***
		(0.039)	(0.042)	(0.042)	(0.041)	(0.039)	(0.043)	(0.046)	(0.040)
Unemployment Rate			-0.002***	-0.002***	-0.001**	-0.001**	-0.001**	-0.001**	-0.001**
			(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Log (Population)				-0.207**	-0.229***	-0.211**	-0.106	-0.138	-0.104
				(0.074)	(0.075)	(0.075)	(0.075)	(0.084)	(0.086)
Labor Force Participation Rate					0.002**	0.002**	0.000	0.000	0.000
					(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Real Effective Exchange Rate						0.000**	0.000***	0.000***	0.000***
						(0.000)	(0.000)	(0.000)	(0.000)
Log (Output per Worker)							-0.148***	-0.168***	-0.245***
							(0.029)	(0.020)	(0.025)
Human Capital Index								0.024	-0.187***
								(0.014)	(0.023)
Outperwor*HumCap									0.045***
									(0.006)
After Crisis (Dummy)	-0.006	-0.009	-0.009*	-0.003	-0.003	-0.005	-0.000	-0.002	-0.003
	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)
Constant	0.652***	0.690***	0.707***	2.213***	2.235***	2.087***	2.059***	2.333***	2.443***
	(0.014)	(0.013)	(0.016)	(0.552)	(0.557)	(0.551)	(0.482)	(0.544)	(0.575)
Within R-squared	0.2208	0.2696	0.2909	0.3114	0.3242	0.3345	0.3635	0.3662	0.3781
Observations	836	792	792	792	792	792	792	792	792
Number of countries	44	44	44	44	44	44	44	44	44

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6.5.E: Extension to Base Specifications Results: Dependent Variable: Labor Share of Income

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Trade Openness	-0.031***	-0.036***	-0.035***	-0.034***	-0.030***	-0.013	-0.021**
	(0.010)	(0.010)	(0.011)	(0.009)	(0.009)	(0.009)	(0.009)
Capital Account Openness	-0.018***	-0.017***	-0.016***	-0.016***	-0.018***	-0.015***	-0.012**
	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.004)	(0.005)
Financial Development	-0.103***	-0.116***	-0.132***	-0.112***	-0.115***	-0.075***	-0.083***
	(0.019)	(0.021)	(0.023)	(0.018)	(0.018)	(0.025)	(0.025)
Kaopen*FinDev	0.029***	0.030***	0.028***	0.027***	0.029***	0.021***	0.014*
	(0.003)	(0.005)	(0.007)	(0.006)	(0.006)	(0.007)	(0.008)
Government Share		-0.122**	-0.074	-0.030	-0.024	-0.179***	-0.170***
		(0.051)	(0.049)	(0.047)	(0.044)	(0.046)	(0.045)
Government Effectiveness		-0.056***	-0.057***	-0.052***	-0.055***	-0.056***	-0.055***
		(0.009)	(0.009)	(0.008)	(0.008)	(0.008)	(0.008)
Govshare*Goveff		0.286***	0.277***	0.244***	0.248***	0.299***	0.289***
		(0.039)	(0.042)	(0.042)	(0.040)	(0.043)	(0.041)
Unemployment Rate			-0.002***	-0.002***	-0.002***	-0.002***	-0.002***
			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Log (Population)				-0.207**	-0.190**	-0.054	-0.087
				(0.074)	(0.074)	(0.073)	(0.077)
Real Effective Exchange Rate					0.000**	0.000***	0.000***
					(0.000)	(0.000)	(0.000)
Log (GDP per Capita)						-0.150***	-0.595***
						(0.026)	(0.070)
Log (GDP per Capita)^2							0.062***
							(0.009)
After Crisis (Dummy)	-0.006	-0.009	-0.009*	-0.003	-0.005	-0.000	-0.002
	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.005)
Constant	0.652***	0.690***	0.707***	2.213***	2.063***	1.684***	2.691***
	(0.014)	(0.013)	(0.016)	(0.552)	(0.550)	(0.489)	(0.490)
Within R-squared	0.2208	0.2696	0.2909	0.3114	0.3219	0.3586	0.3759
Observations	836	792	792	792	792	792	792
Number of countries	44	44	44	44	44	44	44

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6.5.F: Extension to Base Specifications Results: Dependent Variable: Labor Share of Income

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Trade Openness	-0.031***	-0.036***	-0.035***	-0.032***	-0.027**	-0.010	-0.016**
	(0.010)	(0.010)	(0.011)	(0.010)	(0.009)	(0.008)	(0.007)
Capital Account Openness	-0.018***	-0.017***	-0.016***	-0.015***	-0.018***	-0.017***	-0.013***
	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Financial Development	-0.103***	-0.116***	-0.132***	-0.130***	-0.131***	-0.085***	-0.078***
	(0.019)	(0.021)	(0.023)	(0.022)	(0.022)	(0.020)	(0.018)
Kaopen*FinDev	0.029***	0.030***	0.028***	0.027***	0.030***	0.027***	0.015**
	(0.003)	(0.005)	(0.007)	(0.006)	(0.006)	(0.006)	(0.006)
Government Share		-0.122**	-0.074	-0.066	-0.056	-0.122***	-0.132***
		(0.051)	(0.049)	(0.044)	(0.039)	(0.034)	(0.042)
Government Effectiveness		-0.056***	-0.057***	-0.049***	-0.052***	-0.049***	-0.041***
		(0.009)	(0.009)	(0.010)	(0.010)	(0.008)	(0.008)
Govshare*Goveff		0.286***	0.277***	0.244***	0.247***	0.261***	0.234***
		(0.039)	(0.042)	(0.041)	(0.039)	(0.041)	(0.034)
Unemployment Rate			-0.002***	-0.002***	-0.002***	-0.002***	-0.002***
			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Labor Quantity Growth				-0.001***	-0.001**	-0.001***	-0.001***
				(0.000)	(0.000)	(0.000)	(0.000)
Real Effective Exchange Rate					0.000***	0.000***	0.000***
					(0.000)	(0.000)	(0.000)
Human Development Index						-0.405***	-1.783***
						(0.041)	(0.188)
Human Development Index^2							0.957***
							(0.123)
After Crisis (Dummy)	-0.006	-0.009	-0.009*	-0.010*	-0.011**	0.000	-0.003
	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.003)
Constant	0.652***	0.690***	0.707***	0.704***	0.682***	0.961***	1.449***
	(0.014)	(0.013)	(0.016)	(0.015)	(0.011)	(0.029)	(0.079)
Within R-squared	0.2208	0.2696	0.2909	0.3035	0.3158	0.3757	0.4101
Observations	836	792	792	792	792	792	792
Number of countries	44	44	44	44	44	44	44

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

CONCLUSION

The capitalist system has structural ups and downs due to its nature. These structural changes may include both economic, social, political, and cultural factors. Therefore, the historical processes are transformed in parallel to the development path of the capitalist system. Additionally, these historical processes involve very different and opposed socio-economic forces. These opposing forces are also the main influence of the structural changes. The processes that interact with each other in dialectic ways try to internalize by transforming their different properties instead of excluding each other. Since capitalism has structurally acquired the economic superstructure, it has been changed on the basis of the opposing forces inherent to the system.

The major emphasis of this work was to examine the dynamics behind the varying income shares accruing from the national income of two upper classes based on the labor-capital conflict in the historical process of the capitalist system. For this reason, instead of focusing on the antagonism between these two classes (i.e., capital and labor) for both the theoretical part and the empirical part in a pure economic framework, the work focused on to analyze it in a multi-dimensional context. Although the scope of the study is based on the investigation of the neoliberal period, the common points related to a given period having different economic and social backgrounds have been also tried to be summarized in the study. The major reason of this depends on the fact that the study aimed to carry out a multi-dimensional and historical analysis of the conflicts between capital and labor. In other words, the main aim of this comprehensive investigation depends on the issue that the current class contradictions internalize the outcomes of the contradiction among classes of the previous periods. The epistemological detachment of the current historical components, especially of the economic history, from the developments in the previous historical practices, constitutes the most important obstacle to understanding antagonism among classes.

Within all this information, the dynamics of the capital-labor contradiction in the neoliberal period assessed through the changes in the share of labor income. One of the key points in the work and empirical analysis was based on the question of how the labor share is defined and how it is measured. Several approaches and schools of thought having different perspectives and theoretical foundations were focused on the ways and factors in making and distributing of the total income on a class-based or individual levels. In this framework, some schools of thought have merely investigated the emergence and distribution of aggregate income in relation to the pure economic norms, while other approaches and paradigms have also taken social and historical dynamics as a major component of the analysis in addition to the economic factors. Hence, all these different approaches have also created an important theoretical basis for the rejection or the adoption of class-based facts.

The issue of income distribution has been one of the critical factors for the scientific studies and thus the related literature from the beginning of the capitalist system to the current period. While it has provided a sense of opportunity to understand the different aspects of the subject, it has been able to influence both the positive and negative aspects of the income distribution among classes at practical level. In addition, the theoretical and practical structure of class interests have played a unique role in transforming of the dynamics of the income distribution. However, the existence of classes has a critical meaning in terms of schools of thought that analyze capitalist relations. This context can also be interpreted in the following way: The class phenomenon also defines the limits of these approaches when investigating capitalist relations at methodological level. These limits thus depend on the acceptance or rejection of the existence

of classes. In particular, the dominant approach (i.e., the neoclassical paradigm) of the current period, in which this work examines its major topics, rejects the concept of class and class-based distributional relations at both the theoretical and practical level. Therefore, the neoclassical approach confines the assumptions on income distribution to the theoretical and practical limits of personal income distribution.

The advantages and disadvantages of these theoretical and practical limits of the personal income distribution can be discussed, depending on the socio-economic and historical features of the capitalist system[127]. However, the reduction of individuals to purely economic units by purifying them from the social structures and historical ingredients will further reveal the negation power of this theoretical foundation within the context of the intensification of the income distribution. In other words, following the increasing scale of economic antagonism in distributional issues among individuals, it has potential to stimulate the instincts towards unity against any class whose welfare level is ceaselessly increasing in time. Although the mainstream approach or other theoretically parallel approaches reject the existence of classes, capitalist relations have initially power to make the formation dynamics of different classes in the current mode of production. Regardless of the level of these relations, the dynamics of class contradictions and polarizations are internalized in the capitalist system.

According to the neoclassical perspective, the forms of behaviors and social reactions of individuals in the capitalist system are in harmony. Therefore, the existence of any class contradiction reflects a utopian view. Although economic equilibrium is considered as a constant norm in every period of the capitalist system, this norm has been raised to the highest point in the neoclassical paradigm both methodologically and epistemologically. In addition, it has become an indispensable tool of several scientific disciplines in many senses. Especially the case of harmony within the economic discipline is the cornerstone of the infrastructure of each unit which takes place in the mainstream approach as an "equilibrium" condition.

In the neoclassical paradigm, the equilibrium phenomenon is both the indispensable criterion of each analysis and the major aim that must be reached. This is the point that distinguishes neoclassical paradigm from the other approaches. Although the issue on equilibrium is investigated by focusing on social phenomena to some extent both in Classical and Keynesian paradigms, this is regarded as being given in the neoclassical paradigm. Hence, any intervention aimed at the reactions of individuals in the societal context and their behavioral patterns at the economic scale will adversely affect this "perfect" equilibrium form. The liberty of the economic structure should be maintained in all circumstances.

Another point that distinguishes the theoretical components of the neoclassical paradigm from other approaches in the framework of the "equilibrium" issue is that this problem is accepted as an indispensable norm in all markets. In that sense, the labor markets are considered as a part of this "perfect" harmony as well as the goods and financial markets. Particularly the labor markets, where individual relations are most clearly displayed at the economic scale, are the major markets to be examined in this regard. According to the neoclassical economics, the economic agent has an unlimited right to use and develop the labor-power. It is not possible for the labor-power to remain idle except in temporary business cycles. Just as each commodity or financial instrument has a buyer and seller in goods and financial markets, the supply of labor will respond to a simultaneous demand for this labor in the labor markets, depending on the neoclassical perspective in the context of economic harmony. The critical level is thus the

---

[127] For more information please see Section 5.1.

"equilibrium point" in the neoclassical paradigm. The divergence from the equilibrium point interrupts these simultaneous reciprocal relations (although it is temporary). For that reason, any intervention that affects the decisions of "economic subjects" must be avoided. If this condition is met, each economic agent will earn an income equivalent to the value of their produced goods at the end of the labor process. The equality condition is basically depended on the equivalence between the marginal product of labor and the marginal product of capital. The provision and efficient use of this income have also critical importance in terms of the proper processing of goods and financial markets as well as the labor markets. In that sense, each market operates on the basis of their interrelated relations.

One of the major theoretical assumption of the neoclassical approach for getting more equal distribution in income shares of the society is basically depended on providing of the equivalence between the marginal product of labor and the marginal product of capital. This point also shows the level in which each production factor achieves maximum income. Therefore, the constancy feature of the labor's share and capital's share can be evaluated as an expression of this theoretical structure. The divergence from the equilibrium point negatively affects the "perfect" harmony between demand and supply in a way that breaks down the constancy ratio of the income shares of capital and labor. However, the neoclassical approach strictly states that this phenomenon is temporary. As long as the equilibrium is maintained, the constant income share ratios between capital and labor can also be maintained in the long-run. Hence, contrary to the existence of the class-based phenomena, the temporary factors which shift the components from their equilibrium points are the major reasons behind the problem. The solution of the problems between economic objects and subjects depends on the reinforcement of these factors. Therefore, the existence of long-run problems is not possible within this theoretical framework. In other words, the presence of continuous contradictions is trapped at the intellectual level among economic entities. At the practical level, the existence of equilibrium and the presence of harmony determine the limits of the contradictions and thus is not possible for long-run issues.

The major purpose of this study is constructed on to prove that these facts developed by the neoclassical approach are not valid both at theoretical and practical levels. The historical period in which the neoclassical approach prevails is based on the fact that the income share of labor accruing from the national income is in a declining trend. In a sense, this case shows the main phenomenon that income is redistributed to the capital from the labor. Although the neoclassical approach is mainly based on the structure of income distribution within the framework of equilibrium by rejecting the existence of class-based facts, each sub-period of the neoclassical period shows that the labor share of income is continuously declining at the macro level. Even in many periods when the business cycle does not exist, it is not possible to assert the constancy phenomenon between the income shares of capital and labor. Therefore, in this case, there is an important paradox emerges at the theoretical level in which the neoclassical economics has: *the rejection of the constancy phenomenon for the distribution of income among economic objects in the equilibrium point*. The existence of classes in social and economic context requires affirmation in this dilemma. This is what the neoclassical approach depends on at the theoretical level: A continuous volatile market system based on equilibrium condition.

The income shares of labor and capital have been tended to deteriorate at the expense of labor when neoliberal policies began to spread to world economics from the very beginning of the 1980s until the current period. However, the measurement methods of the income shares of labor are different at the methodological level even if the trends for income share of labor exhibit a same downward trend in each case. In addition to this methodological features, these

trends are investigated by different types of theoretical methods. Statistical outcomes showed this declining trend at different scales and with different factors. One of the main aims of this study was based on the investigation of the major determinants behind the declining trend of the labor's share in the context of the critiques against the equilibrium phenomenon and thereby the constancy framework of the neoclassical approach. Therefore, depending on these critical assumptions, dealing with the economic structures without pointing out the class dynamics will not provide accurate results. Furthermore, the instability case rather than the equilibrium condition is the cornerstone of the logical unity behind the economic and social analyses due to the emergence of both worldwide and country- and regional-based economic crises. The major question is to uncover the causes of the increasing economic contradictions between labor and capital in parallel to the permanent instability in both micro and macro contexts.

In this study, related to the labor share of income, the neoliberal policy components of the neoclassical approach were empirically examined on the macro scale. However, on the micro scale, the basic variables related to the working class, which affect these components endogenously, tried to be revealed. Within the financial liberalization process, both the financial sector and trade regime have had a more open economic structure. In that sense, the internal structures and their related problems of the countries have been bypassed in this liberalization process. On the one hand, these policies were being applied sudden and unexpected by the major institutions of the neoliberal structure such as IMF, WB, and WTO in the presence of economic and social problems that countries have been faced; on the other hand, they have been tested only at the empirical level in developing and emerging markets such as Turkey, Chile, and Brazil.

Although the variables affecting the labor share of income and thereby the share accruing from the total national income periodically differ, three main factors were found to have significant effects on the decline of the labor's share in the neoliberal period. These factors can be listed as follows: (1) high rates of unemployment; (2) increasing scale of the total population; (3) increasing concentration of the labor quantity growth in the labor market; and (4) stable labor force participation rates. These four factors are also the fundamental variables that determine the bargaining power of labor against the capital. In essence, the counterattack of the neoliberal policy framework against the working class by implementing liberalization policies in trade regime and the financial sector can be shown as one of the major reason behind the reduction of the level of bargaining power of labor. For this reason, the main reason behind the decline in the labor share of income depends on the variables that affect the bargaining power of labor against the capital. This is not to say that these four variables are the leading ones all over the world economies. On the contrary, there are also other critical determinants and their related variables that can be added into the category of these four variables in the context of the changing structure of countries, both economically, politically, and socially (e.g., trade union density, strictness of employment protection, collective bargaining coverage rate; and quality of labor)[128].

However, it is worth pointing out one more point in that case. Although the neoliberal period has witnessed a steady decline in labor's share, the volume of this decline was periodically and country-specifically different[129]. Therefore, the breaking point is the year of 1995 for all country

---

[128] Although there are many different kinds of bargaining power measurements for working class, the availability of data is scarce for both OECD and non-OECD countries. Especially, the data availability for non-OECD country groups is near to zero for pre-2000 period.

[129] These ups and downs in the labor share of income both for country-groups over 1980-2015 period can be seen in section 6.2.

groups in average in OECD and non-OECD samples. As a matter of fact, since this year, there has been an increase in the number of the economic crises either in country-specific, regional, or worldwide framework. Thus, this study investigates the factors affecting the labor share of income over the 1995-2015 period for selected OECD and non-OECD countries. Additionally, these selected countries have also by about 90 percentages of total GDP. Therefore, they have ample effects on the changes in the world economy, and more specifically, in income distribution.

As the empirical outcomes showed that the liberalization policies towards trade regimes and financial sectors which are the leading policy arguments of the neoliberal framework have not positively affected the labor share of income over the sample period. On the contrary, these policies implications for more liberalized trade regimes and financial sectors all over the world economies have served as a special tool for the redistribution of income from labor to capital. This phenomenon has also evoked by the overall globalization and the economic globalization variables. However, the distinctive feature of this study has depended on interactively using of data on capital account openness (i.e. the financial liberalization) and financial development. The joint regression of capital account openness and the financial development has made a positive effect on the labor share of income for a given period. In other words, the interaction term of these two variables showed that the only condition for an increase in the labor share of income and the redistribution of income from capital to labor depends on making the financial sector more liberalized, while developing the financial markets and institutions. However, even when an effective financial structure was established, the share of labor income has decreased. It means that the positive effects of the interaction term between the capital account openness and the financial development were suppressed by the negative effects of the decline in the bargaining power of the labor. In all specifications, these frameworks were significant and robust. In other words, the income was redistributed in favor of the capital in parallel to the decline of the labor share of income in case of the downward pressure on the bargaining power of labor. Therefore, the factors that affect the bargaining position of labor vis-à-vis capital should be all considered. In this sense, the logic of this investigation depended on the fact that the analysis of the aims and the scale of the neoliberal policies, and more specifically, the theoretical structure of the neoclassical paradigm would provide to the reveal of the changing dynamics of the labor's share in the historical process. Furthermore, it would play a key role in an understanding of the quality of contradictions between capital and labor.

In conclusion, in the context of the empirical results presented in Table 6.4.A, Table 6.5.A, Table 6.5.B, Table 6.5.C, Table 6.5.D, Table 6.5.E and Table 6.5.F, each specification output can be interpreted in different paradigms and frameworks on the basis of the theoretical and practical assumptions of different schools of thought. However, especially in the neoclassical paradigm, these empirical results and policy conclusions and recommendations have not been addressed by a class-based approach. The most extreme argument about the income distribution were criticized only in the reformist style in the neoclassical paradigm. However, this does not mean that the empirical results cannot be evaluated in revolutionary practices. Therefore, all specifications are open to debate for all kinds of economic paradigms and schools of thought. However, there is a constant fact that the neoliberal policies and the neoclassical theoretical framework have caused to a serious decline in the labor share of income on behalf of the capital over time. Although it is not possible to reject this fact, the history will show us which schools of thought is right in the theoretical framework.

BIBLIOGRAPHY

Adesina, J. O. (2001). "NEPAD and the Challenge of Africa's Development: Towards the Political Economy of a Discourse", *AJIA*, Volume: 4, No: 1 & 2.

Agénor, P.-R. (2002). "Does Globalization Hurt the Poor?", *The World Bank Policy Research*, World Bank Policy Research Working Paper No. 2922, October.

Aglietta, M. [1979] (2000). *A Theory of Capitalist Regulation: The US Experience*. London, New York: Verso.

Aglietta, M. (2000). "Shareholder value and corporate governance: some tricky questions", *Economy and Society*, Volume: 29 No: 1, pp. 146-159.

Ağır, H. (2010). *Türkiye'de Finansal Liberalizasyon ve Finansal Gelişme İlişkisinin Ekonometrik Analizi*. BDDK Kitapları, No: 8, Ankara: Bankacılık Düzenleme ve Denetleme Kurumu.

Ahsan, R. N. and Mitra, D. (2014). "Trade liberalization and labor's slice of the pie: Evidence from Indian firms", *Journal of Development Economics*, Volume: 108, pp. 1-16.

Akman, C. (2010). *Marksist Kriz Teorileri Işığında Küresel Kriz*. 1st edition, Istanbul: Kalkedon Publishing.

Aktan, C. C. (2008). *Yeni Iktisat Okulları*. 2nd edition, Ankara: Seçkin Publishing.

Albertini, J. M., Pecherand, M. and Poujet, M. (1990). *Ekonomik Sistemler: Uygulamada Kapitalizm ve Sosyalizm*. Uludağ University Consolidation Foundation No. 48, U.U FEAB The Economics of Business Administration and Accounting Research and Application Center Publication No. 49, Translated by Prof. Dr. Cafer Unay, Uludağ: Uludağ University Press.

Albo, G., Gindin, S. and Panitch, L. (2010). *In and Out of Crisis: The Global Financial Meltdown and Left Alternatives*. Oakland: Spectre PM Press.

Alcala, F. and Ciccone, A. (2004). "Trade and Productivity", *The Quarterly Journal of Economics*, Volume: 119, No: 2, pp. 613-646.

Althusser, L. (2014). *İdeoloji ve Devletin İdeolojik Aygıtları*. 1st edition, Translated by Alp Tümertekin, Istanbul: İthaki Publishers.

Amin, S. (1977). *Imperialism and Unequal Development*. London, New York: Monthly Review Press.

Amin, S. (1984). "Bunalım, Ulusçuluk ve Toplumculuk", *Genel Bunalımın Dinamikleri*, Translated by F. Akar, 1st edition, pp. 187-257, Istanbul: Belge Publishing.

Amin, S. (2004). *The Liberal Virus: Permanent War and the Americanization of the World*. London, New York: Monthly Review Press.

Amin, S. (2015). "Contemporary Imperialism", *Monthly Review*, Volume: 67, Issue: 03, July-August.

Ang, J. (2010). "Savings Mobilization, Financial Development and Liberalization: The Case of Malaysia", *Munich Personal RePEc Archive (MPRA)*, MPRA Paper No: 21718, posted 28, March.

Antonios, A. (2010), "Stock Market and Economic Growth: An Empirical Analysis for Germany*", Business and Economic Journal*, Volume 2010: BEJ-1.

Arbache, J. S., Dickerson, A. and Green, F. (2004). "Trade Liberalisation and Wages in Developing Countries", *The Economic Journal*, Volume: 114, Issue: 493, pp. F73-F96, February.

Arendt, H. (1968). *Imperialism*. Part Two of the Origins of Totalitarianism, New York: A Harvest Book.

Arestis, P. and Caner, A. (2004). "Financial Liberalization and Poverty: Channels of Influence", *The Levy Economics Institute*, Working Paper No: 441, July.

Arestis, P. and Caner, A. (2009). "Capital account liberalisation and poverty: how close is the link?", *The Cambridge Journal of Economics*, Volume: 34, No: 2, pp. 295-323.

Arestis, P. and Demetriades, P. O. (1997). "Financial Development and Economic Growth: Assessing the Evidence", *The Economic Journal*, Volume: 107, Issue: 442, pp. 783-799.

Arestis, P., Demetriades, P. O. and Luintel, K. B. (2001). "Financial Development and Economic Growth: The Role of Stock Markets", *Journal of Money, Credit and Banking*, Volume: 33, No: 1, pp. 16-41.

Arrighi, G. [1994] (2010). *The Long Twentieth Century: Money, Power, and the Origins of Our Times*. London, New York: Verso.

Arrow, K. J.; Chenery, H. B.; Minhas, B. S. and Solow, R. M. (1961). "Capital-Labor Substitution and Economic Efficiency", *The Review of Economics and Statistics*, Volume: 43, No: 3, pp. 225-250.

Atiyas, I. (2009). "Recent Privatization Experience of Turkey: A Reappraisal", *Turkey and the Global Economy: Neo-liberal Restructuring and Integration in the Post-Crisis Era*, in Ziya Öniş and Fikret Şenses (eds.), pp. 101-123, London and New York: Routledge.

Atkinson, A. B. (1975). *The Economics of Inequality*. Oxford: Clarendon Press.

Atkinson, A. B. (2009). "Factor shares: the principal problem of political economy?", *Oxford Review of Economic Policy*, Volume: 25, No: 1, pp. 3-16.

Azmat, G., Manning, A. and Reenen, J. V. (2012). "Privatization and the Decline of Labour's Share: International Evidence from Network Industries", *Economica*, Volume: 79, Issue: 315, pp. 470-492.

Backhouse, R. E. (2008). "Keynesçi Devrim", *Keynes,* in R. E. Backhouse and B. W. Bateman (eds.), Translated by Müfit Günay, pp. 28-45, Ankara: Dost Bookstore.

Bağımsız Sosyal Bilimciler (BSB). (2015). *AKP'li Yıllarda Emeğin Durumu*. Istanbul: Yordam Book.

Bandiera, O., Caprio, G., Honohan, P. and Schiantarelli, F. (2000). "Does Financial Reform Raise or Reduce Saving?", *The Review of Economics and Statistics*, Volume: 82, No: 2, pp. 239-263.

Bandyopadhyay, S. and Bandyopadhyay, S. C. (1999). "Unionization and International Market Share Rivalry: A Paradox", *Review of International Economics,* Volume: 7, No: 1, pp. 153-161.

Baran, P. (1957). *The Political Economy of Growth*. London, New York: Monthly Review Press.

Bartlett, B. R. (1981). *Reaganomics: Supply-Side Economics in Action*. New York: Quill.

Barro, R. J. (1990). "Government Spending in a Simple Model of Endogenous Growth", *The Journal of Political Economy*, Volume: 98, No: 5, Part 2: The Problem of Development: A Conference of the Institute for the Study of Free Enterprise Systems, pp. S103-S125.

Bauer, O. (1913). *Neue Zeit*. No. 24, pp. 873-874.

Bayoumi, T. (1993). "Financial Deregulation and Household Saving", *The Economic Journal*, Volume: 103, No: 421, pp. 1432-1443.

Beaud, M. (2015). *Kapitalizmin Tarihi 1950-2010*. Translated by Fikret Başkaya, Istanbul: Yordam Book.

Beck, N. and Katz, J. N. (1995). "What to do (and not to do) with Time-Series Cross-Section Data", *The American Political Science Review*, Volume: 89, No: 3, pp. 634-647.

Bencivenga, V. R., Smith, B. D. and Starr, R. M. (1995). "Transactions Costs, Technological Choice, and Endogenous Growth", *Journal of Economic Theory*, Volume: 67, No: 1, pp. 153-177.

Bentolila, S. and Saint-Paul, G. (2003). "Explaining Movements in the Labor Share", *Contributions in Macroeconomics*, Volume: 3, Issue: 1, ISSN (Online) 1534-6005, DOI: https://doi.org/10.2202/1534-6005.1103.

Bernstein, E. (1899). "Evolutionary Socialism", *Marxists Internet Archive*, Available at https://www.marxists.org/reference/archive/bernstein/works/1899/evsoc/index.htm.

Best, M. (1993). *The New Competition: Institutions of Industrial Restructuring*. Cambridge, Massachusetts and London: Harvard University Press.

Blanchard, O. and Giavazzi, F. (2001). "Macroeconomic Effects of Regulation and Deregulation in Goods and Labor Markets", *National Bureau of Economic Research*, NBER Working Paper Series No: 8120, February.

Blaug, M. (1996). *Economic Theory in Retrospect*. 5th edition, Cambridge: Cambridge University Press.

Blejer, M. I. and Khan, M. S. (1984). "Government Policy and Private Investment in Developing Countries", *Staff Papers (International Monetary Fund),* Volume: 31, No: 2, pp. 379-403.

Bluestone, B. (1995). "The Inequality Express", *The American Prospect*, Winter.

Boggio, L., Dall'Aglio, V. and Magnani, M. (2010). "On Labour Shares in Recent Decades: A Survey", *Rivista Internazionale di Scienze Sociali,* Volume: 118, No: 3, pp. 283-333.

Bohl, M. T. (1996). "Some International Evidence of Wagner's Law", *Public Finance*, Volume: 51, No: 2, pp. 185-200.

Bond, P. (2008). "Küresel Apartheid'la Yüzleşme", *Küreselleşmenin Krizi*, in Alan Freeman and Boris Kagarlitsky (eds.), Translated by İbrahim Yıldız and Bahar Kara, pp. 234-281, 1st edition, Istanbul: Yordam Book.

Booth, A. (1985). "The Keynesian Revolution and Economic Policy-Making – A Reply", *The Economic History Review*, Volume: 38, No: 1, pp. 101-106.

Boratav, K. (2015). *Dünyadan Türkiye'ye İktisattan Siyasete*. 1st edition. Istanbul: Yordam Book.

Boskin, M. J. (1978). "Taxation, Saving, and the Rate of Interest", *Journal of Political Economy*, Volume: 86, No: 2, Part 2: Research in Taxation, pp. S3-S27.

Bowen, H. R. (1943). "The Interpretation of Voting in the Allocation of Economic Resources", *The Quarterly Journal of Economics*, Volume: 58, No: 1, pp. 27-48.

Bowles, S., Gordon, D. and Weisskopf, T. (1983). *Beyond the Waste Land: A Democratic Alternative to Economic Decline*. New York: Anchor Books.

Boyd, J. H. and Prescott, E. C. (1985). "Financial Intermediary – Coalitions", *Federal Reserve Bank of Minneapolis*, Research Department Working Paper No. 272, Revised July.

Boyer, R. (1990). *The Regulation School: A Critical Introduction*. New York: Colombia University Press.

Boyer, R. (2000). "Is a Finance-led growth regime a viable alternative to Fordism? A preliminary analysis", *Economy and Society*, Volume: 29, No: 1, pp. 111-145.

Böhm-Bawerk, E. v. [1884] (1959). *Capital and Interest*. 3 Volumes, South Holland, IL: Libertarian Press.

Brada, J. C. (2013). "The distribution of income between labor and capital is not stable: But why is that so and why does it matter?", *Economic Systems*, Volume: 37, Issue: 3, pp. 333-344.

Brewer, A. (2011). *Marksist Emperyalizm Teorileri: Eleştirel Bir Analiz*. Translated by Cansu Aksoy, 1st edition, Istanbul: Kalkedon Publishing.

Broad, R. and Cavanagh, J. (1999). "The Death of the Washington Consensus?", *World Policy Journal*, Volume: 16, No: 3, pp. 79-88.

Brosius, B. (2010). *Tarihin Yapıları: Tarihsel Materyalizme Giriş*. 1st edition, Translated by Nejat Ağırnaslı, Istanbul: Yordam Book.

Bukharin, N. (1917). *Imperialism and World Economy*. London: Martin Lawrence Limited.

Bullock, P. and Yaffe, D. (1988). "Enflasyon, Bunalım ve Savaş-Sonrası Genişleme", *Dünya Kapitalizminin Bunalımı*, in Nail Satlıgan and Sungur Savran (eds.), pp. 223-291, Istanbul: Alan Publishing.

Burns, E. (2010). *Marksizm Nedir?*. 2nd edition, Translated by Mehmet Dikmen, Istanbul: Yordam Book.

Burtless, G. (1995). "International Trade and the Rise in Earnings Inequality", *Journal of Economic Literature*, Volume: 33, No: 2, pp. 800-816.

Carver, T. N. (1924). *The Distribution of Wealth*. London, New York: Macmillan.

Cassel, G. (1903). *The Nature and the Necessity of Interest*. London, New York: Macmillan.

Chen, X., Lin, S. and Reed, W. R. (2006). "Another Look at What to Do with Time-Series Cross-Section Data", Working Paper No. 04/2006, *Department of Economics, College of Business and Economics, Christchurch: New Zealand*.

Chinn, M. D. and Ito, H. (2002). "Capital Account Liberalization, Institutions and Financial Development: Cross Country Evidence", *National Bureau of Economic Research,* NBER Working Paper Series No: 8967, June.

Chinn, M. D. and Ito, H. (2006). "What matters for financial development? Capital controls, institutions, and interactions", *Journal of Development Economics*, Volume: 81, Issue: 1, pp. 163-192.

Chinn, M. D. and Ito, H. (2008). "A New Measure of Financial Openness", *Journal of Comparative Policy Analysis: Research and Practice*, Volume: 10, Issue: 3, pp. 309-322.

Cin, M. F. (2012). *Post-Keynezyen İktisat*. 1st edition, Ankara: Efil Publishing House.

Clark, J. B. [1899] (1908). *The Distribution of Wealth: A Theory of Wages, Interest and Profits*. The Online Library of Liberty, (Edition Used: New York: Macmillan, 1908), Indianapolis, Indiana: Liberty Fund.

Cline, W. R. (1997). *Trade and Income Distribution*. Washington: Institute for International Economics.

Cobb, C. W. and Douglas, P. H. (1928). "A Theory of Production", *The American Economic Review*, Volume: 18, No: 1, Supplement, Papers and Proceedings of the Fortieth Annual Meeting of the American Economic Association, pp. 139-165.

Courakis, A. S. (1984). "Constraints on Bank Choices and Financial Repression in Less Developed Countries", *Oxford Bulletin of Economics and Statistics*, Volume: 46, Issue: 4, pp. 341-370.

Cowen, T. (1982). "Say's Law and Keynesian Economics", *Supply-Side Economics: A Critical Appraisal*, in Richard H. Fink (ed.), pp. 160-184, Maryland: Aletheia Books.

Crinò, R. and Epifani, P. (2014). "Trade Imbalances, Export Structure and Wage Inequality", *The Economic Journal*, Volume: 124, Issue: 576, pp. 507-539.

Crotty, J. (2005). "The Neoliberal Paradox: The Impact of Destructive Product Market Competition and 'Modern' Financial Markets on Nonfinancial Corporation Performance in the Neoliberal Era", *Financialization and the World Economy*, in Gerald Epstein (ed.), pp. 77-110, Cheltenham, UK and Northampton, MA, USA: Edward Elgar.

Dabla-Norris, E. and Srivisal, N. (2013). "Revisiting the Link Between Finance and Macroeconomic Volatility", *International Monetary Fund*, IMF Working Paper WP/13/29.

Dalton, H. [1922] (2003). *Principles of Public Finance*. Reprinted in 2003, London and New York: Routledge.

Dardot, P. and Laval, C. (2012). *Dünyanın Yeni Aklı: Neoliberal Toplum Üzerine Deneme*. Translated by Işık Ergüden, 1st edition, Istanbul: Istanbul Bilgi University Publishing.

Durlauf, S. N. and Blume, L. E. (2008). *The New Palgrave Dictionary of Economics*. Steven N. Durlauf and Lawrence E. Blume (eds.), 2nd edition, New York: Palgrave Macmillan.

Daudey, E. and Garcia-Penalosa, C. (2007). "The personal and the factor distributions of income in a cross-section of countries", *The Journal of Development Studies*, Volume: 43, No: 5, pp. 812-829.

Davidson, P. (2007). *John Maynard Keynes*. Hampshire, New York. Palgrave Macmillan.

Davis, D. R. (1996). "Trade Liberalization and Income Distribution", *National Bureau of Economic Research,* NBER Working Paper No: 5693, August.

Deidda, L. and Fattouh, B. (2002). "Non-linearity between finance and growth", *Economics Letters*, Volume: 74, pp. 339-345.

DeMelo, J. and Tybout, J. (1986). "The Effects of Financial Liberalization on Savings and Investment in Uruguay", *Economic Development and Cultural Change*, Volume: 34, No: 3, pp. 561-587.

Demetriades, P. O. and Luintel, K. B. (1996). "Financial Development, Economic Growth and Banking Sector Controls: Evidence from India", *The Economic Journal*, Volume: 106, No: 435, pp. 359-374.

Demetriades, P. and Andrianova, S. (2003). "Finance and Growth: What We Know and What We Need To Know", Discussion Papers in Economics, 03/15, Department of Economics, *University of Leicester*.

Demirgüç-Kunt, A. and Levine, R. (2009). "Finance and Inequality: Theory and Evidence", *National Bureau of Economic Research,* NBER Working Paper No: 15275, August.

Denis, H. (1974). *Marksist Değer Teorisi ve Kapitalizm*. 1st edition, Translated by Orhan Suda, Istanbul: Suda Publishers.

Diamond, D. W. (1984). "Financial Intermediation and Delegated Monitoring", *The Review of Economic Studies*, Volume: 51, No: 3, pp. 393-414.

Diwan, I. (2001). "Debt as Sweat: Labor, financial crises, and the globalization of capital", 1st draft, Washington DC: *The World Bank*.

Divitçioğlu, S. (1976). *Değer ve Bölüşüm: Marksist İktisat ve Cambridge Okulu*. 1st edition, Department of Economics: 375, Istanbul: Istanbul University Department of Economics Press.

Dobb, M. H. [1937] (2012). *Political Economy and Capitalism: Some Essays in Economic Tradition*. London: Routledge & Kegan Paul.

Doğru, K. M. (2015). *"Yeni Anlaşma" Mümkün mü? 1929 ve 2008 Krizi*. 1st edition, Ankara: NotaBene Publishing.

Dollar, D. and Kraay, A. (2002). "Growth Is Good for the Poor", *Journal of Economic Growth*, Volume: 7, pp. 195-225.

Dollar, D. and Kraay, A. (2003). "Institutions, trade, and growth", *Journal of Monetary Economics*, Volume: 50, Issue: 1, pp. 133-162.

Dore, R. (2002). "Stock Market Capitalism and its Diffusion", *New Political Economy*, Volume: 7, Issue: 1, pp. 115-121.

Dos Santos, P. (2009). "At the Heart of the Matter: Household Debt in Contemporary Banking and the International Crisis", *Research on Money and Finance*, Discussion Paper Series, No: 11.

Dos Santos, T. (1970). "The Structure of Dependence", *The American Economic Review*, Volume: 60, No: 2, pp. 231-236.

Driscoll, J. C. and Kraay, A. C. (1998). "Consistent Covariance Matrix Estimation with Spatially Dependent Panel Data", *Review of Economics and Statistics*, Volume: 80, pp. 549-560.

Dumenil, G. and Lévy, D. (1993). *The Economics of the Profit Rate: Competition, Crises and Historical Tendencies in Capitalism*. Aldershot, UK: Edward Elgar.

Dumenil, G. and Lévy, D. (2001). "Costs and benefits of neoliberalism: A class analysis", *Review of International Political Economy*, Volume: 8, No: 4, pp. 578-607.

Dumenil, G. and Lévy, D. (2004a). "The Real and Financial Components of Profitability (United States, 1952-2000)", *Review of Radical Political Economics*, Volume: 36, No: 1, pp. 82-110.

Dumenil, G. and Lévy, D. (2004b). *Capital Resurgent: Roots of the Neoliberal Revolution*. Cambridge, Massachusetts and London: Harvard University Press.

Dumenil, G. and Lévy, D. (2009). *Kapitalizmin Marksist İktisadı*. 1st edition, Translated by Selin Pelek, Istanbul: Iletişim Publishers.

Dumenil, G. and Lévy, D. (2011). *The Crisis of Neoliberalism*. Cambridge, Massachusetts and London: Harvard University Press.

Dupuit, J. (1969). "On the measurement of the utility of public works", *Readings in Welfare Economics*, in Kenneth Arrow and Tibor Scitovsky (eds.), pp. 255-283, Homewood, Illinois: Richard D. Irwin, Inc.

Dünhaupt, P. (2013). "Determinants of Functional Income Distribution: Theory and Empirical Evidence", *International Labour Organization*, Global Labour University Working Paper No: 18, November.

Edison, H. J., Klein, M., Ricci, L. and Sløk, T. (2002). "Capital Account Liberalization and Economic Performance: Survey and Synthesis", *International Monetary Fund*, IMF Working Paper WP/02/120.

Edwards, S. (1999). "How Effective are Capital Controls?", *The Journal of Economic Perspectives,* Volume: 13, No: 4, pp. 65-84.

Edwards, S. (2001). "Capital Mobility and Economic Performance: Are Emerging Economies Different?", *National Bureau of Economic Research,* NBER Working Paper No: 8076, January.

Edgeworth, F. Y. (1904). "The Theory of Distribution", *The Quarterly Journal of Economics*, Volume: 18, No: 2, pp. 159-219.

Elsby, M. W. L, Hobijn, B. and Şahin, A. (2013). "The Decline of the U.S. Labor Share", *Brookings Papers on Economic Activity*, pp. 1-52.

Epstein, G. (2005a). "Introduction: Financialization and the World Economy", *Financialization and the World Economy*, in Gerald Epstein (ed.), pp. 3-16, Cheltenham, UK and Northampton, MA, USA: Edward Elgar.

Epstein, G. (2005b). *Financialization and the World Economy*. Gerald Epstein (ed.), Cheltenham, UK and Northampton, MA, USA: Edward Elgar.

Ergüneş, N. (2009). "Global Integration of the Turkish Economy in the Era of Financialisation", *Research on Money and Finance*, Discussion Paper Series, No: 8.

Ertürk, I. and Solari, S. (2007). "Banks as Continuous Reinvention", *New Political Economy*, Volume: 12, No: 3, pp. 369-388.

Eschenbach, F. (2004). "Finance and Growth: A Survey of the Theoretical and Empirical Literature", Tinbergen Institute Discussion Paper, No: TI 2004-039/2, *Tinbergen Institute*.

Esquivel, G. and Rodríguez-López, J. A. (2003). "Technology, trade, and wage inequality in Mexico before and after NAFTA", *Journal of Development Economics*, Volume: 72, Issue: 2, pp. 543-565.

European Commission (2007). "The Labour Income Share in the European Union", *Employment in Europe*, Chapter 5, pp. 237-272.

Evans, M. K. (1983). *The Truth About Supply-Side Economics*. New York: Basic Books Inc.

Faulkner, N. (2014). *Marksist Dünya Tarihi: Neandertallerden Neoliberallere*. 2nd edition, Translated by Tuncel Öncel, Istanbul: Yordam Book.

Feenstra, R. C. and Hanson, G. H. (1996). "Globalization, Outsourcing, and Wage Inequality", *The American Economic Review*, Volume: 86, No: 2, pp. 240-245.

Feenstra, R. C., Inklaar, R. and Timmer, M. P. (2015), "The Next Generation of the Penn World Table", *American Economic Review*, Volume: 105, No: 10, pp. 3150-3182.

Fernández, A., Klein, M. Rebucci, A., Schindler, M. and Uribe, M. (2015). "Capital Control Measures: A New Dataset", *National Bureau of Economic Research*, NBER Working Paper No: 20970, February.

Ferreira, F. H. G., Leite, P. G. and Wai-Poi, M. (2007). "Trade Liberalization, Employment Flows and Wage Inequality in Brazil", *World Bank*, World Bank Policy Research Working Paper 4108, January.

Fine, B. (2010). "Neoliberalism as financialisation", *Economic Transitions to Neoliberalism in Middle-income Countries: Policy dilemmas, economic crises, forms of resistance*, in Alfredo Saad-Filho and Galip L. Yalman (eds.), pp. 11-23, London and New York: Routledge.

Fine, B. and Saad-Filho, A. (2008). *Marx'ın Kapital'i*. 1st edition, Translated by Nail Satlıgan, Istanbul: Yordam Book.

Fischer, S. (1988). "Recent Developments in Macroeconomics", *The Economic Journal*, Volume: 98, No: 391, pp. 294-339.

Fisher, I. (1930). *The Theory of Interest*. New York: Macmillan.

Flux, A. W. (1904). *Economic Principles: An Introductory Study*. London: Methuen.

Foley, D. K. (2010). *Kapital'i Anlamak: Marx'ın İktisat Teorisi*. 1ˢᵗ edition, Translated by Hakan Öngel, Ankara: Arkadaş Publishing.

Foster, J. B. (2006). "Monopoly-Finance Capital", *Monthly Review*, Volume: 58, Issue: 07, December.

Foster, J. B. (2007). "The Financialization of Capitalism", *Monthly Review*, Volume: 58, Issue: 11, April.

Foster, J. B. (2008a). "Tekelci Mali Sermaye", *Kapitalizmin Malileşmesi ve Kriz*, pp. 25-44, 1ˢᵗ edition, Istanbul: Kalkedon Publishing.

Foster, J. B. (2008b). "The Financialization of Capital and the Crisis", *Monthly Review*, Volume: 59, Issue: 11, April.

Foster, J. B. (2010). "The Financialization of Accumulation", *Monthly Review*, Volume: 62, Issue: 05, October.

Foster, J. B. and McChesney, R. W. (2009). "Monopoly-Finance Capital and the Paradox of Accumulation", *Monthly Review*, Volume: 61, Issue: 05, October.

Frank, A. G. (1967). *Capitalism and Underdevelopment in Latin America*. London, New York: Monthly Review Press.

Friedman, M. (1962). *Capitalism and Freedom*. Chicago: Chicago University Press.

Froud, J. H., Haslam, C., Johal, S. and Williams, F. (2001). "Financialisation and the Coupon Pool", *Gestao ve Producao*, Volume: 8, No: 3, pp. 271-288.

Fry, M. J. (1978). "Money and Capital or Financial Deepening in Economic Development?", *Journal of Money, Credit and Banking*, Volume: 10, No: 4, pp. 464-475.

Fry, M. J. (1995). *Money, Interest, and Banking in Economic Development*. 2ⁿᵈ edition, Baltimore and London: Johns Hopkins University Press.

Fry, M. J. (1997). "In Favour of Financial Liberalisation", *The Economic Journal*, Volume: 107, No: 442, pp. 754-770.

Fry, M. J. and Farhi, M. R. (1979). *Money and Banking in Turkey*. Boğaziçi University Publications, No: 171.

Fry, M. J., Goodhart, C. A. E. and Almeida, A. (1996). *Central Banking in Developing Countries: Objectives, Activities & Independence*. London and New York: Routledge.

Fulcher, J. (2004). *Capitalism: A Very Short Introduction*. Oxford, New York: Oxford University Press.

Fülberth, G. (2011). *Kapitalizmin Kısa Tarihi*. 1ˢᵗ edition, Translated by Sadık Usta, Istanbul: Yordam Book.

Galbraith, J. K. [1954] (2009). *The Great Crash 1929*. Boston and New York: Mariner Books.

Galiani, S. and Sanguinetti, P. (2003). "The impact of trade liberalization on wage inequality: evidence from Argentina", *Journal of Development Economics*, Volume: 72, Issue: 2, pp. 497-513.

Gelb, A. (1989). "Financial Policies, Growth, and Efficiency", *World Bank,* PPR Working Paper, WPS 202, Washington, D.C., June.

Gerschenkron, A. (1962). *Economic Backwardness in Historical Perspective: A Book of Essays*. Cambridge, Massachusetts and London: Harvard University Press.

Ghazali, M. (2011). "Trade Liberalization, Rent Sharing and Wage Inequality in Tunisia, 1998-2002", *International Economics*, Volume: 125, pp. 5-39.

Gillman, J. M. (1957). *The Falling Rate of Profit: Marx's Law and Its Significance to Twentieth-Century Capitalism.* London: D. Dobson.

Giovannoni, O. (2010). "Functional Distribution of Income, Inequality and the Incidence of Poverty: Stylized Facts and the Role of Macroeconomic Policy", *The University of Texas Inequality Project (UTIP)*, UTIP Working Paper No: 58.

Glyn, A. (2006). *Capitalism Unleashed: Finance Globalization and Welfare*. Oxford, New York: Oxford University Press.

Glyn, A. (2009). "Functional Distribution and Inequality", *The Oxford Handbook of Economic Inequality*, in Wiemer Salverda, Brian Nolan and Timothy M. Smeeding (eds.), pp. 101-126 Chapter 5, Oxford, New York: Oxford University Press.

Glyn, A. and Sutcliffe, B. (1972). *British Capitalism, Workers and the Profit Squeeze*. Harmondsworth, Middlesex: Penguin Books.

Goldberg, P. K. and Pavcnik, N. (2004). "Trade, Inequality, and Poverty: What Do We Know? Evidence from Recent Trade Liberalization Episodes in Developing Countries", *National Bureau of Economic Research,* NBER Working Paper No: 10593, June.

Goldfarb, R. S. and Leonard, T. C. (2005). "Inequality of What Among Whom?: Rival Conceptions of Distribution in the 20th Century", *Research in the History of Economic Thought and Methodology*, Volume: 23-A, pp. 79-123.

Goldsmith, R. W. (1969). *Financial Structure and Development*. New Haven, Connecticut: Yale University Press.

Gollin, D. (2002). "Getting Income Shares Right", *Journal of Political Economy*, Volume: 110, No: 2, pp. 458-474.

Gomme, P. and Rupert, P. (2004). "Measuring Labor's Share of Income", *Federal Reserve Bank of Cleveland,* Policy Discussion Papers No: 7, November.

Gottschalk, P. and Smeeding, T. M. (1997). "Cross-National Comparisons of Earnings and Income Inequality", *Journal of Economic Literature*, Volume: 35, No: 2, pp. 633-687.

Gouverneur, J. (2007). *Kapitalist Ekonominin Temelleri: Çağdaş Kapitalizmin Marksist Ekonomik Tahliline Giriş*. 2nd edition, Translated by Fikret Başkaya, Ankara: Imge Bookstore.

Gramsci, A. [1971] (1989). *Selections from the Prison Notebooks*. Quintin Hoare and Geoffrey Nowell Smith (eds.), Reprinted in 1989, New York: International Publishers.

Gramsci, A. (2000). *The Antonio Gramsci Reader: Selected Writings 1916-1935*. David Forgacs and Eric J. Hobsbawm (eds.), New York: New York University Press.

Greenspan, A. (1997). *"Testimony before the committee on the budget",* United States, *Washington: Federal Reserve Board*, January 21.

Greenwood, J. and Jovanovic, B. (1990). "Financial Development, Growth, and the Distribution of Income", *Journal of Political Economy*, Volume: 98, No: 5, pp. 1076-1107.

Grossman, H. (1992). *The Law of Accumulation and Breakdown of the Capitalist System: Being also a Theory of Crisis*. London: Pluto Press.

Grossman, G. M. and Rossi-Hansberg, E. (2008). "Trading Tasks: A Simple Theory of Offshoring", *American Economic Review*, Volume: 98, No: 5, pp. 1978-1997.

Guerrien, B. (1999). *Neo-Klasik Iktisat*. 2nd edition, Istanbul: Iletişim Publishing.

Guerriero, M. (2012). "The Labour Share of Income around the World: Evidence from a Panel Dataset", *Institute for Development Policy and Management (IDPM)*, Development Economics and Public Policy Working Paper Series No: 32.

Guerriero, M. and Sen, K. (2012). "What Determines the Share of Labour in National Income? A Cross-Country Analysis", *The Institute for the Study of Labor*, IZA Discussion Paper Series No: 6643, June.

Gupta, K. L. (1987). "Aggregate Savings, Financial Intermediation, and Interest Rate", *The Review of Economics and Statistics*, Volume: 69, No: 2, pp. 303-311.

Gurley, J. G. and Shaw, E. S. (1967). "Financial Structure and Economic Development", *Economic Development and Cultural Change*, Volume: 15, No: 3, pp. 257-268.

Guscina, A. (2006). "Effects of Globalization on Labor's Share in National Income", *International Monetary Fund*, IMF Working Paper WP/06/294.

Güngen, A. R. (2010). "Finansallaşma: Sorunlu bir Kavram ve Verimli bir Araştırma Gündemi", *Praksis*, 20, pp. 85-108.

Hall, R. E. and Jorgenson, D. W. (1971). "Application of the Theory of Optimum Capital Accumulation", *Tax Incentives and Capital Spending*, in Gary Fromm (ed.), pp. 9-60, Washington D.C.: Brookings Institution.

Harman, C. (2007). "The rate of profit and the world today", *International Socialism*, Issue: 115, posted on 2nd July 2007, Available at http://isj.org.uk/the-rate-of-profit-and-the-world-today/.

Harrison, A. (2005). "Has Globalization Eroded Labor's Share? Some Cross-Country Evidence", *Munich Personal RePEc Archive*, MPRA Paper No: 39649, April.

Harrison, A., McLaren, J. and McMillan, M. (2011). "Recent Perspectives on Trade and Inequality", *The Annual Review of Economics*, Volume: 3, pp. 261-289.

Harvey, D. (2003). *The New Imperialism*. Oxford, New York: Oxford University Press.

Harvey, D. (2005). *A Brief History of Neoliberalism*. Oxford, New York: Oxford University Press.

Harvey, D. (2010). *A Companion to Marx's Capital*. London, New York: Verso.

Harvey, D. (2012). *Sermaye Muamması: Kapitalizmin Krizleri*. 1st edition, Translated by Sungur Savran, Istanbul: Sel Publishing.

Hayek, F. A. (1949). *Individualism and Economic Order*. London: Routledge & Kegan Paul.

Heckscher, E. [1919] (1949). The Effect of Foreign Trade on the Distribution of Income. *Ekonomisk Tidskrift*, pp. 497-512. Reprinted as Chapter 13 in A.E.A. (1949), *Readings in the Theory of International Trade*, pp. 272-300, Philadelphia: Blakiston Co.

Heilbroner, R. and Milberg, W. (1998). *The Making of Economic Society*. 10th edition, New Jersey, Upper Saddle River: Prentice-Hall.

Henrekson, M. (1993). "Wagner's Law – A Spurious Relationship?", *Public Finance*, Volume: 48, No: 2, pp. 406-415.

Henry, P. B. (2006). "Capital Account Liberalization: Theory, Evidence, and Speculation", *National Bureau of Economic Research*, NBER Working Paper No: 12698.

Henry, P. B. and Sasson, D. (2008). "Capital Account Liberalization, Real Wages, and Productivity", *National Bureau of Economic Research,* NBER Working Paper No: 13880.

Herzer, D. (2013). "Cross-Country Heterogeneity and the Trade-Income Relationship", *World Development*, Volume: 44, pp. 194-211.

Hilferding R. (1912). *Finance Capital*. Moscow, 1912 (in Russian).

Hilferding, R. [1981] (2006). *Finance-Capital: A Study of the Latest Phase of Capitalist Development*. Reprinted in 2006, London and Boston: Routledge & Kegan Paul.

Hobsbawm, E. (1989). *The Age of Empire: 1875-1914*. First Vintage Books Edition, New York: Vintage Books.

Hobsbawm, E. (1994). *Age of Extremes: The Short Twentieth Century, 1914-1991*. London: Abacus Book.

Hobson, J. A. (1902). *Imperialism: A Study*. New York: James Pott & Co.

Hoechle, D. (2007). "Robust standard errors for panel regressions with cross-sectional dependence", *The Stata Journal*, Volume: 7, Number: 3, pp. 281-312.

Hossein-zadeh, I. (2014). *Beyond Mainstream Explanations of the Financial Crisis: Parasitic Finance Capital*. London and New York: Routledge.

Hume, D. (1955). *Writings on Economics*. Eugene Rotwein (ed.), Edinburgh: Thomas Nelson and Sons.

Husson, M. (2008). "Toxic Capitalism", *International Viewpoint*, IV406, Wednesday 5 November, Available at http://www.internationalviewpoint.org/spip.php?article1551.

ILO (2008). *World of Work Report 2008: Income Inequalities in the Age of Financial Globalization*. Geneva: ILO.

ILO (2011). *World of Work Report 2011: Making markets work for jobs*. Geneva: ILO.

IMF (2001). *Global Trade Liberalization and the Developing Countries*. 01/08, November, Available at https://www.imf.org/external/np/exr/ib/2001/110801.htm.

IMF (2007). "The Globalization of Labor", *World Economic Outlook*, Chapter 5, April Washington D.C.: IMF.

Ito, H. and Chinn, M. D. (2016). "Notes on the Chinn-Ito Financial Openness Index 2014 Update", June 30, Available at http://web.pdx.edu/~ito/Readme_kaopen2014.pdf.

Itoh, M. (1983). "Dünya Kapitalizminin Enflasyonel Bunalımı", *Dünya Ekonomisi, Bunalım ve Siyasal Yapılar*, pp. 152-167, Translated by Orhan Esen, Yılmaz Öner, Göksel Türk, Ümit Kıvanç, Erol Özbek, Ferhat Boratav and Seçkin Cılızoğlu, Istanbul: Belge Publishing.

Jayadev, A. (2007). "Capital account openness and the labour share of income", *Cambridge Journal of Economics*, Volume: 31, Issue: 3, pp. 423-443.

Jayadev, A. and Epstein, G. (2007). "The Correlates of Rentier Returns in OECD Countries*", Political Economy Research Institute*, Working Paper Series No: 123, University of Massachusetts, Amherst.

Jaumotte, F. and Tytell, I. (2007). "How Has The Globalization of Labor Affected the Labor Income Share in Advanced Countries?", *International Monetary Fund*, IMF Working Paper WP/07/298.

Jaumotte, F., Lall, S. and Papageorgiou, C. (2008). "Rising Income Inequality: Technology, or Trade and Financial Globalization?", *International Monetary Fund,* IMF Working Paper WP/08/185.

Jessop, B. and Sum, N-L. (2006). *Beyond the Regulation Approach: Putting Capitalist Economies in Their Place*. Cheltenham, UK, Northampton, USA: Edward Elgar.

Jevons, W. S. [1957] (1965). *The Theory of Political Economy*. 5th edition, Reprinted in 1965, Reprints of Economic Classics, New York: Sentry Press.

Johnson, D. G. (1954). "The Functional Distribution of Income in the United States, 1850-1952", *The Review of Economics and Statistics*, Volume: 36, No: 2, pp. 175-182.

Jung, W. S. (1986). "Financial Development and Economic Growth: International Evidence", *Economic Development and Cultural Change*, Volume: 34, No: 2, pp. 333-346.

Kahn, R. F. (1931). "The Relation of Home Investment to Unemployment", *The Economic Journal*, Volume: 41, No: 162, pp. 173-198.

Kaldor, N. (1956). "Alternative Theories of Distribution", *The Review of Economic Studies*, Volume: 23, No: 2, pp. 83-100.

Kaldor, N. (1961). "Capital Accumulation and Economic Growth", *The Theory of Capital*, in F. A. Lutz and D. C. Hague (eds.), Chapter 10, pp. 177-222 New York: St. Martin's Press.

Kalecki, M. (1938). "The Determinations of Distribution of the National Income", *Econometrica*, Volume: 6, No: 2, pp. 97-112.

Kalecki, M. [1939] (2003). *Essays in the Theory of Economic Fluctuations*. Reprinted in 2003, London and New York: Routledge.

Kalecki, M. (1954). *Theory of Economic Dynamics: An Essay on Cyclical and Long-Run Changes in Capitalist Economy*. London: George Allen and Unwin.

Kamal, F., Lovely, M. E. and Mitra, D. (2015). "Trade Liberalization and Labor Shares in China", *mimeo*, Syracuse University.

Kaminsky, G. L. and Schmukler, S. L. (2003). "Short-run Pain, Long-run Gain: The Effects of Financial Liberalization", *National Bureau of Economic Research*, NBER Working Paper Series No: 9787, June.

Kar, M., Taş, S. and Ağır, H. (2008). "Finansal Sistem ve Kalkınma", *Kalkınma Ekonomisi Seçme Konular*, in Sami Taban and Muhsin Kar (eds.), pp. 185-226, 2nd edition, Bursa: Ekin Publisher.

Karaçimen, E. (2015). *Türkiye'de Finansallaşma: Borç Kıskacında Emek*. 1st edition, Istanbul: Sosyal Araştırmalar Vakfı Publishing.

Karluk, R. S. (2009). *Uluslararası Ekonomi: Teori-Pratik*. 9th edition. Istanbul: Beta Press.

Kautsky, K. (1899). *Bernstein und das Sozialdemokratisches Programme. Eine Antikritik*. Stuttgart, pp. 79.

Kautsky, K. (1902). *The Social Revolution*.
Available at https://www.marxists.org/archive/kautsky/1902/socrev/pt1-2.htm.

Kautsky, K. [1918] (2013). *The Dictatorship of the Proletariat*. Los Angeles: Hardpress Publishing.

Kazgan, G. (2009). *İktisadi Düşünce veya Politik İktisadın Evrimi*. 14th edition, Istanbul: Remzi Bookstore.

Kehoe, T. J., Gibson, M. J., Ruhl, K. J. and Bajona, C. (2008). "Trade Liberalization, Growth, and Productivity", *Federal Reserve Bank of Minneapolis*, Minneapolis: University of Minnesota.

Keynes, J. M. [1923] (1924). *A Tract on Monetary Reform*. Reprinted in 1924. London: Macmillan and Co., Limited.

Keynes, J. M. [1930] (2011). *A Treatise on Money*. Volume I: The Pure Theory of Money, Mansfield Centre: Martino Publishing.

Keynes, J. M. (1939). "Relative Movements of Real Wages and Output", *The Economic Journal*, Volume: 49, No: 139, pp. 34-51.

Keynes, J. M. (1964). *The General Theory of Employment, Interest, and Money*. San Diego, New York, London: A Harvest Book.

Keynes, J. M. (1973). *The Collected Writings of John Maynard Keynes, Volume XIII*. Edited by Donald Moggridge, London: Macmillan.

Kindleberger, C. P. and Aliber, R. Z. (2005). *Manias, Panics and Crashes: A History of Financial Crises*. Basingstoke: Palgrave Macmillan.

King, R. G. and Levine, R. (1993a). "Finance and Growth: Schumpeter Might Be Right", *The Quarterly Journal of Economics*, Volume: 108, No: 3, pp. 717-737.

King, R. G. and Levine, R. (1993b). "Finance, entrepreneurship, and growth: Theory and evidence", *Journal of Monetary Economics*, Volume: 32, No: 3, pp. 513-542.

Klasen, S. (2003). "In Search of The Holy Grail: How to Achieve Pro-Poor Growth", *Annual World Bank Conference on Development Economics-Europe*, pp. 63-94, BIS/World Bank.

Klein, M. and Olivei, G. (1999). "Capital Account Liberalization, Financial Depth, and Economic Growth", *National Bureau of Economic Research*, NBER Working Paper No: 7384, October.

Kliman, A. (2009). "On the Roots of the Current Economic Crisis and Some Proposed Solutions", *Marxist Humanist Initiative*, April 17, Available at http://www.marxisthumanistinitiative.org/economic-crisis/401.html.

Kmenta, J. (1986). *Elements of Econometrics*. 2nd edition, New York: Macmillan.

Knight, F. H. (1951). *The Economic Organization*. New York: Augustus M. Kelley.

Kose, M. A., Prasad, E. Rogoff, K. and Wei, S. J. (2006). "Financial Globalization: A Reappraisal", *National Bureau of Economic Research*, NBER Working Paper No: 12484, August.

Kozanoğlu, H. (2011). "*Finansallaşma ve Türkiye", Uç(ur)amayan Balon*, in Hayri Kozanoğlu (ed.), 1st edition, pp. 11-59, Istanbul: Ayrıntı Publishers.

Köymen, O. (2007). *Sermaye Birikirken: Osmanlı, Türkiye, Dünya*. 1st edition, Istanbul: Yordam Book.

Karabarbounis, L. and Neiman, B. (2013). "The Global Decline of the Labor Share", *National Bureau of Economic Research*, NBER Working Paper No: 19136, June.

Kraay, A. (1998). "In Search of the Macroeconomic Effects of Capital Account Liberalization", *The World Bank. Unpublished Paper* (October).

Kraay, A. (2006). "When is growth pro-poor? Evidence from a panel of countries", *Journal of Development Economics*, Volume: 80, Issue: 1, pp. 198-227.

Kravis, I. B. (1959). "Relative Income Shares in Fact and Theory", *The American Economic Review*, Volume: 49, No: 5, pp. 917-949.

Kravis, I. B. (1962). *The Structure of Income: Some Quantitative Essays*. Philadelphia: University of Pennsylvania.

Kregel, J. (1973). *The Reconstruction of Political Economy: An Introduction to Post-Keynesian Economics*. London: Macmillan.

Krippner, G. R. (2004). "What Is Financialization?", *mimeo*, Department of Sociology, UCLA.

Krippner, G. R. (2005). "The financialization of the American economy", *Socio-Economic Review*, Volume: 3, Issue: 2, pp. 173-208.

Krippner, G. R. (2011). *Capitalizing on Crisis: The Political Origins of the Rise of Finance*. Cambridge, Massachusetts and London: Harvard University Press.

Krueger, A. B. (1999). "Measuring Labor's Share", *National Bureau of Economic Research*, NBER Working Paper No: 7006, March.

Krugman, P. R. (2008). "Trade and Wages, Reconsidered", *Brookings Papers on Economic Activity*, Volume: 39, pp. 103-154, Spring.

Krugman, P. R. (2010). *Bunalım Ekonomisinin Geri Dönüşü ve Küresel Kriz*. 6th edition, Translated by Neşenur Domaniç, Istanbul: Literatür Publishing.

Krugman, P. R. and Obstfeld, M. (2009). *International Economics: Theory & Policy*. 8th edition. Boston: Pearson-Addison Wesley.

Kuczynski, P.-P. (2003a). "Reforming the State", *After the Washington Consensus: Restarting Growth and Reform in Latin America*, in Pedro-Pablo Kuczynski and John Williamson (eds.), Chapter 2, pp. 33-48, Washington: Peterson Institute For International Economics.

Kuczynski, P.-P. (2003b). "Setting the Stage", *After the Washington Consensus: Restarting Growth and Reform in Latin America*, in Pedro-Pablo Kuczynski and John Williamson (eds.), Chapter 1, pp. 21-32, Washington: Peterson Institute For International Economics.

Kuznets, S. (1933). "National Income". *Encyclopedia of the Social Sciences*, Volume 11, New York: Macmillan. Reprinted in *Readings in the Theory of Income Distribution*, selected by a committee of the American Economic Association. Philadelphia: Blakiston.

Kuznets, S. (1955). "Economic Growth and Income Inequality", *The American Economic Review*, Volume: XLV, No: 1, pp. 1-28, March.

Kuznets, S. (1959). "Quantitative Aspects of the Economic Growth of Nations: IV. Distribution of National Income by Factor Shares", *Economic Development and Cultural Change*, Volume: 7, No: 3, Part 2, pp. 1-100.

Laclau, E. (1977). *Politics and Ideology in Marxist Theory: Capitalism, Fascism, Populism*. London: New Left Books.

Laidler, D. E. W. (1999). *Fabricating the Keynesian Revolution: Studies of the Inter-war Literature on Money, the Cycle, and Unemployment*. Cambridge: Cambridge University Press.

Landau, D. (1983). "Government Expenditure and Economic Growth: A Cross-Country Study", *Southern Economic Journal*, Volume: 49, No: 3, pp. 783-792.

Langley, P. (2008). *The Everyday Life of Global Finance: Saving and Borrowing in Anglo-America*. Oxford, New York: Oxford University Press.

Lapavitsas, C. (2009a). "Financialised Capitalism: Crisis and Financial Expropriation", *Historical Materialism*, Volume: 17, No: 2, pp. 114-148.

Lapavitsas, C. (2009b). "Financialisation, or the Search for Profits in the Sphere of Circulation", *Research on Money and Finance*, Discussion Papers No: 10.

Lapavitsas C. (2010a). "Banks for the People", *Redpepper*, Issue: 170, February/March.

Lapavitsas, C. (2010b). "Financialisation and Capitalist Accumulation: Structural Accounts of the Crisis of 2007-9", *Research on Money and Finance*, Discussion Papers No: 16.

Lapavitsas, C. and Mendieta-Muñoz, I. (2016). "The Profits of Financialization", *Monthly Review*, Volume: 68, Issue: 03, July-August.

Laumas, P. S. (1990). "Monetization, Financial Liberalization, and Economic Development" *Economic Development and Cultural Change*, Volume: 38, No: 2, pp. 377-390.

Leamer, E. E. (1987). "Paths of Development in the Three Factor, n-Good General Equilibrium Model", *The Journal of Political Economy*, Volume: 95, No: 5, pp. 961-999.

Lee, K-k. and Jayadev, A. (2003). "A New Index of Capital Account Openness", *mimeo*, University of Massachusetts, Amherst.

Lee, K-k. and Jayadev, A. (2005). "Capital Account Liberalization, Growth and the Labor Share of Income: Reviewing and Extending the Cross-country Evidence", *Capital Flight and Capital Controls in Developing Countries*, in Gerald Epstein (ed.), pp. 15-57, Chapter 2, Cheltenham, UK and Northampton, MA, USA: Edward Elgar.

Lenin, V. I. [1916] (1996). *Imperialism: The Highest Stage of Capitalism*. London and Ann Arbor MI: Pluto Press.

Lenin, V. I. [1918] (2016). *The Proletarian Revolution and the Renegade Kautsky*. North Charleston, South Carolina: CreateSpace Independent Publishing Platform.

Lewis, W. A. [1955] (2013). *Theory of Economic Growth*. Reprinted in 2003, London and New York: Routledge.

Levine, R. (1991). "Stock Markets, Growth, and Tax Policy", *The Journal of Finance*, Volume: 46, No: 4, pp. 1445-1465.

Levine, R. (1997). "Financial Development and Economic Growth: Views and Agenda", *Journal of Economic Literature*, Volume: 35, Issue: 2, pp. 688-726.

Levine, R. (2004). "Finance and Growth: Theory and Evidence*", National Bureau of Economic Research*, NBER Working Paper Series No: 10766, September.

Levine, R. and Zervos, S. (1998). "Stock Markets, Banks, and Economic Growth", *The American Economic Review*, Volume: 88, No: 3, pp. 537-558.

Levitt, K. P. (2008). *The Great Financialization*. A Speech to the Progressive Economics Forum of Canada, June 8.

Luxembourg, R. (1972). *The Accumulation of Capital: An Anti-Critique*. London, New York: Monthly Review Press.

Lübker, M. (2007). "Labour Shares", Technical Brief No. 1, *Geneva: ILO, P. I. Department*.

Lydall, H. F. (1968). *The Structure of Earnings*. Oxford: Clarendon Press.

Maarek, P. (2012). "Labor share, informal sector and development", *Munich Personal RePEc Archive*, MPRA Paper: 38756, posted 12, April.

Macor, C. F., Perticarari, N. and Beltrán, C. (2011). "The Impact of International Trade on Wage Inequality: Recent Evidence from Argentina", *Rev. De Economía Política De Bs. As.*, Volume: 9, No: 10, pp. 145-179.

MaCurdy, T. E. and Pencavel, J. H. (1986). "Testing between Competing Models of Wage and Employment Determination in Unionized Markets", *Journal of Political Economy,* Volume: 94, No: 3, Part 2: Hoover Institution Labor Conference, pp. S3-S39.

Maddison, A. (1979). "Long Run Dynamics of Productivity Growth", *PSL Quarterly Review*, Volume: 32, No: 128, pp. 3-43.

Maddison, A. (1980). "Western Economic Performance in the 1970s: A Perspective and Assessment", *PSL Quarterly Review*, Volume: 33, No: 134, pp. 247-289.

Maddison, A. (2001). *The World Economy: A Millennial Perspective*. Development Centre Studies: OECD.

Magdoff, H. (1997). *Empryalizm Çağı: ABD'nin Dış Politikasının Ekonomik Temelleri*. Translated by Doğan Şafak, 2nd edition, Istanbul: Sosyalist Publishing.

Magdoff, F. and Yates, M. D. (2010). *Ekonomik Krizin ABC'si: Emeğiyle Geçinenlerin Bilmesi Gerekenler*. 1st edition, Translated by Ahmet Kırmızıgül, Ankara: Epos Publishing.

Mage, S. (1963). *The "Law of the Falling Tendency of the Rate of Profit": Its Place in the Marxian Theoretical System and Relevance to the U.S. Economy*. Colombia University Ph.D. Dissertation.

Malthus, T. [1798] (1998). *An Essay on the Principle of Population*. London: Electronic Scholarly Publishing Project.

Mandel, E. [1980] (1995). *Long Waves of Capitalist Development: A Marxist Interpretation*. London: Verso.

Marshall, A. [1890] (1920). *Principles of Economics*. 8th edition, Indianapolis, Indiana: Liberty Fund.

Martin, R. (2002). *Financialization of Daily Life*. Philadelphia: Temple University Press.

Marx, K. (1859). *A Contribution to the Critique of Political Economy*. Available at https://www.marxists.org/archive/marx/works/1859/critique-pol-economy/preface.htm.

Marx, K. [1976] (1982). *Capital: A Critique of Political Economy. Vol. 1*. Translated by Ben Fowkes. Harmondsworth, Middlesex: Penguin Books.

Marx, K. [1978] (1992). *Capital: A Critique of Political Economy. Vol. 2*. Translated by David Fernbach. Harmondsworth, Middlesex: Penguin Books.

Marx, K. [1981] (1991). *Capital: A Critique of Political Economy. Vol. 3*. Translated by David Fernbach. Harmondsworth, Middlesex: Penguin Books.

Marx, K. and Engels, F. (1848). *Manifesto of the Communist Party*.
Available at https://www.marxists.org/archive/marx/works/download/pdf/Manifesto.pdf.

Marx, K. and Engels, F. (2013). *Alman İdeolojisi*. 1st edition, Translated by Olcay Geridönmez and Tonguç Ok, Istanbul: Evrensel Print Publication.

Mattick, P. (1974). *Economic Crisis and Crisis Theory*.
Available at https://www.marxists.org/archive/mattick-paul/1974/crisis/.

McCulloch, J. R. (1863). *A Treatise on the Principles and Practical Influence of Taxation and the Funding System*. Edinburgh: Adam and Charles Black.

McKinnon, R. I. (1973). *Money and Capital in Economic Development*. Washington: The Brookings Institution.

McKinnon, R. I. (1991). *The Order of Economic Liberalization: Financial Control in the Transition to a Market Economy*. Baltimore and London: Johns Hopkins University Press.

McKinnon, R. I. and Mathieson, D. J. (1981). "How to Manage a Repressed Economy", *Essays in International Finance*, No. 145, International Finance Section, Department of Economics, Princeton University, December.

McKinnon, R. I. and Pill, H. (1996). "Credible Liberalizations and International Capital Flows: The "Overborrowing Syndrome" ", *Financial Deregulation and Integration in East Asia*, NBER-EASE Volume 5, in Takatoshi Ito and Anne O. Krueger (eds.), pp. 7-50, Chicago: University of Chicago Press.

Meek, R. L. (2009). *Emek Değer Teorileri*. 1st edition, Translated by Uğur Selçuk Akalın, Istanbul: Kalkedon Publishing.

Melkumian, A. (2009). "Unionized Oligopoly and Outsourcing", *Journal of CENTRUM Cathedra,* Volume: 2, Issue: 2, pp. 68-78.

Meltzer, A. H. and Richard, S. F. (1981). "A Rational Theory of the Size of Government", *The Journal of Political Economy*, Volume: 89, Issue: 5, pp. 914-927.

Melvin, J. R. (1968). "Production and Trade with Two Factors and Three Goods", *The American Economic Review*, Volume: 58, No: 5, pp. 1249-1268.

Menger, C. [1976] (2007). *Principles of Economics*. Reprinted in 2007, Auburn, Alabama: Ludwig von Mises Institute.

Mezzetti, C. and Dinopoulos, E. (1991). "Domestic Unionization and Import Competition", *Journal of International Economics*, Volume: 31, Issue: 1-2, pp. 79-100.

Milanovic, B. and Squire, L. (2005). "Does Tariff Liberalization Increase Wage Inequality? Some Empirical Evidence", *National Bureau of Economic Research*, NBER Working Paper No: 11046.

Milberg, W. and Winkler, D. (2013). *Outsourcing Economics: Global Value Chains in Capitalist Development*. Cambridge: Cambridge University Press.

Minsky, H. (1982). *Can it Happen Again?* New York: Sharpe.

Mishkin, F. S. (2007). *The Economics of Money, Banking, and Financial Markets*. 8th edition. Boston: Pearson-Addison Wesley.

Munck, R. (2011). "Latin Amerika'da Marksizm Latin Amerika Marksizmi?", *20. Yüzyılda Marksizm: Genel Bir Bakış*, in Daryl Glaser and David M. Walker (eds.), pp. 221-245, Translated by Burak Gürel, Onur Koyunlu and Sungur Savran, 1st edition, Istanbul: Versus Book.

Naceur, S. B. and Ghazouani, S. (2007). "Stock markets, banks, and economic growth: Empirical evidence from the MENA region", *Research in International Business and Finance*, Volume: 21, Issue: 2, pp. 297-315.

Obamuyi, T. M. (2009). "An investigation of the relationship between interest rates and economic growth in Nigeria, 1970-2006", *Journal of Economics and International Finance*, Volume: 1, No: 4, pp. 093-098.

Obstfeld, M. (1994). "Risk-Taking, Global Diversification, and Growth", *The American Economic Review*, Volume: 84, No: 5, pp. 1310-1329.

Ollman, B. (2009). *Marksizme Sıra Dışı Bir Giriş*. 1st edition, Translated by Ayşegül Kars, Istanbul: Yordam Book.

Onaran, Ö. (2007). "Wage Share, Globalization, and Crisis: The Case of the Manufacturing Industry in Korea, Mexico, and Turkey", *Political Economy Research Institute*, Working Paper Series No: 132, University of Massachusetts, Amherst.

Orhangazi, Ö. (2007). "Financialization and Capital Accumulation in the Non-Financial Corporate Sector: A Theoretical and Empirical Investigation of the U.S. Economy: 1973-2003", *Political Economy Research Institute*, Working Paper Series No: 149, University of Massachusetts, Amherst.

Orhangazi, Ö. (2008). *Financialization and the US Economy*. Cheltenham, UK and Northampton, MA, USA: Edward Elgar.

Ohlin, B. (1933). *Interregional and International Trade*. Cambridge, Massachusetts and London: Harvard University Press.

Ohlin, B., Robertson, D. H. and Hawtrey, R. G. (1937). "Alternative Theories of the Rate of Interest: Three Rejoinders", *The Economic Journal*, Volume: 47, No: 187, pp. 423-443.

Ortega, D. and Rodriguez, F. (2001). "Openness and Factor Shares", *mimeo*, Office of Economic and Financial Advisors, Venezuela.

Ortega, D. and Rodriguez, F. (2006). "Are capital shares higher in poor countries? Evidence from Industrial Surveys" Working Paper (Vol. 2006-023): *Wesleyan Economics*.

Otsubo, S. (1996). "Globalization: A New Role for Developing Countries in an Integrating World", *The World Bank*, Policy Research Working Paper No: 1628.

Özdemir, O. (2015). "The Reflections of Heterodox Economics on the Current Financial Crisis", *Journal of Economic Policy Researches*, Volume: 2, Issue: 2, pp. 62-94.

Pagano, M. (1993). "Financial markets and growth: an overview", *European Economic Review*, Volume: 37, Issue: 2-3, pp. 613-622.

Parks, R. W. (1967). "Efficient Estimation of a System of Regression Equations when Disturbances are Both Serially and Contemporaneously Correlated", *Journal of the American Statistical Association*, Volume: 62, No: 318, pp. 500-509.

Pasinetti, L. L. (1962). "Rate of Profit and Income Distribution in Relation to the Rate of Economic Growth", *The Review of Economic Studies*, Volume: 29, No: 4, pp. 267-279.

Patinkin, D. (1982). *Anticipations of the General Theory? And Other Essays on Keynes.* Chicago: University of Chicago Press.

Patnaik, P. (2010). "Notes on Contemporary Imperialism", *MRZine*, Available at http://mrzine.monthlyreview.org/2010/patnaik201210.html.

Patrick, H. T. (1966). "Financial Development and Economic Growth in Underdeveloped Countries", *Economic Development and Cultural Change*, Volume: 14, No: 2, pp. 174-189.

Payne, J. E. and Ewing, B. T. (1996). "International Evidence on Wagner's Hypothesis: A Cointegration Analysis", *Public Finance*, Volume: 51, Issue: 2, pp. 258-274.

Peacock, A. and Wiseman, J. (1961). *The Growth of Public Expenditure in the United Kingdom.* London: George Allen & Unwin.

Pencavel, J. H. (1984). "The Tradeoff Between Wages and Employment in Trade Union Objectives", *The Quarterly Journal of Economics,* Volume: 99, No: 2, pp. 215-231.

Persson, T. and Tabellini, G. (1992). "The Politics of 1992: Fiscal Policy and European Integration", *The Review of Economic Studies*, Volume: 59, No: 4, pp. 689-701.

Phillips, K. (1993). *Boiling Point: Republicans, Democrats, and the Decline of Middle-class Prosperity.* New York: Random House.

Pigou, A. C. [1928] (2014). *A Study in Public Finance.* Kowloon: Hesperides Press.

Pigou, A. C. (1937). "Real and Money Wage Rates in Relation to Unemployment", *The Economic Journal*, Volume: 47, No: 187, pp. 405-422.

Polanyi, K. (2001). *The Great Transformation: The Political and Economic Origins of Our Times.* Boston: Beacon Press.

Power, D., Epstein, G. and Abrena, M. (2003). "Trends in the Rentier Income Share in OECD Countries, 1960-2000", *Political Economy Research Institute*, Working Paper Series No: 58a, University of Massachusetts, Amherst.

Prasad, E., Rogoff, K., Wei, S.-J., and Kose, M. A. (2003). "Effects of Financial Globalization on Developing Countries: Some Empirical Evidence", *IMF Board Document*, March 17, Washington, D.C., International Monetary Fund.

Prebisch, R. (1950). *The Economic Development of Latin America and its Principal Problems*. United Nations Publication, Sales No: 50, ILG. 2, Lake Success, New York: United Nations Department of Economic Affairs.

Quinn, D. (1997). "The Correlates of Change in International Financial Regulation", *The American Political Science Review*, Volume: 91, No: 3, pp. 531-551.

Rajan, R. S. (2003). "Financial Integration in ASEAN and Beyond: Implications for Regional Monetary Integration" presented at the ASEAN Roundtable 2003: "*Roadmap to an ASEAN Economic Community*", organized by the Institute of Southeast Asian Studies (Singapore: August 20-21).

Rajan, R. G. and Zingales, L. (1998). "Financial Dependence and Growth", *The American Economic Review*, Volume: 88, No: 3, pp. 559-586.

Ram, R. (1987). "Wagner's Hypothesis in Time-Series and Cross-Section Perspectives: Evidence from "Real" Data for 115 Countries", *The Review of Economics and Statistics*, Volume: 69, No: 2, pp. 194-204.

Reinhart, C. M. and Reinhart, V. R. (2008). "Capital Flow Bonanzas: An Encompassing View of the Past and Present", *National Bureau of Economic Research*, NBER Working Paper No: 14321, September.

Reuss, A. (2009). "That '70s Crisis", *Dollar & Sense*, Issue: 285, November/December.

Ricardo, D. [1911] (2004). *The Principles of Political Economy and Taxation*. 1st edition, Reprinted in 2004, Mineola, New York: Dover Publications.

Robbins, D. J. (1996). "HOS Hits Facts: Facts Win; Evidence on Trade and Wages in the Developing World", *Harvard Institute for International Development*, Development Discussion Paper No: 557, October.

Roberts, P. C. (1984). *The Supply-Side Revolution: An Insider's Account of Policymaking in Washington*. Cambridge, Massachusetts and London: Harvard University Press.

Robinson, B. (2008). "Küresel Kapitalizmin Krizi: Latin Amerika'dan Görünüş", *Küreselleşmenin Krizi*, in Alan Freeman and Boris Kagarlitsky (eds.), pp. 193-233, Translated by İbrahim Yıldız and Bahar Kara, 1st edition, Istanbul: Yordam Book.

Robinson, J. (1952). *The Rate of Interest and Other Essays*. London: Macmillan.

Robinson, J. (1956). *The Accumulation of Capital*. London: Macmillan.

Robinson, J. (1972) "The Second Crisis of Economic Theory", *The American Economic Review*, Volume: 62, No: 1/2, pp. 1-10.

Rodrik, D. (1997). *Has Globalization Gone too Far?*. Washington, D.C.: Institute for International Economics.

Rodrik, D. (1998). "Who Needs Capital-Account Convertibility?" *Should the IMF Pursue Capital-Account Convertibility?,* in Peter B. Kenen (ed.), pp. 55-65, Essays in International Finance No. 207, Princeton, N.J.: Princeton University Press.

Rodrik, D. (2002). "Globalization for Whom?", *Harvard Magazine*, pp. 29-31, July-August.

Rodrik, D., Subramanian, A. and Trebbi, F. (2002). "Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development", *National Bureau of Economic Research*, NBER Working Paper No: 9305, October.

Roemer, J. E. (1989). *Analytical Foundations of Marxian Economic Theory*. Cambridge: Cambridge University Press.

Rostow, W. W. (1991). *The Stages of Economic Growth: A Non-Communist Manifesto*. 3rd edition, Cambridge: Cambridge University Press.

Roubini, N. and Sala-i Martin, X. (1992). "A Growth Model of Inflation, Tax Evasion, and Financial Repression", *National Bureau of Economic Research*, NBER Working Paper Series No: 4062, May.

Rousseau, P. L. and Wachtel, P. (2001). "Inflation, Financial Development and Growth", *Economic Theory, Dynamics and Markets: Essays in Honor of Ryuzo*, Takashi Negishi, Rama V. Ramachandran and Kazuo Mino (eds.), pp. 309-324, Chapter 23, Boston, Dordrecht, London: Kluwer Academic Publishers.

Rowthorn, B. (1985). *Kapitalizm, Çelişki ve Enflasyon*. 1st edition, Translated by Cemil Günay, Ankara: Birey ve Toplum Publishers.

Rubin, I. I. (1972). *Essays on Marx's Theory of Value*. Available at https://www.marxists.org/archive/rubin/value/index.htm

Ryan, P. (1996). "Factor Shares and Inequality in the UK", *Oxford Review of Economic Policy*, Volume: 12, No: 1, pp. 106-126.

Saad-Filho, A. (2006). "Latin Amerika'daki Neo Liberal Geçişin Politik Ekonomik Bir Değerlendirmesi", *Neo Liberalizme Karşı Ortak Savunma*, 1st edition, pp. 33-49, Translated by Erkal Ünal, Istanbul: Kalkedon Publishing.

Saad-Filho, A. (2014). "Washington Uzlaşmasından Washington Sonrası Uzlaşmasına: İktisadi Kalkınmaya Dair Neoliberal Gündemler", *Neoliberalizm: Muhalif Bir Seçki*, in Alfredo Saad-Filho and Deborah Johnston (eds.), pp. 191-201, Translated by Şeyda Başlı and Tuncel Öncel, 2nd edition, Istanbul: Yordam Book.

Sak, G. (1995). *Public Policies Towards Financial Liberalization: A General Framework and an Evaluation of the Turkish Experience in the 1980s*. Capital Markets Board, Publication Number: 22.

Salant, W. S. (1989). "The Spread of Keynesian Doctrines and Practices in the United States", *The Political Power of Economic Ideas: Keynesianism across Nations*, in Peter A. Hall (ed.), pp, 27-52, Princeton, New Jersey: Princeton University Press.

Salvadori, M. (1990). *Karl Kautsky and the Socialist Revolution 1880-1938*. Translated by Jon Rothschild, London and New York: Verso.

Savaş, V. F. (2007a). *Keynezyen İktisat Yıkılırken*. 3rd edition, Ankara: Nobel Publication Distribution.

Savaş, V. F. (2007b). *İktisadın Tarihi*. 5th edition, Ankara: Siyasal Bookstore.

Savran, S. (2013). *Üçüncü Büyük Depresyon: Kapitalizmin Alacakaranlığı*. 1st edition. Istanbul: Yordam Book.

Say, J. B. [1821] (1971). *A Treatise on Political Economy or the Production, Distribution and Consumption of Wealth*. Reprinted in 1971, New York: Augustus M. Kelley Publishers.

Schultz, P. T. (1998). "Inequality in the distribution of personal income in the world: How it is changing and why", *Journal of Population Economics*, Volume: 11, Issue: 3, pp. 307-344.

Schumpeter, J. A. (1934). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Cambridge, Massachusetts and London: Harvard University Press.

Schumpeter, J. A. [1943] (2003). *Capitalism, Socialism and Democracy*. London and New York: Routledge.

Screpanti, E. (2014). *Global Imperialism and the Great Crisis: The Uncertain Future of Capitalism*. London, New York: Monthly Review Press.

Selik, M. (1982). *Marksist Değer Teorisi*. No: 84, Ankara: Ankara University Faculty of Political Sciences Publishing.

Shaikh, A. (1988). "Bunalım Kuramlarının Tarihine Giriş", *Dünya Kapitalizminin Bunalımı*, in Nail Satlıgan ve Sungur Savran (eds.), pp. 126-171, Istanbul: Alan Publishing.

Shan, J. and Jianhong, Q. (2006). "Does Financial Development 'Lead' Economic Growth? The Case of China", *Annals of Economics and Finance*, Volume: 7, No: 1, pp. 197-216.

Shaw, E. S. (1973). *Financial Deepening in Economic Development*. Oxford, New York: Oxford University Press.

Singer, H. W. (1949). "Economic Progress in Underdeveloped Countries", *Social Research*, Volume: 16, No: 1, pp. 1-11.

Skidelsky, R. (2003). *Düşüncenin Ustaları: Keynes*. 1st edition, Istanbul: Altın Books Publishing.

Slaughter, M. J. (1999). "Globalisation and Wages: A Tale of Two Perspectives", *The World Economy*, Volume: 22, Issue: 5, pp. 609-629.

Smith, A. (2012). *An Inquiry into the Nature and Causes of the Wealth of Nations*. London: Wordsworth Classics of World Literature.

Snowden, B. and Vane, H. R. (2005). *Modern Macroeconomics: Its Origins, Development and Current State*. Cheltenham, UK and Northampton, MA, USA: Edward Elgar.

Solow, R. M. (1956). "A Contribution to the Theory of Economic Growth", *The Quarterly Journal of Economics*, Volume: 70, No: 1, pp. 65-94.

Solow, R. M. (1957). "Technical Change and the Aggregate Production Function", *The Review of Economics and Statistics*, Volume: 39, No: 3, pp. 312-320.

Solow, R. M. (1958). "A Skeptical Note on the Constancy of Relative Shares", *The American Economic Review*, Volume: 48, No: 4, pp. 618-631.

Solow, R. M. (1966). "The Case against the Case against the Guideposts", *Guidelines, Informal Controls, and the Market Place: Policy Choices in a Full Employment Economy*, in George P. Schultz and Robert Z. Aliber (eds.), pp. 41-54, Chicago: University of Chicago Press.

Stanford, J. (2008). *Economics for Everyone: A Short Guide to the Economics of Capitalism*. London, Ann Arbor, MI: Pluto Press.

Stein, H. (1969). *The Fiscal Revolution in America*. Chicago: University of Chicago Press.

Steindl, J. [1952] (1976). *Maturity and Stagnation in American Capitalism*. London, New York: Monthly Review Press.

Stewart, M. (1986). *Keynes and After*, 3rd edition, Harmondsworth, Middlesex: Penguin Books.

Stiglitz, J. E. (1994). "The Role of the State in Financial Markets", in *Proceedings of the World Bank Annual Conference of Development Economics 1993*, pp. 19-52.

Stiglitz, J. E. (2000). "Capital Market Liberalization, Economic Growth, and Instability", *World Development*, Volume: 28, No: 6, pp. 1075-1086.

Stiglitz, J. E. (2012). *The Price of Inequality*. New York and London: W. W. Norton & Company.

Stock, J. M. and Watson, M. W. (2007). *Introduction to Econometrics*. 2nd edition. Boston: Pearson-Addison Wesley.

Stockhammer, E. (2004). "Financialisation and the slowdown of accumulation", *Cambridge Journal of Economics*, Volume: 28, Issue: 5, pp. 719-741.

Stockhammer, E. (2009). "Determinants of functional income distribution in OECD countries", *Macroeconomic Policy Institute Studies*, 5/2009, September.

Stockhammer, E. (2010a). "Financialization and the Global Economy", *Political Economy Research Institute*, Working Paper Series No: 240, University of Massachusetts, Amherst.

Stockhammer, E. (2010b). "Neoliberalism, Income Distribution and the Causes of the Crisis", *Research on Money and Finance*, Discussion Paper No: 19.

Streightoff, F. H. (1912). *The Distribution of Incomes in the United States*. New York: Colombia University Press.

Subaşat, T. (2015). "What Is Globalization And What Is Not?: A Historical Perspective", *Florya Chronicles of Political Economy*, Volume: 1, No: 1, pp. 1-38.

Sundararajan, V. and Thakur, S. (1980). "Public Investment, Crowding out, and Growth: A Dynamic Model Applied to India and Korea", *Staff Papers (International Monetary Fund)*, Volume: 27, No: 4, pp. 814-855.

Sweezy, P. M. [1946] (1962). *The Theory of Capitalist Development: Principles of Marxian Political Economy*. Reprinted in 1962, London: Dobson Books.

Sweezy, P. M. (1991). "Monopoly Capital After Twenty-Five Years", *Monthly Review*, Volume: 43, No: 7, December.

Sweezy, P. M. (1997). "More (or less) on Globalization", *Monthly Review*, Volume: 49, Issue: 4, September.

Sweezy, P. M. and Magdoff, H. (1972). *Economic History as it Happened, Volume 1 (The Dynamics of U.S. Capitalism: Corporate Structure, Inflation, Credit, Gold, and the Dollar)*. London, New York: Monthly Review Press.

Sweezy, P. M. and Magdoff, H. (1987). "Capitalism and the Distribution of Income and Wealth", *Monthly Review*, Volume: 39, No: 5, October.

Sweezy, P. M. and Baran, P. (2007). *Tekelci Sermaye*. Translated by Gülsüm Akalın, 1st edition, Istanbul: Kalkedon Publishing.

Svirydzenka, K. (2016). "Introducing a New Broad-based Index of Financial Development", *International Monetary Fund*, IMF Working Paper WP/16/5, January.

Şişman, M. (2011). *Uluslararası Paranın Ekonomi Politiği ve Kriz*. 1st edition, Istanbul: Kalkedon Publishing.

Tatoğlu, F. Y. (2016). *Panel Veri Ekonometrisi*. 3rd edition, Istanbul: Beta Press.

Taussig, F. W. (1911). *Principles of Economics*. New York: Macmillan.

Tobin, J. (1965). "Money and Economic Growth", *Econometrica*, Volume: 33, Issue: 4, pp. 671-684.

Tobin, J. (1977). "How Dead is Keynes?", *Economic Inquiry*, Volume: 15, Issue: 4, pp. 459-468.

Tobin, J. (1987). *Policies for Prosperity: Essays in a Keynesian Mode*. Peter. M. Jackson (ed.), First MIT Press paperback edition, Cambridge, Massachusetts: The MIT Press.

Tobin, J. (1995). "An Overview of the General Theory: Behavior of an economic system without government intervention", *Cowles Foundation for Research in Economics at Yale University*, Cowles Foundation Discussion Paper No. 1093, New Haven, Connecticut: Yale University.

Tobin, J. (1997). "Comment", *The Macroeconomics of Saving, Finance, and Investment*, in Robert Pollin (ed.), pp. 299-304, Ann Arbor, MI: University of Michigan Press.

Tomlinson, J. D. (1984). "A "Keynesian Revolution" in Economic Policy-Making?", *The Economic History Review*, Volume: 37, No: 2, pp. 258-262.

Tybout, J. R. (1983). "Credit Rationing and Investment Behavior in a Developing Country", *The Review of Economics and Statistics*, Volume: 65, No: 4, pp. 598-607.

Voridis, H. (1993). "Ceilings on Interest Rates and Investment: The Example of Greece", *The Review of Economics and Statistics*, Volume: 75, No: 2, pp. 276-283.

Wade, H. R. (2005). "The March of Neoliberalism and What to Do About It", draft paper for plenary talk at conference *Beyond 'Deregulation': Finance in the 21st Century*, University of Sussex, 26-28 May.

Wagner, A. [1892] (2014). *Grundlegung Der Politischen Oekonomie, Volume 1, Part 1*. Nabu Press.

Wagner, A. [1898] (2015). *Grundriss zu vorlesungen über Finanzwissenschaft*. CreateSpace Independent Publishing Platform.

Wallerstein, I. (1992). "The West, Capitalism, and the Modern World-System", *Review (Fernand Braudel Center)*, Volume: 15, No: 4, pp. 561-619.

Wallerstein, I. (2012). *Tarihsel Kapitalizm ve Kapitalist Uygarlık*. Extended 6th edition, Translated by Necmiye Alpay, Istanbul: Metis Publishing.

Walras, L. [1954] (2010). *Elements of Pure Economics or the Theory of Social Wealth*. Reprinted in 2010, London and New York: Routledge.

Wieser, v. F. (1927). *Social Economics*. Translated by A. Ford Hinrichs, Adelphi Economic Series, New York: Adelphi Company.

Wicksell, K. [1954] (1970). *Value, Capital and Rent*. Reprinted in 1970, New York: Augustus M. Kelley Publishers.

Williamson, J. (1990). "What Washington Means by Policy Reform", *Latin American Adjustment: How Much Has Happened?*, in John Williamson (eds.), Chapter 2, Washington, DC: Institute for International Economics.

Williamson, J. (2002). "Did the Washington Consensus Fail?", *Outline of Speech at the Center for Strategic & International Studies*, 169, in PIIE (Peterson Institute For International Economics), November 6, Available at https://piie.com/commentary/speeches-papers/did-washington-consensus-fail.

Williamson, J. (2003). "Overview: An Agenda for Restarting Growth and Reform", *After the Washington Consensus: Restarting Growth and Reform in Latin America*, in Pedro-Pablo Kuczynski and John Williamson (eds.), Washington: Peterson Institute For International Economics.

Williamson, J. and Mahar, M. (1998). "A Survey of Financial Liberalization", *Essays in International Finance*, No. 211, International Finance Section, Department of Economics, Princeton University, November.

Wolff, E. N. (1979). "The Rate of Surplus Value, the Organic Composition, and the General Rate of Profit in the U.S. Economy, 1947-67", *The American Economic Review*, Volume: 69, No: 30, pp. 329-341.

Wolff, E. N. (2001). "The recent rise of profits in the United States", *Review of Radical Political Economics*, Volume: 33, Issue: 3, pp. 315-324.

Wolff, E. N. and Zacharias, A. (2007). "Class Structure and Economic Inequality", *Levy Economics Institute*, Working Paper No: 487, January.

Wood, A. (2002). "Could Africa Be Like America?", *Annual Bank Conference on Development Economics*, Washington: World Bank, April.

Wooldridge, J. M. (2000). *Introductory Econometrics: A Modern Approach*. Boston, Massachusetts: South-Western College Publishing.

Xu, Y. and Ouyang, A. Y. (2015). "China wage inequality: the role of trade and technology", *Applied Economics*, Volume: 47, No: 47, pp. 5057-5071.

Yaffe, D. and Bullock, P. (1979). "Inflation, the Crisis and the Post-War Boom", Available at https://www.marxists.org/subject/economy/authors/yaffed/1979/icpwb.htm.

Yeldan, E. (2008a). "Yeni Emperyalizmin Ekonomisi", *Küreselleşme, Kim İçin*?, in Erinç Yeldan (ed.), 1st edition, pp. 22-23, Istanbul: Yordam Book.

Yeldan, E. (2008b). "İktisadi Kalkınma ve Emperyalizmin Yürütücü Kurumları", *Küreselleşme, Kim İçin?*, in Erinç Yeldan (ed.), 1st edition, pp. 26-28, Istanbul: Yordam Book.

Yeldan, E. (2008c). "IMF Dünya Ekonomisi Raporu'nda Emeğin Küreselleşmesi", *Küreselleşme, Kim İçin?*, in Erinç Yeldan (ed.), 1st edition, pp. 38-41, Istanbul: Yordam Book.

Yeldan, E. (2009). *The Economics of Growth and Distribution*. 1st edition, Ankara: Eflatun Publishing House.

Yanikkaya, H. (2003). "Trade openness and economic growth: a cross-country empirical investigation", *Journal of Development Economics*, Volume: 72, Issue: 1, pp. 57-89.

Zarakolu, A. (1981). *İktisadi Düşünceler Tarihi*. Ankara University Law Faculty Publishing, No: 456, Ankara: Olgaç Press.

APPENDIX A1: UNIT ROOT TESTS

Table A1.1: Levin-Lin-Chu Unit-Root Test for Labor Share of Income

Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 20
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.43 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	-15.4951		
Adjusted t*	-6.4236	0.0000***	
Lag specification for ADF regression: AIC			

Table A1.2: Levin-Lin-Chu Unit-Root Test for Nominal Trade Openness

Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 20
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.36 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	-17.3734		
Adjusted t*	-7.0020	0.0000***	
Lag specification for ADF regression: AIC			

Table A1.3: Levin-Lin-Chu Unit-Root Test for Capital Account Openness

Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 20
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.61 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	-16.6070		
Adjusted t*	-5.2947	0.0000***	
Lag specification for ADF regression: AIC			

Table A1.4: Levin-Lin-Chu Unit-Root Test for Real Trade Openness

	Statistic	p-value	
Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 20
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.11 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-16.7525**		
Adjusted t*	**-4.6327**	**0.0000*****	
Lag specification for ADF regression: AIC			

Table A1.5: Levin-Lin-Chu Unit-Root Test for Overall Capital Account Restrictions

	Statistic	p-value	
Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 42 Number of periods = 19
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.40 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-13.1695**		
Adjusted t*	**-3.0749**	**0.0011*****	
Lag specification for ADF regression: AIC			

Table A1.6: Levin-Lin-Chu Unit-Root Test for Financial Development

	Statistic	p-value	
Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 19
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.20 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-15.3975**		
Adjusted t*	**-8.1824**	**0.0000*****	
Lag specification for ADF regression: AIC			

Table A1.7: Levin-Lin-Chu Unit-Root Test for Government Share

Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 20
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.52 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-16.0989**		
Adjusted t*	**-7.0646**	**0.0000***	
Lag specification for ADF regression: AIC			

Table A1.8: Levin-Lin-Chu Unit-Root Test for Government Effectiveness

Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 20
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.34 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-16.1243**		
Adjusted t*	**-5.7784**	**0.0000***	
Lag specification for ADF regression: AIC			

Table A1.9: Levin-Lin-Chu Unit-Root Test for Overall Globalization

Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 19
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.23 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-14.3207**		
Adjusted t*	**-8.1354**	**0.0000***	
Lag specification for ADF regression: AIC			

Table A1.10: Levin-Lin-Chu Unit-Root Test for Real Effective Exchange Rate

	Statistic	p-value	
Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 21
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.52 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-14.5758**		
Adjusted t*	**-1.7543**	**0.0397****	
Lag specification for ADF regression: AIC			

Table A1.11: Levin-Lin-Chu Unit-Root Test for Investment Share

	Statistic	p-value	
Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 20
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.39 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-16.1351**		
Adjusted t*	**-6.0700**	**0.0000*****	
Lag specification for ADF regression: AIC			

Table A1.12: Levin-Lin-Chu Unit-Root Test for Unemployment Rate

	Statistic	p-value	
Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 21
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.68 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-17.9382**		
Adjusted t*	**-8.5611**	**0.0000*****	
Lag specification for ADF regression: AIC			

Table A1.13: Levin-Lin-Chu Unit-Root Test for Logarithm of Population

Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 21
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 1.00 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-24.0078**		
Adjusted t*	**-20.4154**	**0.0000***	
Lag specification for ADF regression: AIC			

Table A1.14: Levin-Lin-Chu Unit-Root Test for Labor Quantity Growth

Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 20
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.34 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-25.9736**		
Adjusted t*	**-14.0554**	**0.0000***	
Lag specification for ADF regression: AIC			

Table A1.15: Levin-Lin-Chu Unit-Root Test for Labor Force Participation Rate

Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 21
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.50 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-12.0191**		
Adjusted t*	**-3.7707**	**0.0001***	
Lag specification for ADF regression: AIC			

Table A1.16: Levin-Lin-Chu Unit-Root Test for TFP

Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 20
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.32 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-12.4344**		
Adjusted t*	**-4.6114**	**0.0000*****	
Lag specification for ADF regression: AIC			

Table A1.17: Levin-Lin-Chu Unit-Root Test for Logarithm of GDP per Capita

Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 20
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.55 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-12.5209**		
Adjusted t*	**-5.4068**	**0.0000*****	
Lag specification for ADF regression: AIC			

Table A1.18: Levin-Lin-Chu Unit-Root Test for Logarithm of Output per Worker

Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 21
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.20 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-12.9999**		
Adjusted t*	**-4.8765**	**0.0000*****	
Lag specification for ADF regression: AIC			

Table A1.19: Levin-Lin-Chu Unit-Root Test for Human Capital			
Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 20
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.98 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-16.5023**		
Adjusted t*	**-5.3942**	**0.0000*****	
Lag specification for ADF regression: AIC			

Table A1.20: Levin-Lin-Chu Unit-Root Test for Human Development Index			
Ho: Panels contain unit roots Ha: Panels are stationary			Number of panels = 44 Number of periods = 20
AR parameter: Common Panel means: Included Time trend: Included			Asymptotics: N/T -> 0
ADF regressions: 0.66 lags average (chosen by AIC)			
LR variance: Bartlett kernel, 8.00 lags average (chosen by LLC)			
	Statistic	p-value	
Unadjusted t	**-25.1647**		
Adjusted t*	**-16.0294**	**0.0000*****	
Lag specification for ADF regression: AIC			

APPENDIX A2: COLLINEARITY DIAGNOSTICS (BASE SPECIFICATIONS)

Table A2.1: Collinearity Diagnostic for Column (1) in Table 6.4.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.04	1.02	0.0389
	Capital Account Openness	1.04	1.02	0.0342
	After Crisis (Dummy)	1.01	1.01	0.0129
Mean VIF		1.03		
Observations		880		

	Eigenvalue	Condition Index
1	2.9109	1.0000
2	0.5392	2.3234
3	0.3784	2.7734
4	0.1714	4.1206
Condition Number		4.1206
Det(Correlation Matrix)		0.9562

Table A2.2: Collinearity Diagnostic for Column (2) in Table 6.4.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.04	1.02	0.0366
	Capital Account Openness	1.43	1.19	0.2987
	Financial Development	1.44	1.20	0.3067
	After Crisis (Dummy)	1.05	1.02	0.0436
Mean VIF		1.24		
Observations		836		

	Eigenvalue	Condition Index
1	3.7767	1.0000
2	0.5698	2.5745
3	0.3869	3.1243
4	0.2236	4.1100
5	0.0430	9.3764
Condition Number		9.3764
Det(Correlation Matrix)		0.6643

Table A2.3: Collinearity Diagnostic for Column (3) in Table 6.4.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.17	1.08	0.1481
	Capital Account Openness	1.76	1.33	0.4323
	Financial Development	2.70	1.64	0.6297
	Government Share	1.17	1.08	0.1418
	Government Effectiveness	3.22	1.79	0.6892
	After Crisis (Dummy)	1.15	1.07	0.1285
Mean VIF		1.86		
Observations		792		

	Eigenvalue	Condition Index
1	5.4437	1.0000
2	0.6335	2.9314
3	0.4411	3.5130
4	0.2483	4.6823
5	0.1536	5.9541
6	0.0636	9.2483
7	0.0163	18.2867
Condition Number		18.2867
Det(Correlation Matrix)		0.1839

Table A2.4: Collinearity Diagnostic for Column (4) in Table 6.4.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.21	1.10	0.1747
	Capital Account Openness	1.76	1.33	0.4323
	Financial Development	2.75	1.66	0.6367
	Government Share	1.19	1.09	0.1595
	Government Effectiveness	3.22	1.79	0.6893
	Unemployment Rate	1.15	1.07	0.1268
	After Crisis (Dummy)	1.15	1.07	0.1291
Mean VIF		1.78		
Observations		792		

	Eigenvalue	Condition Index
1	6.1010	1.0000
2	0.6747	3.0070
3	0.5335	3.3816
4	0.3221	4.3520
5	0.1752	5.9003
6	0.1144	7.3020
7	0.0636	9.7909
8	0.0153	19.9420
Condition Number		19.9420
Det(Correlation Matrix)		0.1606

Table A2.5: Collinearity Diagnostic for Column (5) in Table 6.4.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.32	1.15	0.2440
	Capital Account Openness	1.77	1.33	0.4342
	Financial Development	3.14	1.77	0.6814
	Government Share	1.27	1.13	0.2112
	Government Effectiveness	4.55	2.13	0.7800
	Unemployment Rate	1.16	1.08	0.1371
	Log (Population)	2.18	1.48	0.5423
	After Crisis (Dummy)	1.15	1.07	0.1300
Mean VIF		2.07		
Observations		792		

	Eigenvalue	Condition Index
1	7.0150	1.0000
2	0.6962	3.1743
3	0.5528	3.5621
4	0.3228	4.6615
5	0.1867	6.1300
6	0.1301	7.3432
7	0.0741	9.7287
8	0.0204	18.5448
9	0.0019	61.1122
Condition Number		61.1122
Det(Correlation Matrix)		0.0735

Table A2.6: Collinearity Diagnostic for Column (6) in Table 6.4.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.32	1.15	0.2440
	Capital Account Openness	1.87	1.37	0.4650
	Financial Development	3.25	1.80	0.6919
	Government Share	1.38	1.17	0.2738
	Government Effectiveness	4.55	2.13	0.7802
	Unemployment Rate	1.16	1.08	0.1386
	Log (Population)	2.21	1.49	0.5466
	Real Effective Exchange Rate	1.20	1.10	0.1698
	After Crisis (Dummy)	1.21	1.10	0.1701
Mean VIF		2.02		
Observations		792		

	Eigenvalue	Condition Index
1	7.9527	1.0000
2	0.7070	3.3538
3	0.5596	3.7698
4	0.3236	4.9577
5	0.1921	6.4344
6	0.1387	7.5709
7	0.0803	9.9499
8	0.0328	15.5656
9	0.0113	26.5080
10	0.0018	66.0618
Condition Number		66.0618
Det(Correlation Matrix)		0.0610

Table A2.7: Collinearity Diagnostic for Column (7) in Table 6.4.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.37	1.17	0.2716
	Human Capital	2.16	1.47	0.5373
	Capital Account Openness	1.92	1.39	0.4794
	Financial Development	3.29	1.81	0.6962
	Government Share	1.57	1.25	0.3649
	Government Effectiveness	4.95	2.22	0.7979
	Unemployment Rate	1.17	1.08	0.1459
	Log (Population)	2.22	1.49	0.5491
	Real Effective Exchange Rate	1.20	1.10	0.1700
	After Crisis (Dummy)	1.24	1.11	0.1938
Mean VIF		2.11		
Observations		792		

	Eigenvalue	Condition Index
1	8.9289	1.0000
2	0.7074	3.5528
3	0.5628	3.9830
4	0.3239	5.2506
5	0.1983	6.7100
6	0.1392	8.0089
7	0.0821	10.4316
8	0.0328	16.4877
9	0.0135	25.6778
10	0.0094	30.7906
11	0.0017	72.7219
Condition Number		72.7219
Det(Correlation Matrix)		0.0282

Table A2.8: Collinearity Diagnostic for Column (8) in Table 6.4.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Overall Globalization Index	3.76	1.94	0.7339
	Financial Development	3.43	1.85	0.7081
	Government Share	1.51	1.23	0.3357
	Government Effectiveness	5.24	2.29	0.8092
	Unemployment Rate	1.15	1.07	0.1336
	Log (Population)	2.11	1.45	0.5262
	Real Effective Exchange Rate	1.14	1.07	0.1225
	After Crisis (Dummy)	1.21	1.10	0.1749
Mean VIF		2.44		
Observations		792		

	Eigenvalue	Condition Index
1	7.6690	1.0000
2	0.5775	3.6442
3	0.4426	4.1628
4	0.1665	6.7870
5	0.0884	9.3134
6	0.0347	14.8638
7	0.0127	24.5687
8	0.0071	32.9180
9	0.0016	69.5116
Condition Number		69.5116
Det(Correlation Matrix)		0.0401

Table A2.9: Collinearity Diagnostic for Column (9) in Table 6.4.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Overall Globalization Index	3.56	1.89	0.7189
	Human Capital	2.03	1.42	0.5064
	Government Share	1.51	1.23	0.3358
	Government Effectiveness	4.27	2.07	0.7659
	Unemployment Rate	1.15	1.07	0.1284
	Log (Population)	1.73	1.31	0.4208
	Real Effective Exchange Rate	1.12	1.06	0.1066
	After Crisis (Dummy)	1.15	1.07	0.1283
Mean VIF		2.06		
Observations		792		

	Eigenvalue	Condition Index
1	7.7270	1.0000
2	0.5779	3.6566
3	0.4077	4.3535
4	0.1690	6.7622
5	0.0791	9.8820
6	0.0195	19.8812
7	0.0110	26.5205
8	0.0070	33.1204
9	0.0017	67.0628
Condition Number		67.0628
Det(Correlation Matrix)		0.0678

APPENDIX A3: COLLINEARITY DIAGNOSTICS (ROBUSTNESS CHECKS)

Table A3.1: Collinearity Diagnostic for Column (1) in Table 6.5.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Real Trade Openness	1.32	1.15	0.2449
	Capital Account Openness	1.52	1.23	0.3418
	Financial Development	1.48	1.22	0.3418
	After Crisis (Dummy)	1.10	1.05	0.0875
Mean VIF		1.36		
Observations		836		

	Eigenvalue	Condition Index
1	3.8068	1.0000
2	0.5671	2.5908
3	0.3282	3.4057
4	0.2535	3.8748
5	0.0443	9.2722
Condition Number		9.2722
Det(Correlation Matrix)		0.5207

Table A3.2: Collinearity Diagnostic for Column (2) in Table 6.5.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Real Trade Openness	1.70	1.30	0.4118
	Capital Account Openness	1.77	1.33	0.4344
	Financial Development	2.68	1.64	0.6264
	Government Share	1.16	1.08	0.1349
	Government Effectiveness	3.64	1.91	0.7250
	After Crisis (Dummy)	1.29	1.14	0.2250
Mean VIF		2.04		
Observations		792		

	Eigenvalue	Condition Index
1	5.4753	1.0000
2	0.6344	2.9378
3	0.4294	3.5709
4	0.2454	4.7234
5	0.1374	6.3117
6	0.0617	9.4220
7	0.0165	18.2393
Condition Number		18.2393
Det(Correlation Matrix)		0.1270

Table A3.3: Collinearity Diagnostic for Column (3) in Table 6.5.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Real Trade Openness	1.73	1.32	0.4221
	Capital Account Openness	1.77	1.33	0.4347
	Financial Development	2.72	1.65	0.4347
	Government Share	1.18	1.08	0.1493
	Government Effectiveness	3.64	1.91	0.1493
	Unemployment Rate	1.13	1.06	0.1493
	After Crisis (Dummy)	1.29	1.14	0.2267
Mean VIF		1.92		
Observations		792		

	Eigenvalue	Condition Index
1	6.1139	1.0000
2	0.7014	2.9525
3	0.5637	3.2933
4	0.2567	4.8803
5	0.1688	6.0181
6	0.1182	7.1917
7	0.0616	9.9592
8	0.0156	19.7732
Condition Number		19.7732
Det(Correlation Matrix)		0.1124

Table A3.4: Collinearity Diagnostic for Column (4) in Table 6.5.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Real Trade Openness	1.98	1.41	0.4952
	Capital Account Openness	1.77	1.33	0.4351
	Financial Development	3.12	1.77	0.6798
	Government Share	1.27	1.13	0.2143
	Government Effectiveness	4.69	2.17	0.7868
	Unemployment Rate	1.14	1.07	0.1249
	Log (Population)	2.29	1.51	0.5635
	After Crisis (Dummy)	1.30	1.14	0.2299
Mean VIF		2.20		
Observations		792		

	Eigenvalue	Condition Index
1	7.0118	1.0000
2	0.7441	3.0698
3	0.5810	3.4741
4	0.2570	5.2234
5	0.1864	6.1326
6	0.1236	7.5314
7	0.0738	9.7492
8	0.0206	18.4640
9	0.0018	62.1805
Condition Number		62.1805
Det(Correlation Matrix)		0.0491

Table A3.5: Collinearity Diagnostic for Column (5) in Table 6.5.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Real Trade Openness	2.00	1.41	0.4988
	Capital Account Openness	1.87	1.37	0.4649
	Financial Development	3.23	1.80	0.6904
	Government Share	1.38	1.17	0.2746
	Government Effectiveness	4.69	2.17	0.7869
	Unemployment Rate	1.15	1.07	0.1275
	Log (Population)	2.33	1.53	0.5703
	Real Effective Exchange Rate	1.21	1.10	0.1756
	After Crisis (Dummy)	1.34	1.16	0.2533
Mean VIF		2.13		
Observations		792		

	Eigenvalue	Condition Index
1	7.9419	1.0000
2	0.7658	3.2203
3	0.5863	3.6804
4	0.2571	5.5580
5	0.1930	6.4143
6	0.1281	7.8738
7	0.0827	9.7984
8	0.0319	15.7739
9	0.0113	26.5135
10	0.0018	66.7895
Condition Number		66.7895
Det(Correlation Matrix)		0.0405

Table A3.6: Collinearity Diagnostic for Column (6) in Table 6.5.A

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Real Trade Openness	2.07	1.44	0.5177
	Capital Account Openness	1.93	1.39	0.4817
	Financial Development	3.29	1.81	0.6958
	Government Share	1.56	1.25	0.3594
	Government Effectiveness	5.15	2.27	0.8059
	Unemployment Rate	1.15	1.07	0.1341
	Log (Population)	2.35	1.53	0.5737
	Real Effective Exchange Rate	1.21	1.10	0.1765
	Human Capital	2.16	1.47	0.5379
	After Crisis (Dummy)	1.40	1.18	0.2838
Mean VIF		2.23		
Observations		792		

	Eigenvalue	Condition Index
1	8.9145	1.0000
2	0.7693	3.4042
3	0.5909	3.8841
4	0.2573	5.8865
5	0.1992	6.6893
6	0.1282	8.3404
7	0.0841	10.2926
8	0.0320	16.7017
9	0.0134	25.8349
10	0.0095	30.5582
11	0.0016	73.5681
Condition Number		73.5681
Det(Correlation Matrix)		0.0187

Table A3.7: Collinearity Diagnostic for Column (1) in Table 6.5.B

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.04	1.02	0.0350
	Capital Account Restrictions	1.51	1.23	0.3366
	Financial Development	1.60	1.27	0.3754
	After Crisis (Dummy)	1.07	1.03	0.0639
Mean VIF		1.30		
Observations		798		

	Eigenvalue	Condition Index
1	3.6312	1.0000
2	0.5997	2.4606
3	0.5087	2.6717
4	0.2331	3.9467
5	0.0272	11.5619
Condition Number		11.5619
Det(Correlation Matrix)		0.6145

Table A3.8: Collinearity Diagnostic for Column (2) in Table 6.5.B

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.18	1.08	0.1494
	Capital Account Restrictions	1.83	1.35	0.4531
	Financial Development	2.71	1.64	0.6303
	Government Share	1.08	1.04	0.0763
	Government Effectiveness	3.20	1.79	0.6877
	After Crisis (Dummy)	1.16	1.08	0.1365
Mean VIF		1.86		
Observations		756		

	Eigenvalue	Condition Index
1	5.2186	1.0000
2	0.7928	2.5656
3	0.5495	3.0818
4	0.2613	4.4687
5	0.1101	6.8856
6	0.0528	9.9412
7	0.0149	18.7281
Condition Number		18.7281
Det(Correlation Matrix)		0.1812

Table A3.9: Collinearity Diagnostic for Column (3) in Table 6.5.B

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.22	1.10	0.1773
	Capital Account Restrictions	1.88	1.37	0.4675
	Financial Development	2.75	1.66	0.6361
	Government Share	1.09	1.04	0.0818
	Government Effectiveness	3.23	1.80	0.6906
	Unemployment Rate	1.15	1.07	0.1307
	After Crisis (Dummy)	1.16	1.08	0.1376
Mean VIF		1.78		
Observations		756		

	Eigenvalue	Condition Index
1	0.1376	0.0136
2	0.8108	2.7002
3	0.5583	3.2542
4	0.3706	3.9941
5	0.1936	5.5256
6	0.0896	8.1243
7	0.0515	10.7185
8	0.0136	20.8793
Condition Number		20.8793
Det(Correlation Matrix)		0.1576

Table A3.10: Collinearity Diagnostic for Column (4) in Table 6.5.B

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.33	1.15	0.2503
	Capital Account Restrictions	1.97	1.40	0.4913
	Financial Development	3.16	1.78	0.6836
	Government Share	1.13	1.06	0.1169
	Government Effectiveness	4.37	2.09	0.7711
	Unemployment Rate	1.16	1.08	0.1349
	Log (Population)	2.16	1.47	0.5371
	After Crisis (Dummy)	1.16	1.08	0.1402
Mean VIF		2.06		
Observations		756		

	Eigenvalue	Condition Index
1	6.8660	1.0000
2	0.8177	2.8978
3	0.5656	3.4842
4	0.3733	4.2888
5	0.1995	5.8665
6	0.0934	8.5745
7	0.0640	10.3550
8	0.0187	19.1694
9	0.0019	60.3227
Condition Number		60.3227
Det(Correlation Matrix)		0.0729

Table A3.11: Collinearity Diagnostic for Column (5) in Table 6.5.B

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.36	1.17	0.2655
	Capital Account Restrictions	2.44	1.56	0.5904
	Financial Development	3.24	1.80	0.6910
	Government Share	1.13	1.06	0.1181
	Government Effectiveness	4.48	2.12	0.7768
	Unemployment Rate	1.39	1.18	0.2828
	Log (Population)	2.20	1.48	0.5464
	Labor Force Participation Rate	1.62	1.27	0.3815
	After Crisis (Dummy)	1.16	1.08	0.1406
Mean VIF		2.11		
Observations		756		

	Eigenvalue	Condition Index
1	7.8382	1.0000
2	0.8180	3.0955
3	0.5712	3.7045
4	0.3733	4.5821
5	0.2085	6.1311
6	0.0951	9.0776
7	0.0662	10.8827
8	0.0213	19.1676
9	0.0067	34.3035
10	0.0014	74.2757
Condition Number		74.2757
Det(Correlation Matrix)		0.0451

Table A3.12: Collinearity Diagnostic for Column (6) in Table 6.5.B

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.36	1.17	0.2669
	Capital Account Restrictions	2.60	1.61	0.6157
	Financial Development	3.38	1.84	0.7045
	Government Share	1.21	1.10	0.1734
	Government Effectiveness	4.48	2.12	0.7770
	Unemployment Rate	1.40	1.18	0.2855
	Log (Population)	2.25	1.50	0.5552
	Labor Force Participation Rate	1.63	1.28	0.3872
	Real Effective Exchange Rate	1.18	1.09	0.1551
	After Crisis (Dummy)	1.22	1.10	0.1777
Mean VIF		2.07		
Observations		756		

	Eigenvalue	Condition Index
1	8.7937	1.0000
2	0.8183	3.2781
3	0.5736	3.9155
4	0.3761	4.8352
5	0.2098	6.4736
6	0.1008	9.3382
7	0.0751	10.8191
8	0.0324	16.4655
9	0.0120	27.0363
10	0.0065	36.7510
11	0.0014	79.1176
Condition Number		79.1176
Det(Correlation Matrix)		0.0381

Table A3.13: Collinearity Diagnostic for Column (1) in Table 6.5.C

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.04	1.02	0.0366
	Capital Account Openness	1.43	1.19	0.2987
	Financial Development	1.44	1.20	0.3067
	After Crisis (Dummy)	1.05	1.02	0.0436
Mean VIF		1.24		
Observations		836		

	Eigenvalue	Condition Index
1	3.7767	1.0000
2	0.5698	2.5745
3	0.3869	3.1243
4	0.2236	4.1100
5	0.0430	9.3764
Condition Number		9.3764
Det(Correlation Matrix)		0.6643

Table A3.14: Collinearity Diagnostic for Column (2) in Table 6.5.C

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.17	1.08	0.1481
	Capital Account Openness	1.76	1.33	0.4323
	Financial Development	2.70	1.64	0.6297
	Government Share	1.17	1.08	0.1418
	Government Effectiveness	3.22	1.79	0.6892
	After Crisis (Dummy)	1.15	1.07	0.1285
Mean VIF		1.86		
Observations		792		

	Eigenvalue	Condition Index
1	5.4437	1.0000
2	0.6335	2.9314
3	0.4411	3.5130
4	0.2483	4.6823
5	0.1536	5.9541
6	0.0636	9.2483
7	0.0163	18.2867
Condition Number		18.2867
Det(Correlation Matrix)		0.1839

Table A3.15: Collinearity Diagnostic for Column (3) in Table 6.5.C

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.21	1.10	0.1747
	Capital Account Openness	1.76	1.33	0.4323
	Financial Development	2.75	1.66	0.6367
	Government Share	1.19	1.09	0.1595
	Government Effectiveness	3.22	1.79	0.6893
	Unemployment Rate	1.15	1.07	0.1268
	After Crisis (Dummy)	1.15	1.07	0.1291
Mean VIF		1.78		
Observations		792		

	Eigenvalue	Condition Index
1	6.1010	1.0000
2	0.6747	3.0070
3	0.5335	3.3816
4	0.3221	4.3520
5	0.1752	5.9003
6	0.1144	7.3020
7	0.0636	9.7909
8	0.0153	19.9420
Condition Number		19.9420
Det(Correlation Matrix)		0.1606

Table A3.16: Collinearity Diagnostic for Column (4) in Table 6.5.C

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.22	1.11	0.1836
	Capital Account Openness	1.76	1.33	0.4324
	Financial Development	2.78	1.67	0.6405
	Government Share	1.26	1.12	0.2071
	Government Effectiveness	3.22	1.79	0.6894
	Unemployment Rate	1.17	1.08	0.1419
	Labor Quantity Growth	1.12	1.06	0.1102
	After Crisis (Dummy)	1.16	1.08	0.1365
Mean VIF		1.71		
Observations		792		

	Eigenvalue	Condition Index
1	6.2004	1.0000
2	0.9334	2.5774
3	0.6724	3.0366
4	0.5181	3.4595
5	0.3122	4.4563
6	0.1750	5.9523
7	0.1138	7.3811
8	0.0603	10.1365
9	0.0144	20.7420
Condition Number		20.7420
Det(Correlation Matrix)		0.1429

Table A3.17: Collinearity Diagnostic for Column (5) in Table 6.5.C

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.23	1.11	0.1845
	Capital Account Openness	1.86	1.36	0.4617
	Financial Development	2.85	1.69	0.6494
	Government Share	1.39	1.18	0.2795
	Government Effectiveness	3.22	1.79	0.6896
	Unemployment Rate	1.17	1.08	0.1427
	Labor Quantity Growth	1.12	1.06	0.1102
	Real Effective Exchange Rate	1.19	1.09	0.1620
	After Crisis (Dummy)	1.21	1.10	0.1747
Mean VIF		1.69		
Observations		792		

	Eigenvalue	Condition Index
1	7.1259	1.0000
2	0.9339	2.7623
3	0.6849	3.2255
4	0.5265	3.6790
5	0.3137	4.7662
6	0.1783	6.3211
7	0.1248	7.5552
8	0.0727	9.8994
9	0.0324	14.8413
10	0.0069	32.2506
Condition Number		32.2506
Det(Correlation Matrix)		0.1197

Table A3.18: Collinearity Diagnostic for Column (6) in Table 6.5.C

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.35	1.16	0.2596
	Capital Account Openness	1.91	1.38	0.4752
	Financial Development	2.92	1.71	0.6573
	Government Share	1.39	1.18	0.2800
	Government Effectiveness	3.24	1.80	0.6918
	Unemployment Rate	1.28	1.13	0.2199
	Labor Quantity Growth	1.12	1.06	0.1111
	Real Effective Exchange Rate	1.23	1.11	0.1854
	Investment Share	1.47	1.21	0.3203
	After Crisis (Dummy)	1.21	1.10	0.1753
Mean VIF		1.71		
Observations		792		

	Eigenvalue	Condition Index
1	8.0535	1.0000
2	0.9355	2.9340
3	0.6864	3.4254
4	0.5298	3.8988
5	0.3209	5.0096
6	0.1957	6.4154
7	0.1313	7.8322
8	0.0774	10.2003
9	0.0331	15.6029
10	0.0298	16.4433
11	0.0066	34.8418
Condition Number		34.8418
Det(Correlation Matrix)		0.0814

Table A3.19: Collinearity Diagnostic for Column (7) in Table 6.5.C

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.35	1.16	0.2611
	Capital Account Openness	2.17	1.47	0.5394
	Financial Development	2.92	1.71	0.6573
	Government Share	1.52	1.23	0.3419
	Government Effectiveness	3.24	1.80	0.6918
	Unemployment Rate	1.29	1.14	0.2243
	Labor Quantity Growth	1.14	1.07	0.1203
	Real Effective Exchange Rate	1.23	1.11	0.1888
	Investment Share	1.48	1.21	0.3225
	TFP	1.54	1.24	0.3496
	After Crisis (Dummy)	1.33	1.15	0.2458
Mean VIF		1.75		
Observations		792		

	Eigenvalue	Condition Index
1	9.0216	1.0000
2	0.9358	3.1049
3	0.6935	3.6067
4	0.5352	4.1055
5	0.3221	5.2922
6	0.1998	6.7195
7	0.1348	8.1799
8	0.0782	10.7401
9	0.0334	16.4402
10	0.0313	16.9779
11	0.0122	27.1852
12	0.0020	67.1283
Condition Number		67.1283
Det(Correlation Matrix)		0.0529

Table A3.20: Collinearity Diagnostic for Column (1) in Table 6.5.D

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.04	1.02	0.0366
	Capital Account Openness	1.43	1.19	0.2987
	Financial Development	1.44	1.20	0.3067
	After Crisis (Dummy)	1.05	1.02	0.0436
Mean VIF		1.24		
Observations		836		

	Eigenvalue	Condition Index
1	3.7767	1.0000
2	0.5698	2.5745
3	0.3869	3.1243
4	0.2236	4.1100
5	0.0430	9.3764
Condition Number		9.3764
Det(Correlation Matrix)		0.6643

Table A3.21: Collinearity Diagnostic for Column (2) in Table 6.5.D

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.17	1.08	0.1481
	Capital Account Openness	1.76	1.33	0.4323
	Financial Development	2.70	1.64	0.6297
	Government Share	1.17	1.08	0.1418
	Government Effectiveness	3.22	1.79	0.6892
	After Crisis (Dummy)	1.15	1.07	0.1285
Mean VIF		1.86		
Observations		792		

	Eigenvalue	Condition Index
1	5.4437	1.0000
2	0.6335	2.9314
3	0.4411	3.5130
4	0.2483	4.6823
5	0.1536	5.9541
6	0.0636	9.2483
7	0.0163	18.2867
Condition Number		18.2867
Det(Correlation Matrix)		0.1839

Table A3.22: Collinearity Diagnostic for Column (3) in Table 6.5.D

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.21	1.10	0.1747
	Capital Account Openness	1.76	1.33	0.4323
	Financial Development	2.75	1.66	0.6367
	Government Share	1.19	1.09	0.1595
	Government Effectiveness	3.22	1.79	0.6893
	Unemployment Rate	1.15	1.07	0.1268
	After Crisis (Dummy)	1.15	1.07	0.1291
Mean VIF		1.78		
Observations		792		

	Eigenvalue	Condition Index
1	6.1010	1.0000
2	0.6747	3.0070
3	0.5335	3.3816
4	0.3221	4.3520
5	0.1752	5.9003
6	0.1144	7.3020
7	0.0636	9.7909
8	0.0153	19.9420
Condition Number		19.9420
Det(Correlation Matrix)		0.1606

Table A3.23: Collinearity Diagnostic for Column (4) in Table 6.5.D

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.32	1.15	0.2440
	Capital Account Openness	1.77	1.33	0.4342
	Financial Development	3.14	1.77	0.6814
	Government Share	1.27	1.13	0.2112
	Government Effectiveness	4.55	2.13	0.7800
	Unemployment Rate	1.16	1.08	0.1371
	Log (Population)	2.18	1.48	0.5423
	After Crisis (Dummy)	1.15	1.07	0.1300
Mean VIF		2.07		
Observations		792		

	Eigenvalue	Condition Index
1	7.0150	1.0000
2	0.6962	3.1743
3	0.5528	3.5621
4	0.3228	4.6615
5	0.1867	6.1300
6	0.1301	7.3432
7	0.0741	9.7287
8	0.0204	18.5448
9	0.0019	61.1122
Condition Number		61.1122
Det(Correlation Matrix)		0.0735

Table A3.24: Collinearity Diagnostic for Column (5) in Table 6.5.D

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.33	1.15	0.2459
	Capital Account Openness	1.93	1.39	0.4824
	Financial Development	3.15	1.77	0.6822
	Government Share	1.27	1.13	0.2113
	Government Effectiveness	4.64	2.15	0.7843
	Unemployment Rate	1.42	1.19	0.2953
	Log (Population)	2.19	1.48	0.5441
	Labor Force Participation Rate	1.40	1.18	0.2854
	After Crisis (Dummy)	1.15	1.07	0.1335
Mean VIF		2.05		
Observations		792		

	Eigenvalue	Condition Index
1	7.9654	1.0000
2	0.7047	3.3620
3	0.5625	3.7630
4	0.3234	4.9629
5	0.2027	6.2688
6	0.1348	7.6884
7	0.0747	10.3254
8	0.0238	18.3130
9	0.0066	34.7979
10	0.0015	73.2241
Condition Number		73.2241
Det(Correlation Matrix)		0.0525

Table A3.25: Collinearity Diagnostic for Column (6) in Table 6.5.D

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.33	1.15	0.2459
	Capital Account Openness	2.05	1.43	0.5110
	Financial Development	3.26	1.80	0.6929
	Government Share	1.38	1.17	0.2742
	Government Effectiveness	4.64	2.15	0.7844
	Unemployment Rate	1.42	1.19	0.2974
	Log (Population)	2.22	1.49	0.5486
	Labor Force Participation Rate	1.40	1.18	0.2866
	Real Effective Exchange Rate	1.21	1.10	0.1713
	After Crisis (Dummy)	1.21	1.10	0.1725
Mean VIF		2.01		
Observations		792		

	Eigenvalue	Condition Index
1	8.9109	1.0000
2	0.7145	3.5314
3	0.5671	3.9639
4	0.3242	5.2425
5	0.2071	6.5600
6	0.1408	7.9550
7	0.0803	10.5316
8	0.0330	16.4341
9	0.0142	25.0876
10	0.0064	37.3755
11	0.0015	78.3900
Condition Number		78.3900
Det(Correlation Matrix)		0.0435

Table A3.26: Collinearity Diagnostic for Column (7) in Table 6.5.D

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.52	1.23	0.3417
	Capital Account Openness	2.13	1.46	0.5297
	Financial Development	4.31	2.08	0.7679
	Government Share	1.38	1.18	0.2775
	Government Effectiveness	6.09	2.47	0.8358
	Unemployment Rate	1.45	1.20	0.3085
	Log (Population)	2.90	1.70	0.6550
	Labor Force Participation Rate	1.64	1.28	0.3893
	Real Effective Exchange Rate	1.21	1.10	0.1725
	Log (Output per Worker)	7.42	2.72	0.8653
	After Crisis (Dummy)	1.22	1.11	0.1811
Mean VIF		2.84		
Observations		792		

	Eigenvalue	Condition Index
1	9.8977	1.0000
2	0.7152	3.7202
3	0.5721	4.1595
4	0.3247	5.5213
5	0.2105	6.8575
6	0.1408	8.3839
7	0.0803	11.0995
8	0.0330	17.3192
9	0.0144	26.1921
10	0.0068	38.2751
11	0.0042	48.6858
12	0.0004	155.5254
Condition Number		155.5254
Det(Correlation Matrix)		0.0059

Table A3.27: Collinearity Diagnostic for Column (8) in Table 6.5.D

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.52	1.23	0.3424
	Capital Account Openness	2.15	1.47	0.5346
	Financial Development	4.37	2.09	0.7710
	Government Share	1.59	1.26	0.3704
	Government Effectiveness	6.10	2.47	0.8362
	Unemployment Rate	1.47	1.21	0.3184
	Log (Population)	2.97	1.72	0.6632
	Labor Force Participation Rate	1.73	1.32	0.4220
	Real Effective Exchange Rate	1.21	1.10	0.1733
	Log (Output per Worker)	8.99	3.00	0.8888
	Human Capital	2.63	1.62	0.6195
	After Crisis (Dummy)	1.24	1.12	0.1963
Mean VIF		3.00		
Observations		792		

	Eigenvalue	Condition Index
1	10.8791	1.0000
2	0.7153	3.9000
3	0.5738	4.3543
4	0.3250	5.7857
5	0.2141	7.1287
6	0.1409	8.7866
7	0.0822	11.5044
8	0.0330	18.1549
9	0.0153	26.6952
10	0.0107	31.8490
11	0.0067	40.4354
12	0.0036	54.7128
13	0.0004	170.0728
Condition Number		170.0728
Det(Correlation Matrix)		0.0022

Table A3.28: Collinearity Diagnostic for Column (1) in Table 6.5.E

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.04	1.02	0.0366
	Capital Account Openness	1.43	1.19	0.2987
	Financial Development	1.44	1.20	0.3067
	After Crisis (Dummy)	1.05	1.02	0.0436
Mean VIF		1.24		
Observations		836		

	Eigenvalue	Condition Index
1	3.7767	1.0000
2	0.5698	2.5745
3	0.3869	3.1243
4	0.2236	4.1100
5	0.0430	9.3764
Condition Number		9.3764
Det(Correlation Matrix)		0.6643

Table A3.29: Collinearity Diagnostic for Column (2) in Table 6.5.E

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.17	1.08	0.1481
	Capital Account Openness	1.76	1.33	0.4323
	Financial Development	2.70	1.64	0.6297
	Government Share	1.17	1.08	0.1418
	Government Effectiveness	3.22	1.79	0.6892
	After Crisis (Dummy)	1.15	1.07	0.1285
Mean VIF		1.86		
Observations		792		

	Eigenvalue	Condition Index
1	5.4437	1.0000
2	0.6335	2.9314
3	0.4411	3.5130
4	0.2483	4.6823
5	0.1536	5.9541
6	0.0636	9.2483
7	0.0163	18.2867
Condition Number		18.2867
Det(Correlation Matrix)		0.1839

Table A3.30: Collinearity Diagnostic for Column (3) in Table 6.5.E

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.21	1.10	0.1747
	Capital Account Openness	1.76	1.33	0.4323
	Financial Development	2.75	1.66	0.6367
	Government Share	1.19	1.09	0.1595
	Government Effectiveness	3.22	1.79	0.6893
	Unemployment Rate	1.15	1.07	0.1268
	After Crisis (Dummy)	1.15	1.07	0.1291
Mean VIF		1.78		
Observations		792		

	Eigenvalue	Condition Index
1	6.1010	1.0000
2	0.6747	3.0070
3	0.5335	3.3816
4	0.3221	4.3520
5	0.1752	5.9003
6	0.1144	7.3020
7	0.0636	9.7909
8	0.0153	19.9420
Condition Number		19.9420
Det(Correlation Matrix)		0.1606

Table A3.31: Collinearity Diagnostic for Column (4) in Table 6.5.E

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.32	1.15	0.2440
	Capital Account Openness	1.77	1.33	0.4342
	Financial Development	3.14	1.77	0.6814
	Government Share	1.27	1.13	0.2112
	Government Effectiveness	4.55	2.13	0.7800
	Unemployment Rate	1.16	1.08	0.1371
	Log (Population)	2.18	1.48	0.5423
	After Crisis (Dummy)	1.15	1.07	0.1300
Mean VIF		2.07		
Observations		792		

	Eigenvalue	Condition Index
1	7.0150	1.0000
2	0.6962	3.1743
3	0.5528	3.5621
4	0.3228	4.6615
5	0.1867	6.1300
6	0.1301	7.3432
7	0.0741	9.7287
8	0.0204	18.5448
9	0.0019	61.1122
Condition Number		61.1122
Det(Correlation Matrix)		0.0735

Table A3.32: Collinearity Diagnostic for Column (5) in Table 6.5.E

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.32	1.15	0.2440
	Capital Account Openness	1.87	1.37	0.4650
	Financial Development	3.25	1.80	0.6919
	Government Share	1.38	1.17	0.2738
	Government Effectiveness	4.55	2.13	0.7802
	Unemployment Rate	1.16	1.08	0.1386
	Log (Population)	2.21	1.49	0.5466
	Real Effective Exchange Rate	1.20	1.10	0.1698
	After Crisis (Dummy)	1.21	1.10	0.1701
Mean VIF		2.02		
Observations		792		

	Eigenvalue	Condition Index
1	7.9527	1.0000
2	0.7070	3.3538
3	0.5596	3.7698
4	0.3236	4.9577
5	0.1921	6.4344
6	0.1387	7.5709
7	0.0803	9.9499
8	0.0328	15.5656
9	0.0113	26.5080
10	0.0018	66.0618
Condition Number		66.0618
Det(Correlation Matrix)		0.0610

Table A3.33: Collinearity Diagnostic for Column (6) in Table 6.5.E

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.45	1.20	0.3084
	Capital Account Openness	2.13	1.46	0.5299
	Financial Development	4.15	2.04	0.7592
	Government Share	1.39	1.18	0.2800
	Government Effectiveness	5.58	2.36	0.8206
	Unemployment Rate	1.17	1.08	0.1457
	Log (Population)	2.71	1.65	0.6308
	Real Effective Exchange Rate	1.20	1.10	0.1698
	Log (GDP per Capita)	6.98	2.64	0.8568
	After Crisis (Dummy)	1.22	1.10	0.1796
Mean VIF		2.80		
Observations		792		

	Eigenvalue	Condition Index
1	8.9363	1.0000
2	0.7077	3.5536
3	0.5652	3.9762
4	0.3238	5.2534
5	0.1981	6.7171
6	0.1391	8.0166
7	0.0803	10.5473
8	0.0328	16.5001
9	0.0121	27.1289
10	0.0040	47.0491
11	0.0006	125.2803
Condition Number		125.2803
Det(Correlation Matrix)		0.0087

Table A3.34: Collinearity Diagnostic for Column (1) in Table 6.5.F

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.04	1.02	0.0366
	Capital Account Openness	1.43	1.19	0.2987
	Financial Development	1.44	1.20	0.3067
	After Crisis (Dummy)	1.05	1.02	0.0436
Mean VIF		1.24		
Observations		836		

	Eigenvalue	Condition Index
1	3.7767	1.0000
2	0.5698	2.5745
3	0.3869	3.1243
4	0.2236	4.1100
5	0.0430	9.3764
Condition Number		9.3764
Det(Correlation Matrix)		0.6643

Table A3.35: Collinearity Diagnostic for Column (2) in Table 6.5.F

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.17	1.08	0.1481
	Capital Account Openness	1.76	1.33	0.4323
	Financial Development	2.70	1.64	0.6297
	Government Share	1.17	1.08	0.1418
	Government Effectiveness	3.22	1.79	0.6892
	After Crisis (Dummy)	1.15	1.07	0.1285
Mean VIF		1.86		
Observations		792		

	Eigenvalue	Condition Index
1	5.4437	1.0000
2	0.6335	2.9314
3	0.4411	3.5130
4	0.2483	4.6823
5	0.1536	5.9541
6	0.0636	9.2483
7	0.0163	18.2867
Condition Number		18.2867
Det(Correlation Matrix)		0.1839

Table A3.36: Collinearity Diagnostic for Column (3) in Table 6.5.F

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.21	1.10	0.1747
	Capital Account Openness	1.76	1.33	0.4323
	Financial Development	2.75	1.66	0.6367
	Government Share	1.19	1.09	0.1595
	Government Effectiveness	3.22	1.79	0.6893
	Unemployment Rate	1.15	1.07	0.1268
	After Crisis (Dummy)	1.15	1.07	0.1291
Mean VIF		1.78		
Observations		792		

	Eigenvalue	Condition Index
1	6.1010	1.0000
2	0.6747	3.0070
3	0.5335	3.3816
4	0.3221	4.3520
5	0.1752	5.9003
6	0.1144	7.3020
7	0.0636	9.7909
8	0.0153	19.9420
Condition Number		19.9420
Det(Correlation Matrix)		0.1606

Table A3.37: Collinearity Diagnostic for Column (4) in Table 6.5.F

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.22	1.11	0.1836
	Capital Account Openness	1.76	1.33	0.4324
	Financial Development	2.78	1.67	0.6405
	Government Share	1.26	1.12	0.2071
	Government Effectiveness	3.22	1.79	0.6894
	Unemployment Rate	1.17	1.08	0.1419
	Labor Quantity Growth	1.12	1.06	0.1102
	After Crisis (Dummy)	1.16	1.08	0.1365
Mean VIF		1.71		
Observations		792		

	Eigenvalue	Condition Index
1	6.2004	1.0000
2	0.9334	2.5774
3	0.6724	3.0366
4	0.5181	3.4595
5	0.3122	4.4563
6	0.1750	5.9523
7	0.1138	7.3811
8	0.0603	10.1365
9	0.0144	20.7420
Condition Number		20.7420
Det(Correlation Matrix)		0.1429

Table A3.38: Collinearity Diagnostic for Column (5) in Table 6.5.F

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.23	1.11	0.1845
	Capital Account Openness	1.86	1.36	0.4617
	Financial Development	2.85	1.69	0.6494
	Government Share	1.39	1.18	0.2795
	Government Effectiveness	3.22	1.79	0.6896
	Unemployment Rate	1.17	1.08	0.1427
	Labor Quantity Growth	1.12	1.06	0.1102
	Real Effective Exchange Rate	1.19	1.09	0.1620
	After Crisis (Dummy)	1.21	1.10	0.1747
Mean VIF		1.69		
Observations		792		

	Eigenvalue	Condition Index
1	7.1259	1.0000
2	0.9339	2.7623
3	0.6849	3.2255
4	0.5265	3.6790
5	0.3137	4.7662
6	0.1783	6.3211
7	0.1248	7.5552
8	0.0727	9.8994
9	0.0324	14.8413
10	0.0069	32.2506
Condition Number		32.2506
Det(Correlation Matrix)		0.1197

Table A3.39: Collinearity Diagnostic for Column (6) in Table 6.5.F

	Variables	Variance Inflation Factor (VIF)	Square Root of VIF	R-squared
	Trade Openness	1.25	1.12	0.2000
	Capital Account Openness	2.12	1.46	0.5286
	Financial Development	3.01	1.73	0.6674
	Government Share	1.49	1.22	0.3291
	Government Effectiveness	4.42	2.10	0.7737
	Unemployment Rate	1.17	1.08	0.1431
	Labor Quantity Growth	1.14	1.07	0.1193
	Real Effective Exchange Rate	1.19	1.09	0.1623
	Human Development Index	4.28	2.07	0.7663
	After Crisis (Dummy)	1.31	1.15	0.2374
Mean VIF		2.14		
Observations		792		

	Eigenvalue	Condition Index
1	8.1044	1.0000
2	0.9340	2.9457
3	0.6859	3.4374
4	0.5319	3.9035
5	0.3140	5.0803
6	0.1852	6.6149
7	0.1277	7.9654
8	0.0728	10.5506
9	0.0324	15.8273
10	0.0098	28.7795
11	0.0019	65.6854
Condition Number		65.6854
Det(Correlation Matrix)		0.0280

APPENDIX A4: DIAGNOSTIC TESTS RESULTS FOR BASE MODELS AND ROBUSTNESS CHECKS

Table A4.1: Diagnostic Tests Results for Base Specifications in Table 6.4.A

TRADITIONAL HAUSMAN TEST RESULTS									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prob>chi2	0.1143	0.0077	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
HAUSMAN TEST RESULTS IN THE PRESENCE OF HETEROSKEDASTICITY, AUTOCORRELATION AND SPATIAL DEPENDENCE									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
F-distribution	7.14	5.14	340.34	795.34	418.09	615.94	388.18	117.38	40.94
(Prob>F)	(0.0021)	(0.0061)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
HETEROSKEDASTICITY TEST RESULTS									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Modified Wald test for groupwise heteroskedasticity in fixed effect regression model chi2 (Prob>chi2)	3142.15 (0.0000)	4892.87 (0.0000)	3260.99 (0.0000)	3139.67 (0.0000)	3664.29 (0.0000)	3582.50 (0.0000)	3503.11 (0.0000)	3078.09 (0.0000)	3933.77 (0.0000)
AUTOCORRELATION TEST RESULTS									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Modified Bhargava et al. Durbin-Watson	0.3771	0.4238	0.4653	0.4762	0.4713	0.4718	0.5126	0.5168	0.5110
Baltagi-Wu LBI	0.5147	0.5720	0.6049	0.6128	0.6170	0.6193	0.6615	0.6668	0.6683
CROSS SECTIONAL DEPENDENCE TEST RESULTS									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Pesaran's Test of Cross Sectional Dependence (Pr)	9.295 (0.0000)	4.082 (0.0000)	4.942 (0.0000)	4.673 (0.0000)	1.844 (0.0651)	2.502 (0.0124)	1.213 (0.2250)	4.866 (0.0000)	6.383 (0.0000)
Frees's Test of Cross Sectional Dependence (alpha=0.05)	7.177 (0.1695)	7.084 (0.1782)	7.336 (0.1888)	7.255 (0.1888)	6.895 (0.1888)	6.798 (0.1888)	5.843 (0.1888)	7.099 (0.1888)	6.342 (0.1888)
F TEST RESULTS									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SERIAL CORRELATION TEST RESULTS									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
F-distribution (Prob>F)	220.355 (0.0000)	201.146 (0.0000)	226.523 (0.0000)	206.885 (0.0000)	209.152 (0.0000)	194.776 (0.0000)	200.022 (0.0000)	231.985 (0.0000)	203.491 (0.0000)

Table A4.2: Diagnostic Tests Results for Robustness Checks in Table 6.5.A

TRADITIONAL HAUSMAN TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Prob>chi2	0.0059	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
HAUSMAN TEST RESULTS IN THE PRESENCE OF HETEROSKEDASTICITY, AUTOCORRELATION AND SPATIAL DEPENDENCE							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
F-distribution	8.64	315.05	769.97	287.04	428.68	428.73	801.46
(Prob>F)	(0.0004)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
HETEROSKEDASTICITY TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Modified Wald test for groupwise heteroskedasticity in fixed effect regression model chi2 (Prob>chi2)	3145.82 (0.0000)	2042.20 (0.0000)	1889.01 (0.0000)	2470.94 (0.0000)	2490.48 (0.0000)	2253.01 (0.0000)	1725.17 (0.0000)
AUTOCORRELATION TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Modified Bhargava et al. Durbin-Watson	0.4494	0.4991	0.5134	0.5006	0.4920	0.4881	0.5058
Baltagi-Wu LBI	0.5900	0.6304	0.6407	0.6386	0.6337	0.6283	0.6436
CROSS SECTIONAL DEPENDENCE TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Pesaran's Test of Cross Sectional Dependence (Pr)	8.011 (0.0000)	10.051 (0.0000)	9.706 (0.0000)	5.445 (0.0000)	5.347 (0.0000)	4.968 (0.0000)	3.803 (0.0001)
Frees's Test of Cross Sectional Dependence (alpha=0.05)	6.295 (0.1782)	6.328 (0.1888)	6.217 (0.1888)	5.957 (0.1888)	5.962 (0.1888)	6.417 (0.1888)	6.579 (0.1888)
F TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SERIAL CORRELATION TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
F-distribution (Prob>F)	235.925 (0.0000)	243.950 (0.0000)	226.599 (0.0000)	225.738 (0.0000)	194.950 (0.0000)	189.279 (0.0000)	189.644 (0.0000)

Table A4.3: Diagnostic Tests Results for Robustness Checks in Table 6.5.B

TRADITIONAL HAUSMAN TEST RESULTS						
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Prob>chi2	0.0021	0.0000	0.0000	0.0000	0.0000	0.0000
HAUSMAN TEST RESULTS IN THE PRESENCE OF HETEROSKEDASTICITY, AUTOCORRELATION AND SPATIAL DEPENDENCE						
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
F-distribution	48.22	89.86	595.18	398.36	523.68	563.59
(Prob>F)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
HETEROSKEDASTICITY TEST RESULTS						
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Modified Wald test for groupwise heteroskedasticity in fixed effect regression model chi2 (Prob>chi2)	2940.31 (0.0000)	1962.17 (0.0000)	2044.83 (0.0000)	2516.77 (0.0000)	2473.36 (0.0000)	2694.52 (0.0000)
AUTOCORRELATION TEST RESULTS						
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Modified Bhargava et al. Durbin-Watson	0.4139	0.4841	0.4949	0.4879	0.4917	0.4906
Baltagi-Wu LBI	0.5423	0.6199	0.6283	0.6297	0.6376	0.6371
CROSS SECTIONAL DEPENDENCE TEST RESULTS						
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Pesaran's Test of Cross Sectional Dependence (Pr)	4.177 (0.0000)	4.319 (0.0000)	3.971 (0.0001)	1.770 (0.0767)	2.090 (0.0366)	2.652 (0.0080)
Frees's Test of Cross Sectional Dependence (alpha=0.05)	6.522 (0.1782)	6.745 (0.1888)	7.302 (0.1888)	6.785 (0.1888)	6.640 (0.1888)	6.157 (0.1888)
F TEST RESULTS						
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SERIAL CORRELATION TEST RESULTS						
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
F-distribution (Prob>F)	234.555 (0.0000)	279.891 (0.0000)	253.827 (0.0000)	255.741 (0.0000)	241.820 (0.0000)	211.360 (0.0000)

Table A4.4: Diagnostic Tests Results for Robustness Checks in Table 6.5.C

TRADITIONAL HAUSMAN TEST RESULTS								
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Prob>chi2	0.0077	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
HAUSMAN TEST RESULTS IN THE PRESENCE OF HETEROSKEDASTICITY, AUTOCORRELATION AND SPATIAL DEPENDENCE								
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
F-distribution	19.58	340.34	795.34	457.53	509.66	604.67	587.94	2912.34
(Prob>F)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
HETEROSKEDASTICITY TEST RESULTS								
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Modified Wald test for groupwise heteroskedasticity in fixed effect regression model chi2 (Prob>chi2)	4892.87 (0.0000)	3260.99 (0.0000)	3139.67 (0.0000)	3330.12 (0.0000)	3265.40 (0.0000)	2839.93 (0.0000)	3447.69 (0.0000)	2944.96 (0.0000)
AUTOCORRELATION TEST RESULTS								
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Modified Bhargava et al. Durbin-Watson	0.4238	0.4653	0.4762	0.4948	0.4912	0.5004	0.4874	0.5019
Baltagi-Wu LBI	0.5720	0.6049	0.6128	0.6343	0.6333	0.6397	0.6263	0.6361
CROSS SECTIONAL DEPENDENCE TEST RESULTS								
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Pesaran's Test of Cross Sectional Dependence (Pr)	4.082 (0.0000)	4.942 (0.0000)	4.673 (0.0000)	4.436 (0.0000)	5.040 (0.0000)	4.239 (0.0000)	3.032 (0.0024)	3.405 (0.0007)
Frees's Test of Cross Sectional Dependence (alpha=0.05)	7.084 (0.1782)	7.336 (0.1888)	7.255 (0.1888)	7.085 (0.1888)	6.884 (0.1888)	6.582 (0.1888)	7.186 (0.1888)	7.066 (0.1888)
F TEST RESULTS								
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SERIAL CORRELATION TEST RESULTS								
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
F-distribution	201.146	226.523	206.885	239.698	237.729	238.165	253.088	253.494
(Prob>F)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)

Table A4.5: Diagnostic Tests Results for Robustness Checks in Table 6.5.D

TRADITIONAL HAUSMAN TEST RESULTS									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prob>chi2	0.0077	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
HAUSMAN TEST RESULTS IN THE PRESENCE OF HETEROSKEDASTICITY, AUTOCORRELATION AND SPATIAL DEPENDENCE									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
F-distribution	19.58	340.34	795.34	418.09	575.37	1218.39	1649.96	1962.12	1455.45
(Prob>F)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
HETEROSKEDASTICITY TEST RESULTS									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Modified Wald test for groupwise heteroskedasticity in fixed effect regression model chi2 (Prob>chi2)	4892.87 (0.0000)	3260.99 (0.0000)	3139.67 (0.0000)	3664.29 (0.0000)	3131.24 (0.0000)	3036.63 (0.0000)	4144.12 (0.0000)	4202.38 (0.0000)	3504.77 (0.0000)
AUTOCORRELATION TEST RESULTS									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Modified Bhargava et al. Durbin-Watson	0.4238	0.4653	0.4762	0.4713	0.4809	0.4810	0.4788	0.4817	0.4961
Baltagi-Wu LBI	0.5720	0.6049	0.6128	0.6170	0.6313	0.6332	0.6212	0.6250	0.6396
CROSS SECTIONAL DEPENDENCE TEST RESULTS									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Pesaran's Test of Cross Sectional Dependence (Pr)	4.082 (0.0000)	4.942 (0.0000)	4.673 (0.0000)	1.844 (0.0651)	2.229 (0.0258)	2.919 (0.0035)	2.486 (0.0129)	2.246 (0.0247)	2.685 (0.0073)
Frees's Test of Cross Sectional Dependence (alpha=0.05)	7.084 (0.1782)	7.336 (0.1888)	7.255 (0.1888)	6.895 (0.1888)	6.700 (0.1888)	6.473 (0.1888)	6.837 (0.1888)	6.518 (0.1888)	6.465 (0.1888)
F TEST RESULTS									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SERIAL CORRELATION TEST RESULTS									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
F-distribution (Prob>F)	201.146 (0.0000)	226.523 (0.0000)	206.885 (0.0000)	209.152 (0.0000)	204.533 (0.0000)	184.113 (0.0000)	202.170 (0.0000)	194.727 (0.0000)	193.830 (0.0000)

Table A4.6: Diagnostic Tests Results for Robustness Checks in Table 6.5.E

TRADITIONAL HAUSMAN TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Prob>chi2	0.0077	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
HAUSMAN TEST RESULTS IN THE PRESENCE OF HETEROSKEDASTICITY, AUTOCORRELATION AND SPATIAL DEPENDENCE							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
F-distribution	19.58	340.34	795.34	418.09	615.94	855.53	963.19
(Prob>F)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
HETEROSKEDASTICITY TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Modified Wald test for groupwise heteroskedasticity in fixed effect regression model chi2 (Prob>chi2)	4892.87 (0.0000)	3260.99 (0.0000)	3139.67 (0.0000)	3664.29 (0.0000)	3582.50 (0.0000)	4173.57 (0.0000)	2960.43 (0.0000)
AUTOCORRELATION TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Modified Bhargava et al. Durbin-Watson	0.4238	0.4653	0.4762	0.4713	0.4718	0.4752	0.5030
Baltagi-Wu LBI	0.5720	0.6049	0.6128	0.6170	0.6193	0.6148	0.6419
CROSS SECTIONAL DEPENDENCE TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Pesaran's Test of Cross Sectional Dependence (Pr)	4.082 (0.0000)	4.942 (0.0000)	4.673 (0.0000)	1.844 (0.0651)	2.502 (0.0124)	2.397 (0.0165)	3.168 (0.0015)
Frees's Test of Cross Sectional Dependence (alpha=0.05)	7.084 (0.1782)	7.336 (0.1888)	7.255 (0.1888)	6.895 (0.1888)	6.798 (0.1888)	7.240 (0.1888)	6.724 (0.1888)
F TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SERIAL CORRELATION TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
F-distribution	201.146	226.523	206.885	209.152	194.776	230.445	229.667
(Prob>F)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)

Table A4.7: Diagnostic Tests Results for Robustness Checks in Table 6.5.F

TRADITIONAL HAUSMAN TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Prob>chi2	0.0077	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
HAUSMAN TEST RESULTS IN THE PRESENCE OF HETEROSKEDASTICITY, AUTOCORRELATION AND SPATIAL DEPENDENCE							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
F-distribution	19.58	340.34	795.34	457.53	509.66	1836.46	899.63
(Prob>F)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
HETEROSKEDASTICITY TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Modified Wald test for groupwise heteroskedasticity in fixed effect regression model chi2 (Prob>chi2)	4892.87 (0.0000)	3260.99 (0.0000)	3139.67 (0.0000)	3330.12 (0.0000)	3265.40 (0.0000)	3902.13 (0.0000)	4456.82 (0.0000)
AUTOCORRELATION TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Modified Bhargava et al. Durbin-Watson	0.4238	0.4653	0.4762	0.4948	0.4912	0.5128	0.5369
Baltagi-Wu LBI	0.5720	0.6049	0.6128	0.6343	0.6333	0.6526	0.6816
CROSS SECTIONAL DEPENDENCE TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Pesaran's Test of Cross Sectional Dependence (Pr)	4.082 (0.0000)	4.942 (0.0000)	4.673 (0.0000)	4.436 (0.0000)	5.040 (0.0000)	2.623 (0.0087)	2.026 (0.0428)
Frees's Test of Cross Sectional Dependence (alpha=0.05)	7.084 (0.1782)	7.336 (0.1888)	7.255 (0.1888)	7.085 (0.1888)	6.884 (0.1888)	7.725 (0.1888)	6.817 (0.1888)
F TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SERIAL CORRELATION TEST RESULTS							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**
F-distribution (Prob>F)	201.146 (0.0000)	226.523 (0.0000)	206.885 (0.0000)	239.698 (0.0000)	237.729 (0.0000)	240.302 (0.0000)	242.585 (0.0000)

APPENDIX A5: **COUNTRY-SPECIFIC TIME TRENDS FOR EACH VARIABLE**

Table A5.1: Country-Specific Time Trends for Labor Share

Table A5.2: Country-Specific Time Trends for Trade Openness
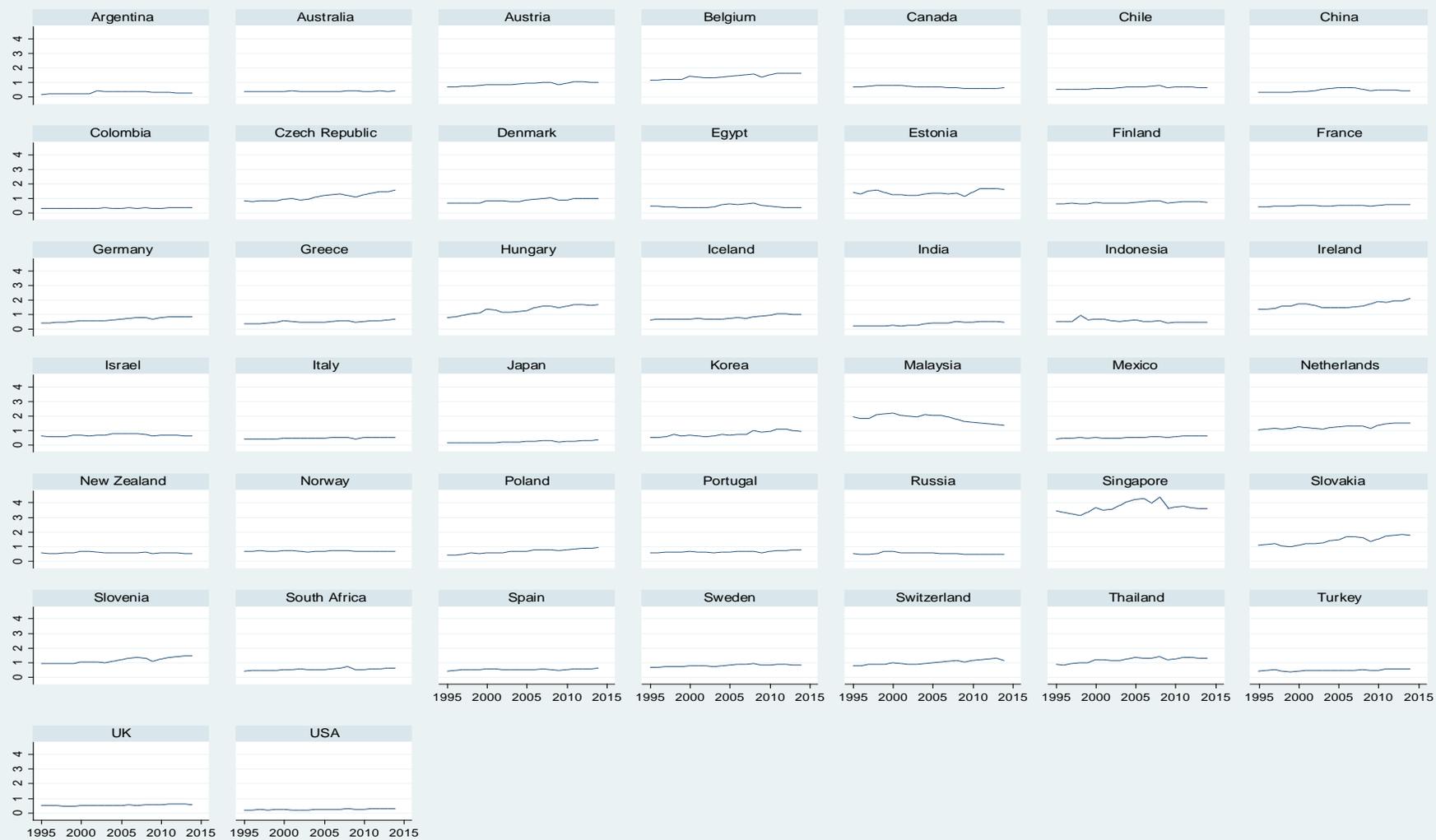
Table A5.3: Country-Specific Time Trends for Capital Account Openness

Table A5.4: Country-Specific Time Trends for Financial Development

**Table A5.5**: Country-Specific Time Trends for Government Share

Table A5.6: Country-Specific Time Trends for Government Effectiveness

Table A5.7: Country-Specific Time Trends for Unemployment Rate
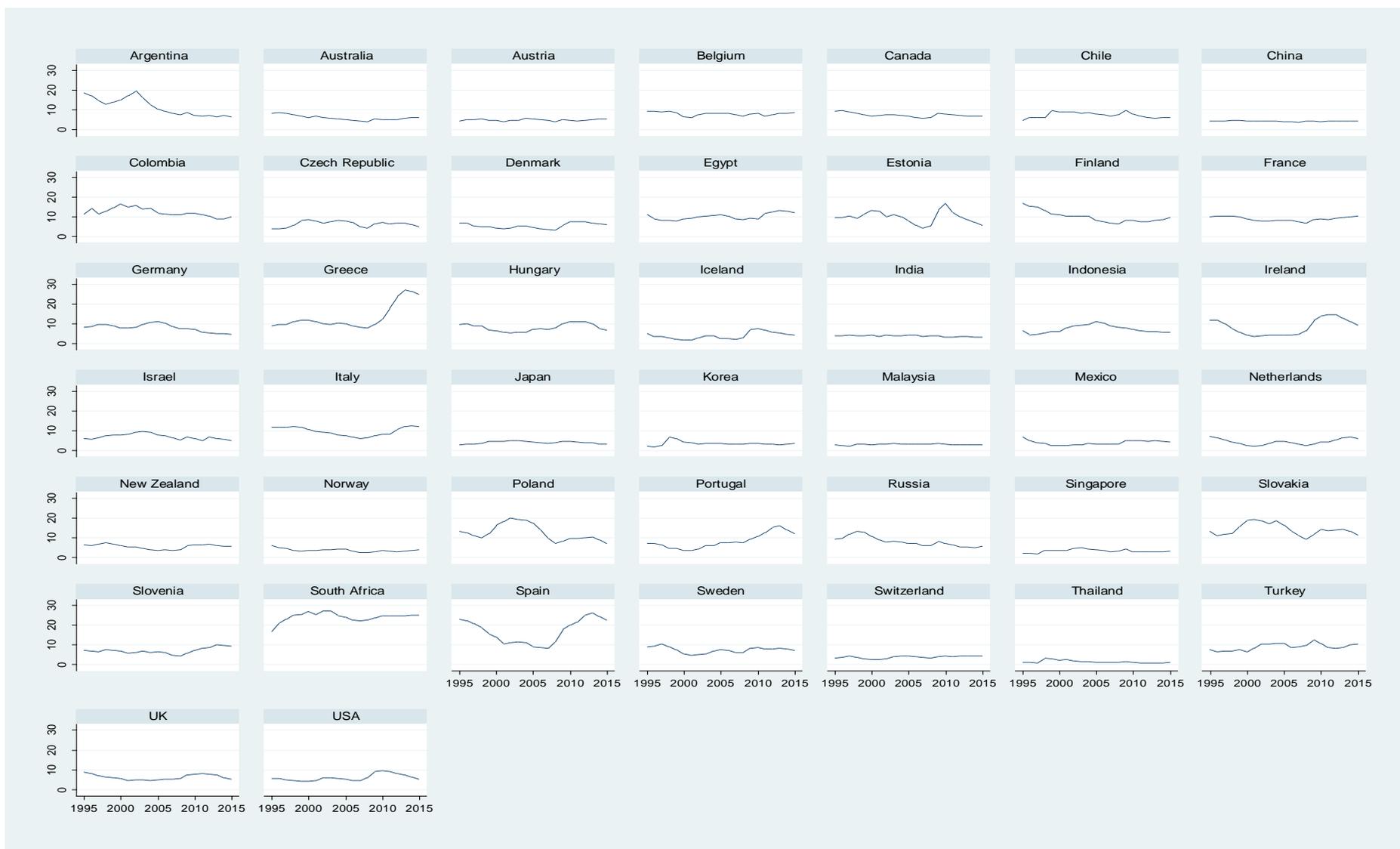
Table A5.8: Country-Specific Time Trends for Logarithm of Population
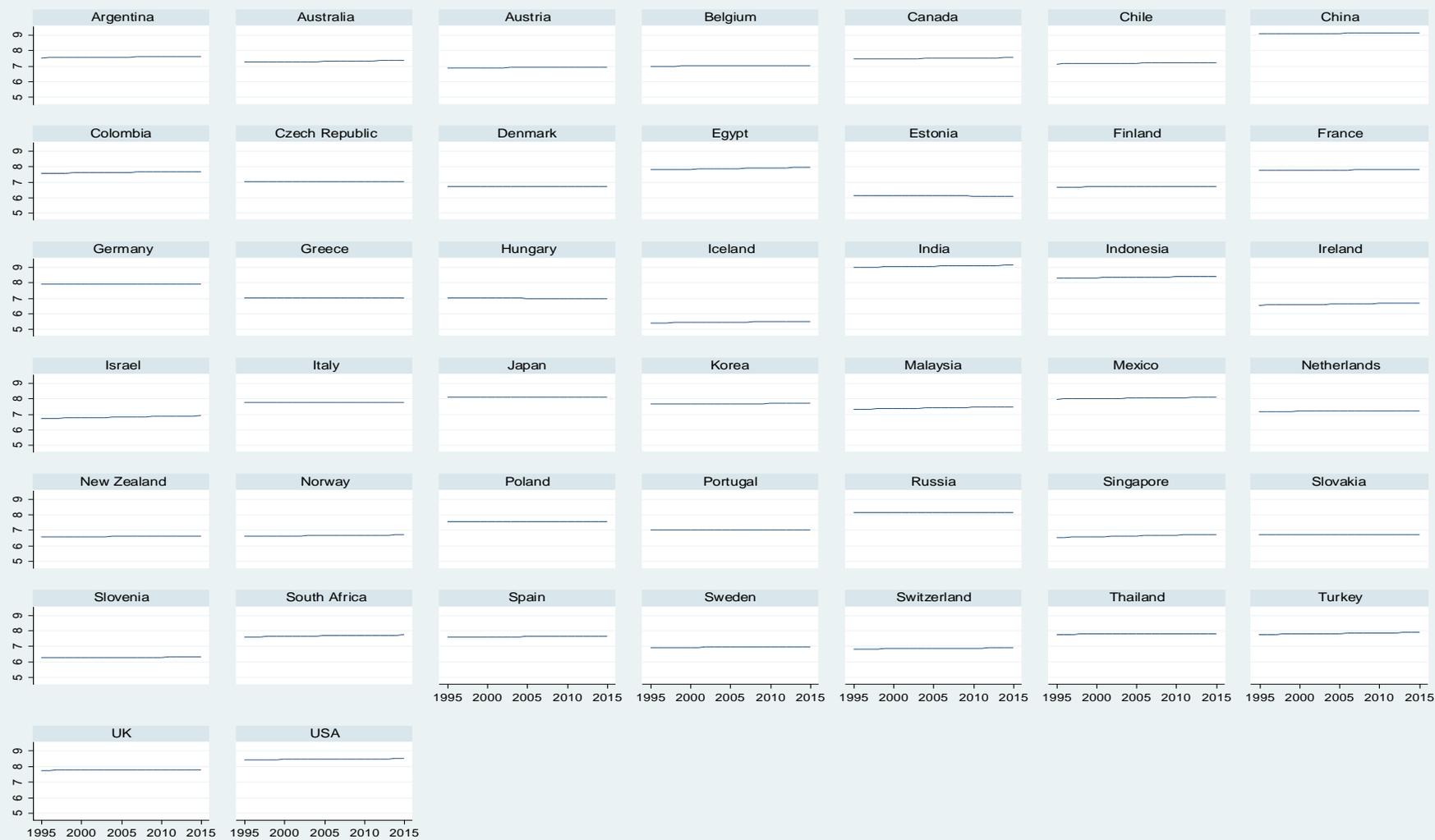
Table A5.9: Country-Specific Time Trends for Real Effective Exchange Rate

Table A5.10: Country-Specific Time Trends for Logarithm of GDP per capita
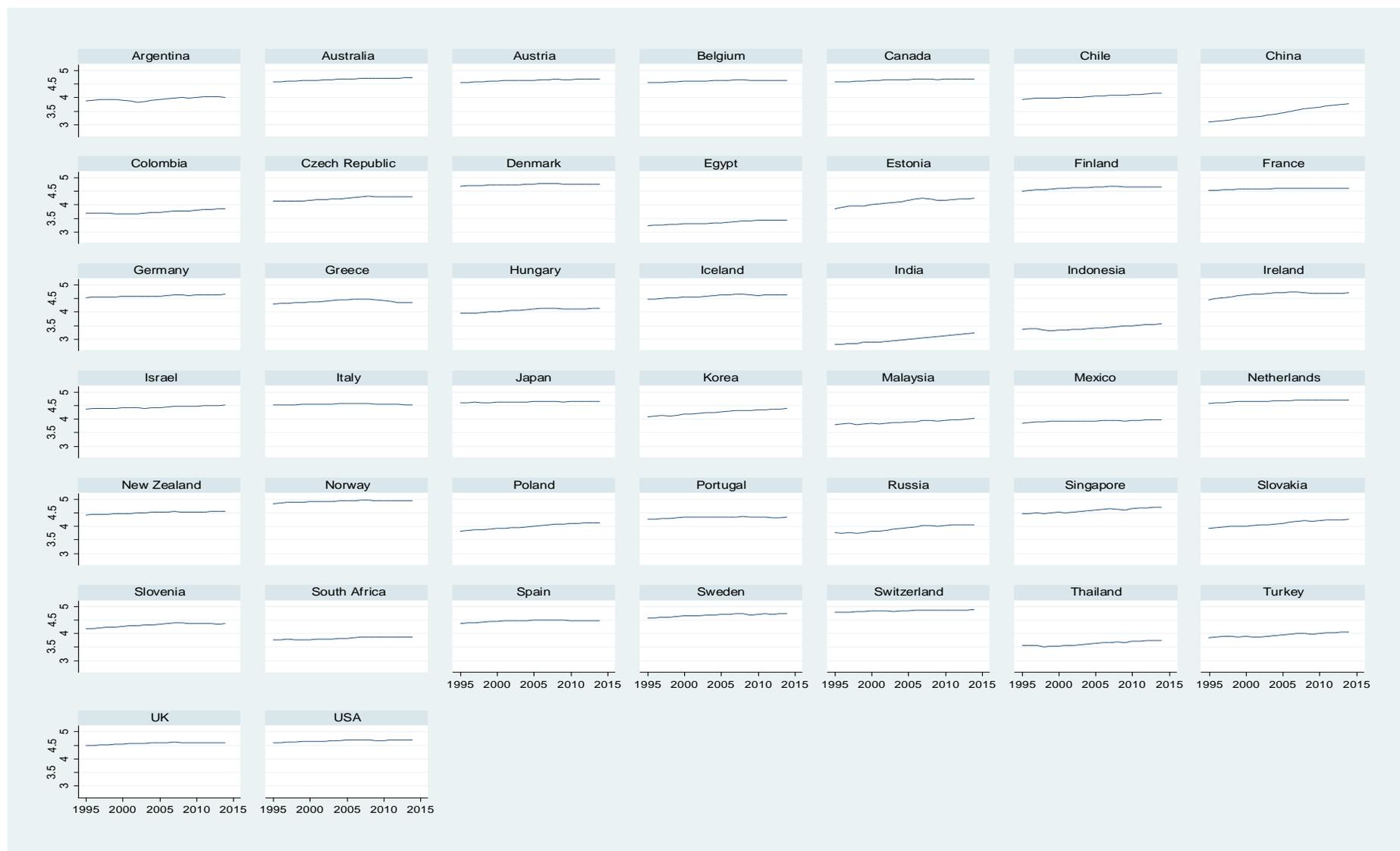
Table A5.11: Country-Specific Time Trends for Overall Globalization
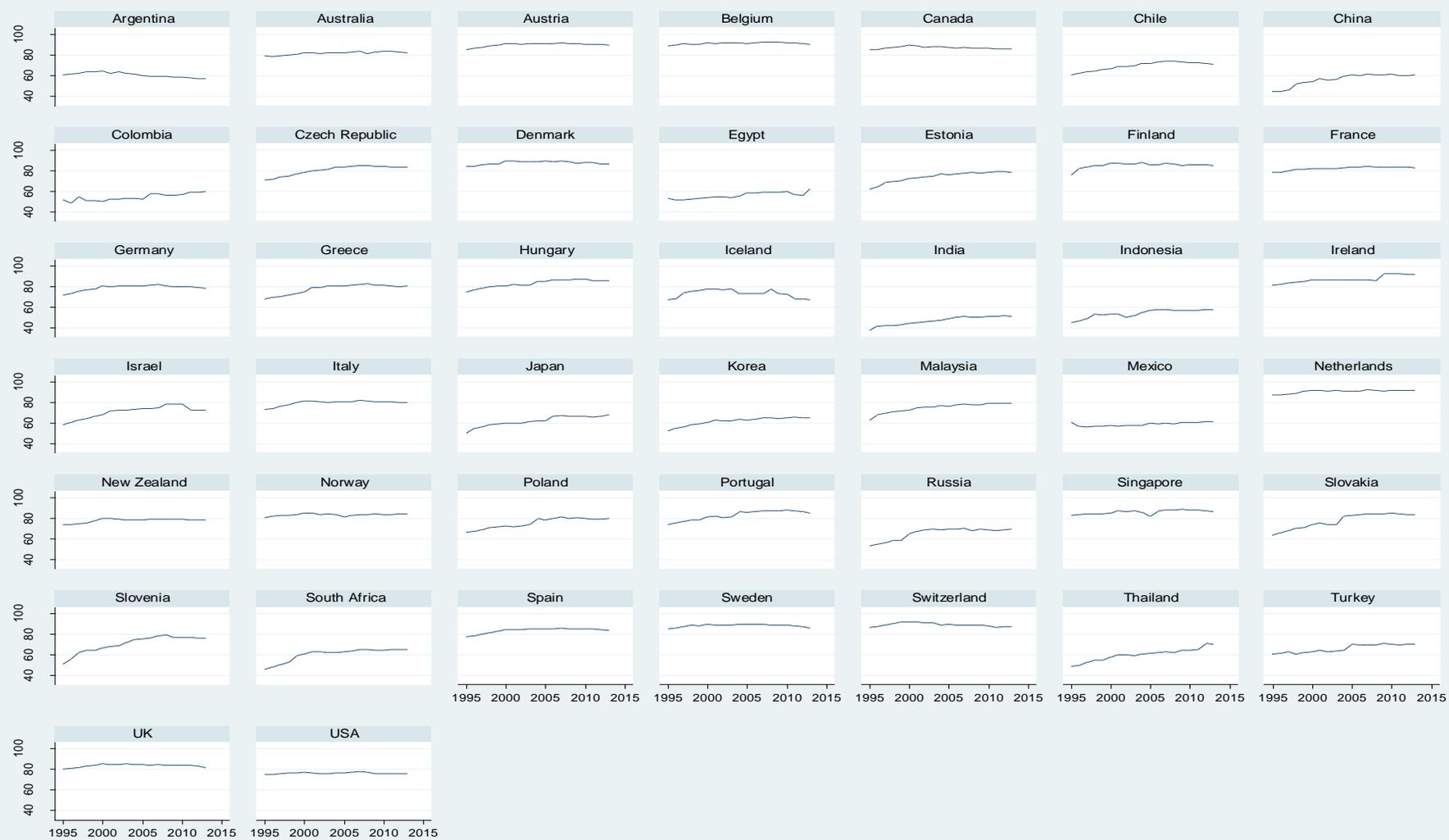
Table A5.12: Country-Specific Time Trends for Real Trade Openness
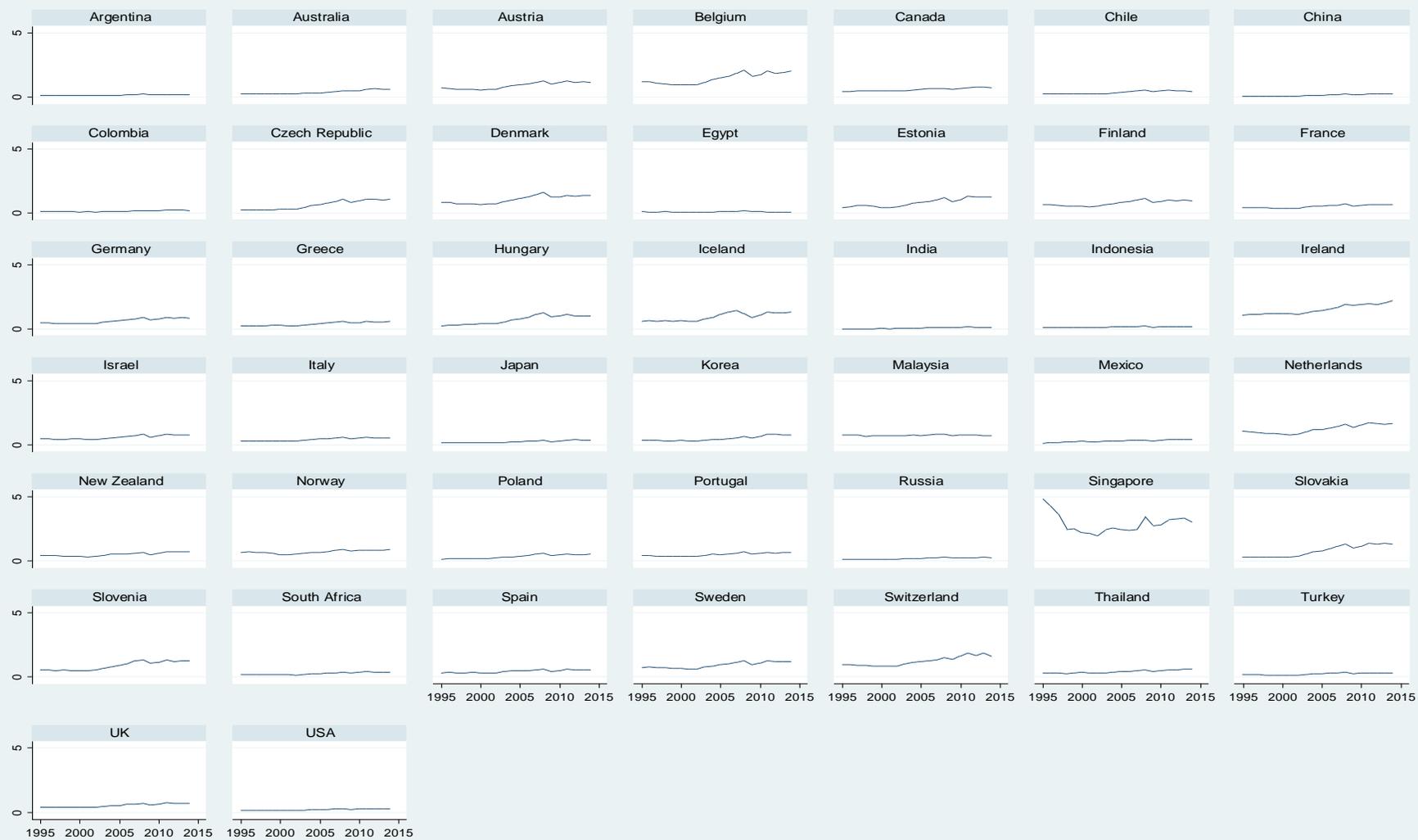
Table A5.13: Country-Specific Time Trends for Labor Quantity Growth
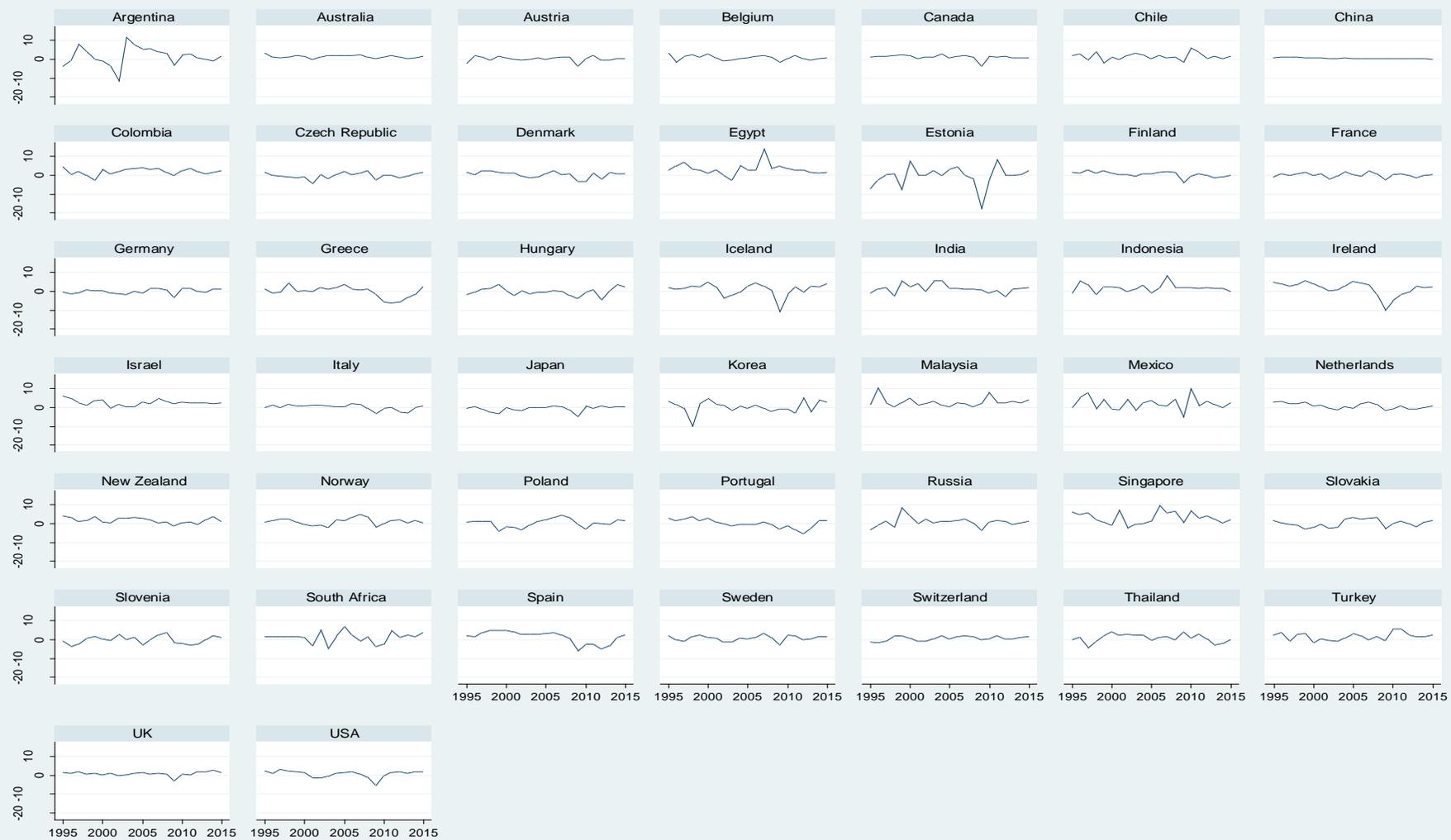
Table A5.14: Country-Specific Time Trends for Labor Force Participation Rate
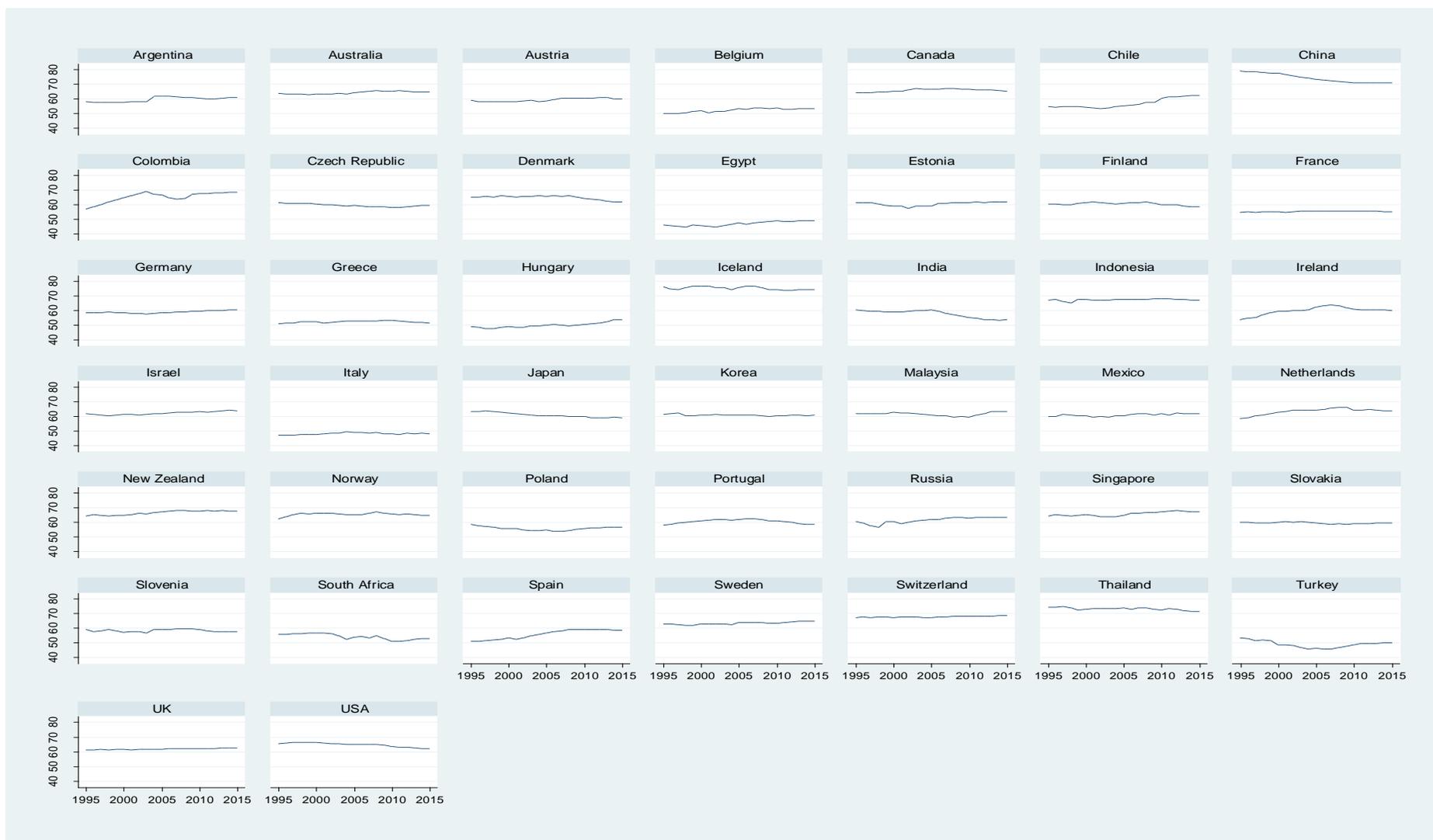
Table A5.15: Country-Specific Time Trends for Capital Account Restrictions

Table A5.16: Country-Specific Time Trends for Logarithm of Output per Worker

Table A5.17: Country-Specific Time Trends for Investment Share

Table A5.18: Country-Specific Time Trends for TFP
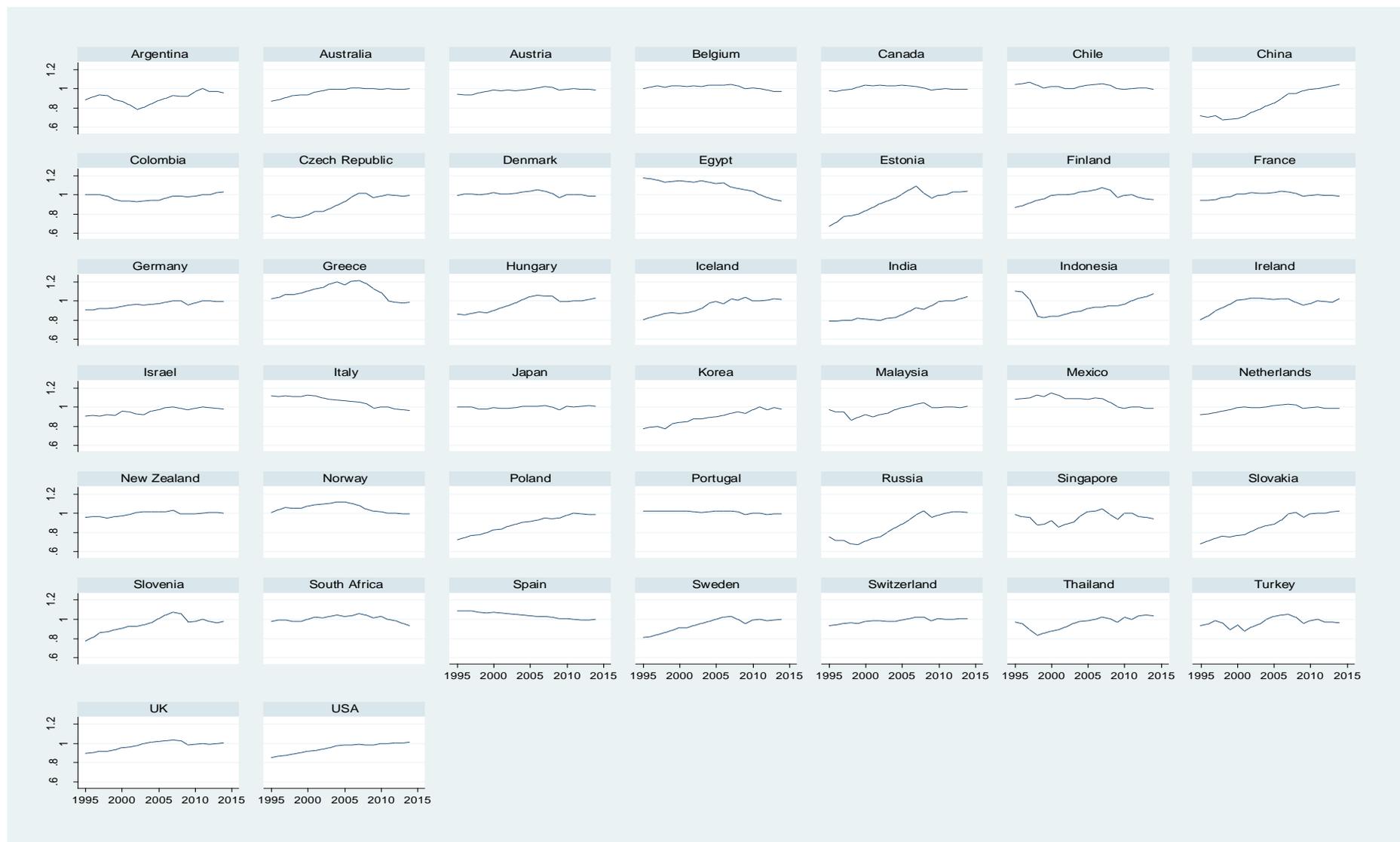
Table A5.19: Country-Specific Time Trends for Human Capital Index
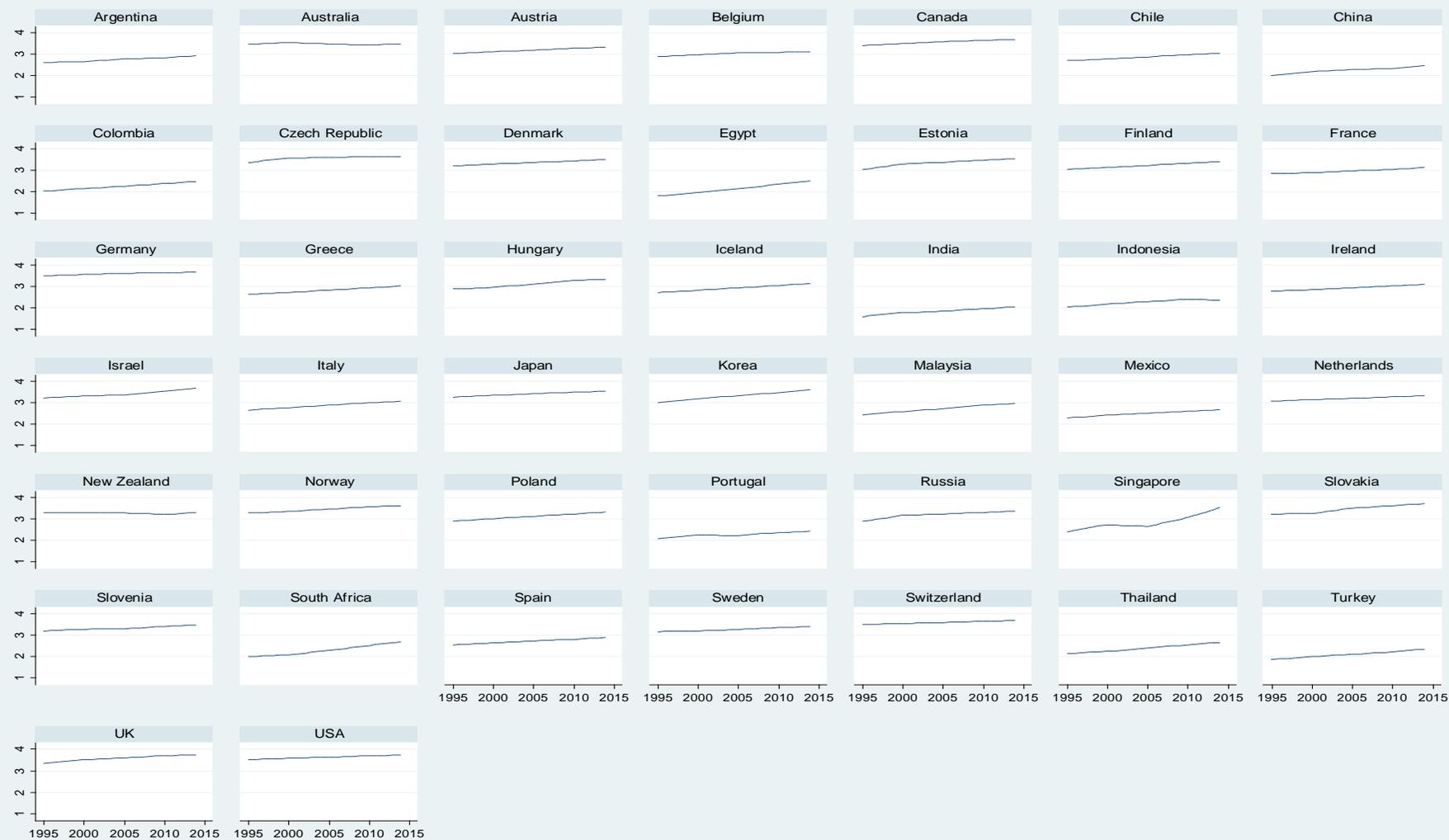
Table A5.20: Country-Specific Time Trends for Human Development Index
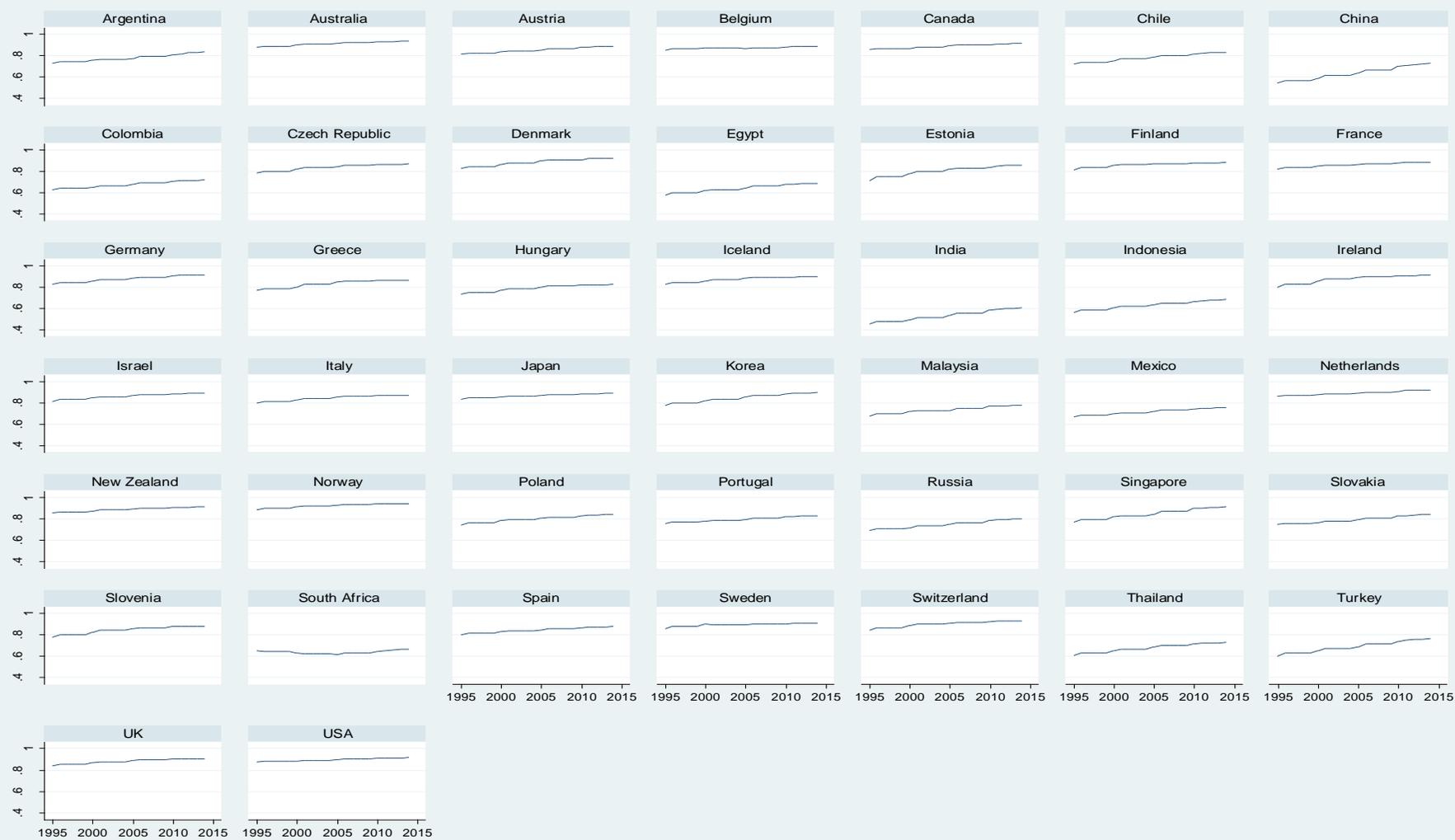
Table A6.1: Model Selection for Linear Panel Models in Stata

Command	Option	Standard error estimates are robust to disturbances that are	Notes
reg, xtreg	vce(robust)	Heteroskedastic	
reg, xtreg	cluster()	Heteroskedastic and autocorrelated	
xtregar		Autocorrelated with AR(1)[a]	
newey		Heteroskedastic and autocorrelated of type MA(q)[b]	
xtgls	panels(), corr()	Heteroskedastic, contemporaneously cross-sectionally correlated, and autocorrelated of type AR(1)	N < T required for feasibility; tends to produce optimistic standard error estimates
xtpcse	correlation()	Heteroskedastic, contemporaneously cross-sectionally correlated, and autocorrelated of type AR(1)	Large-scale panel regressions with xtpcse take a lot of time
xtscc		Heteroskedastic, autocorrelated with MA(q), and cross-sectionally dependent	

[a] AR(1) refers to first-order autoregression.
[b] MA(q) denotes autocorrelation of the moving average type with lag length q.

Source: Hoechle (2007: 285)

APPENDIX A7: TIME TRENDS FOR LABOR SHARE OF INCOME

Figure A7.1: Time Trend for Capital Account Openness

Capital Account Openness
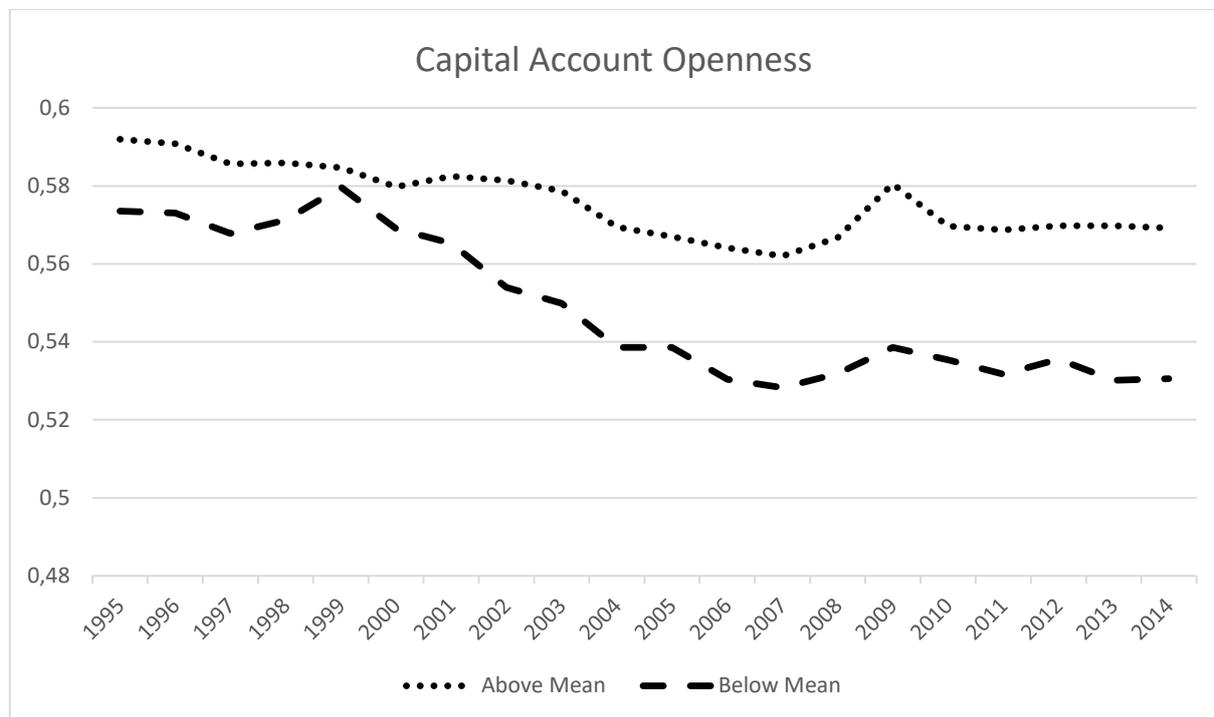
Source: Chinn-Ito KAOPEN Index

Figure A7.2: Time Trend for Financial Development

Financial Development
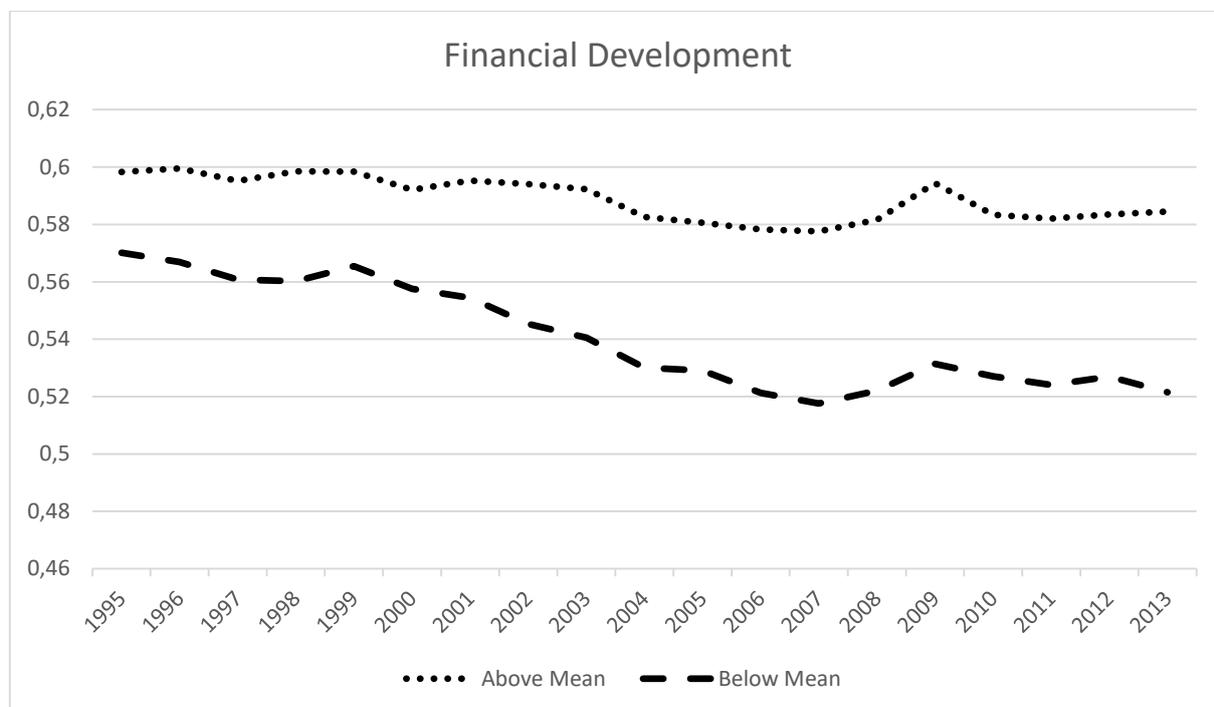
Source: Svirydzenka (2016)

Figure A7.3: Time Trend for Trade Openness
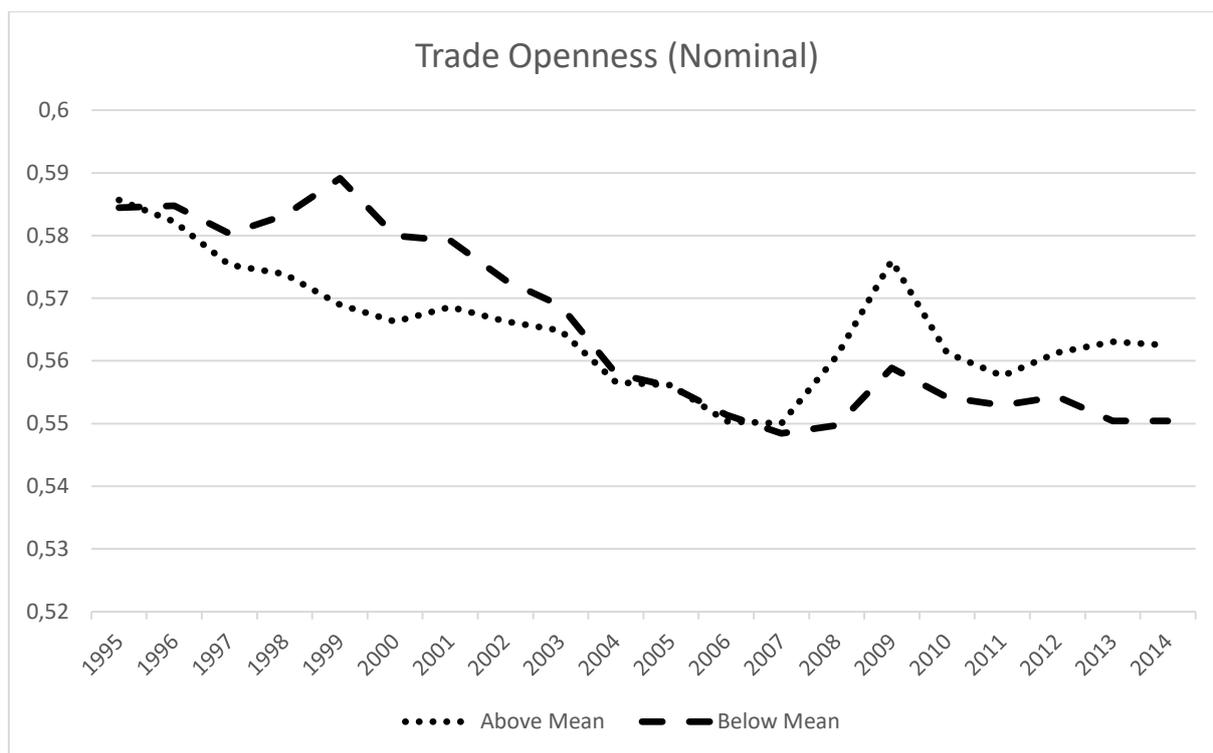
Trade Openness (Nominal)

Source: Author's own calculations based on the World Bank, World Development Indicators Database

Figure A7.4: Time Trend for Government Share

Government Share
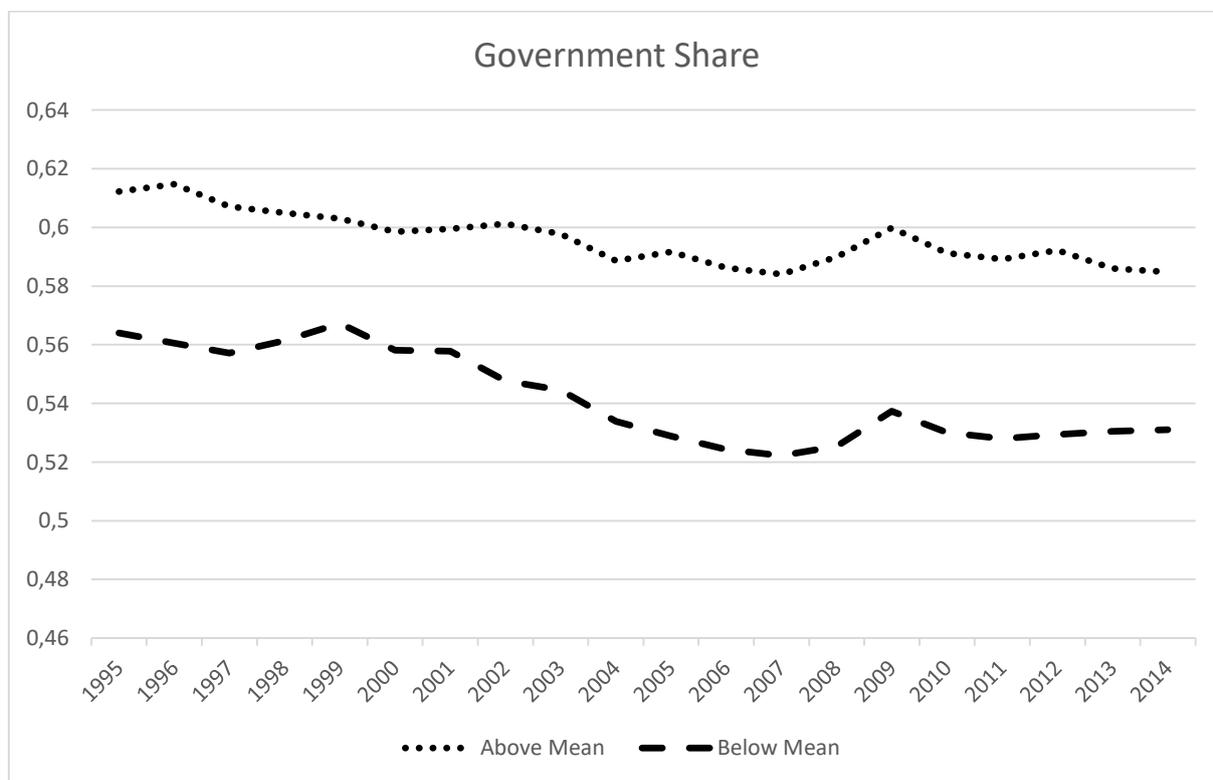
Source: Penn World Tables 9.0

Figure A7.5: Time Trend for Government Effectiveness

Government Effectiveness
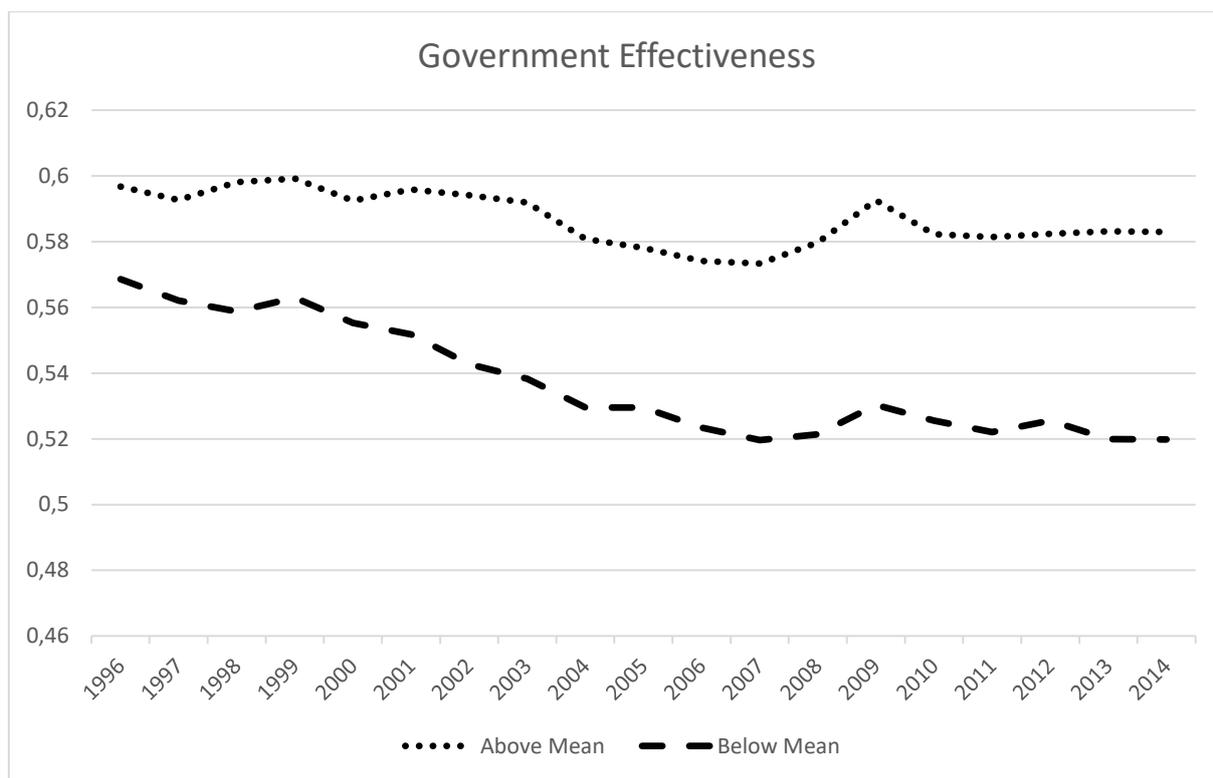
Source: World Governance Indicators Database

Figure A7.6: Time Trend for Unemployment Rate

Unemployment Rate
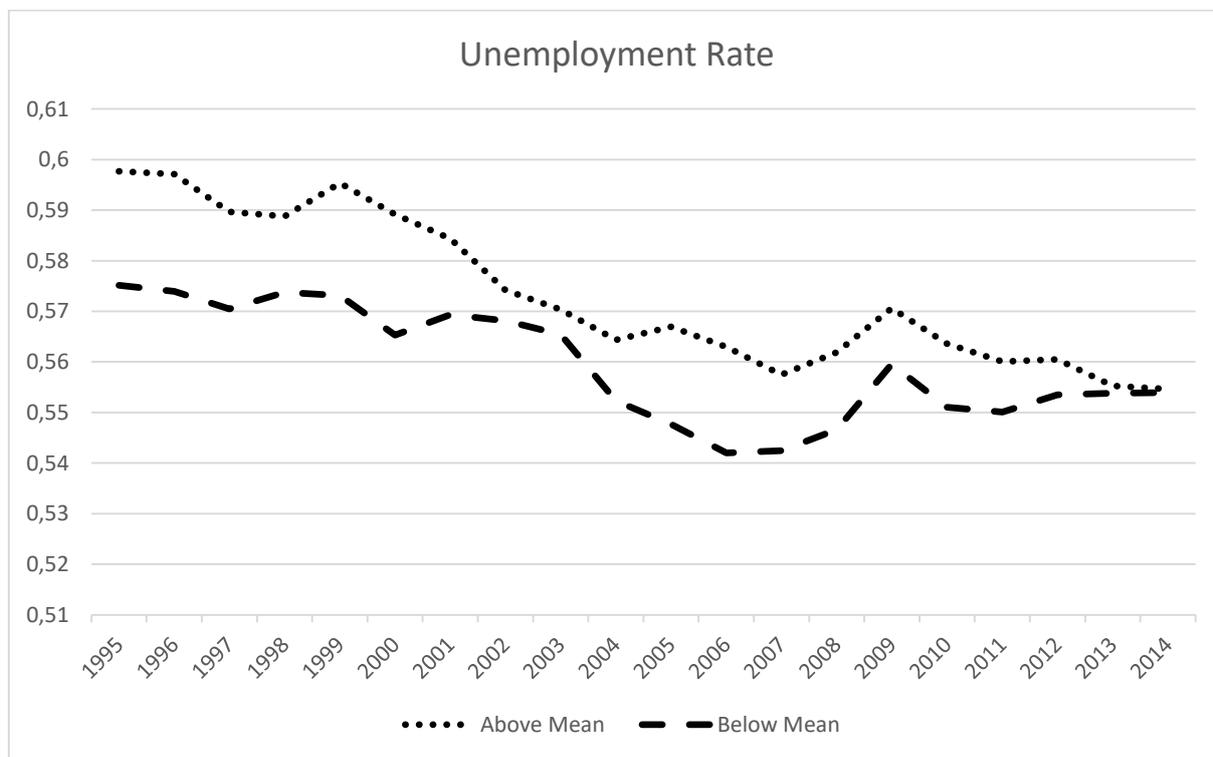
Source: ILO KILM Database

Figure A7.7: Time Trend for GDP per Capita

GDP per Capita
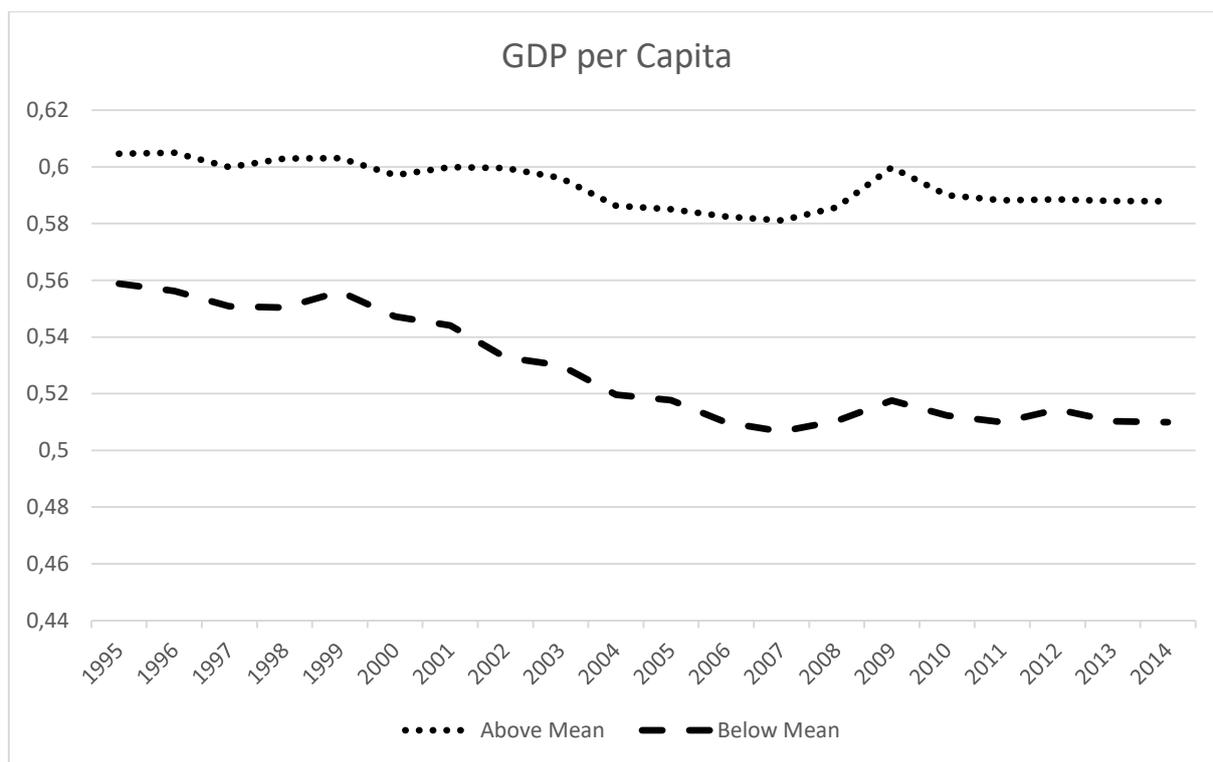
Source: World Bank, World Development Indicators Database

Figure A7.8: Time Trend for Overall Globalization

Overall Globalization
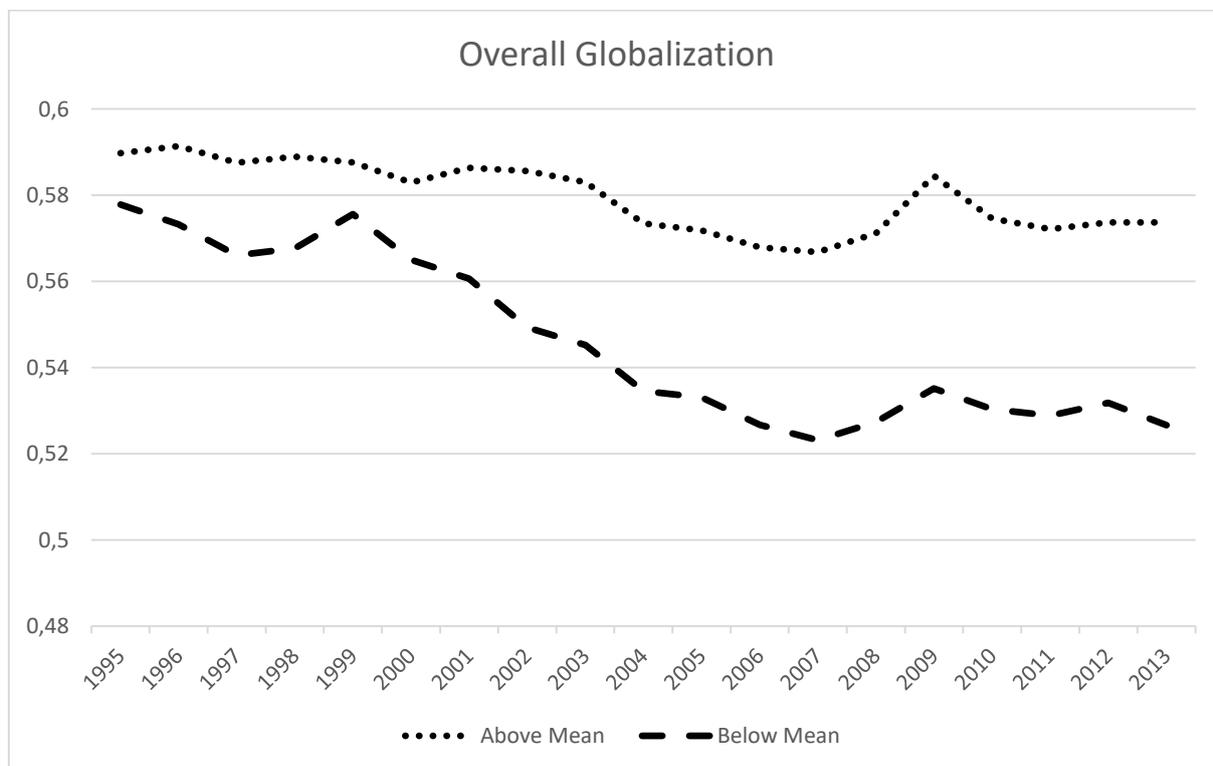
Source: KOF Globalization Index

Figure A7.9: Time Trend for Real Effective Exchange Rate

Real Effective Exchange Rate
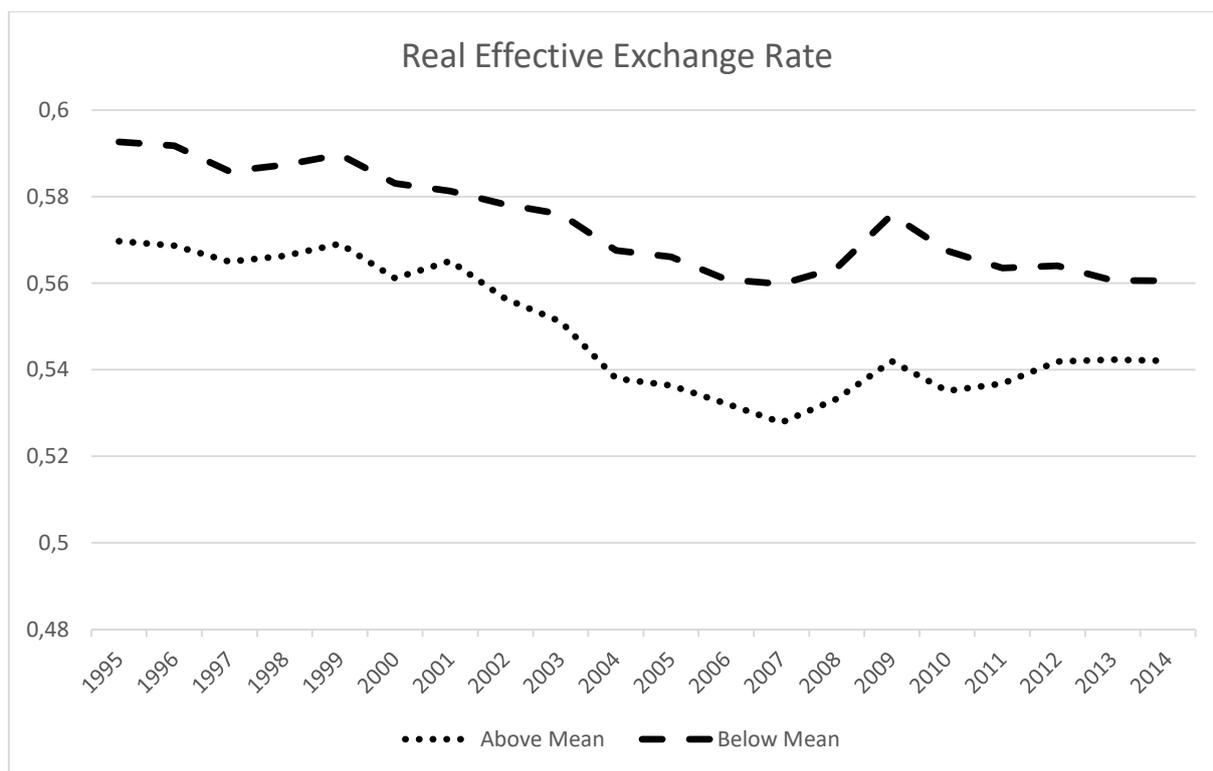
Source: Bruegel REER Database

Figure A7.10: Time Trend for Labor Quantity Growth

Labor Quantity Growth
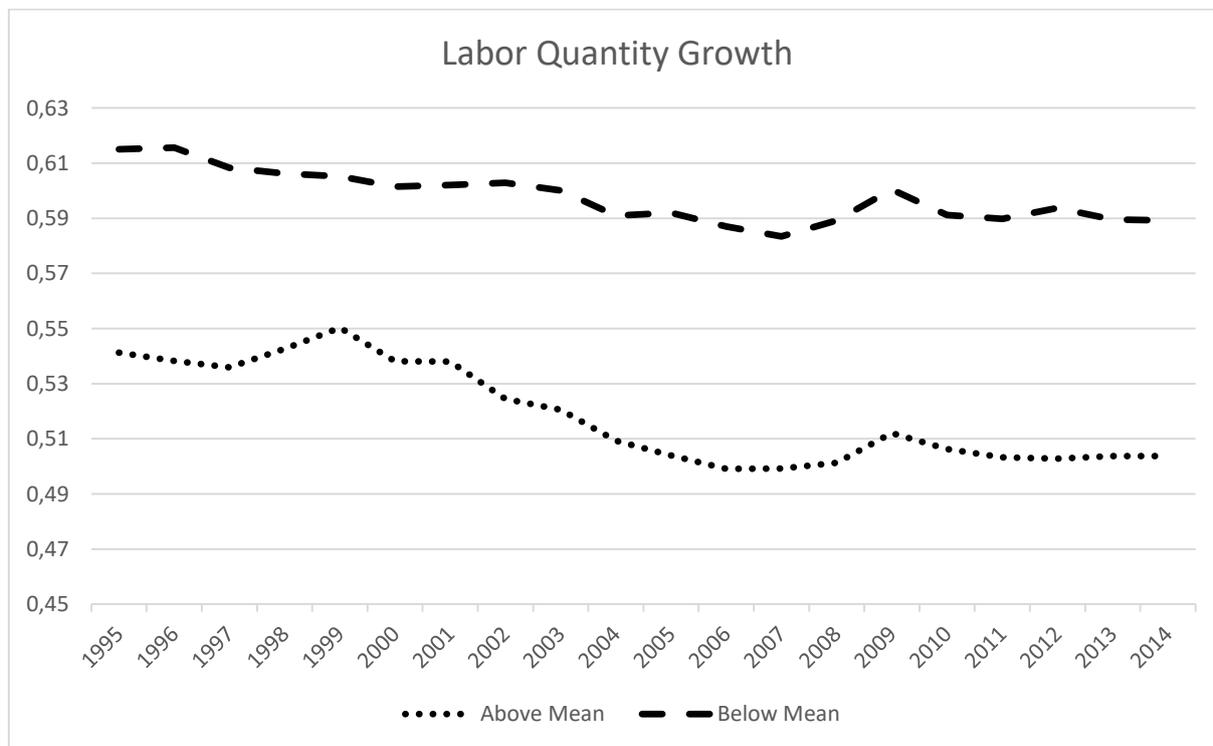
Source: Conference Board, Total Economy Database

Figure A7.11: Time Trend for Real Trade Openness
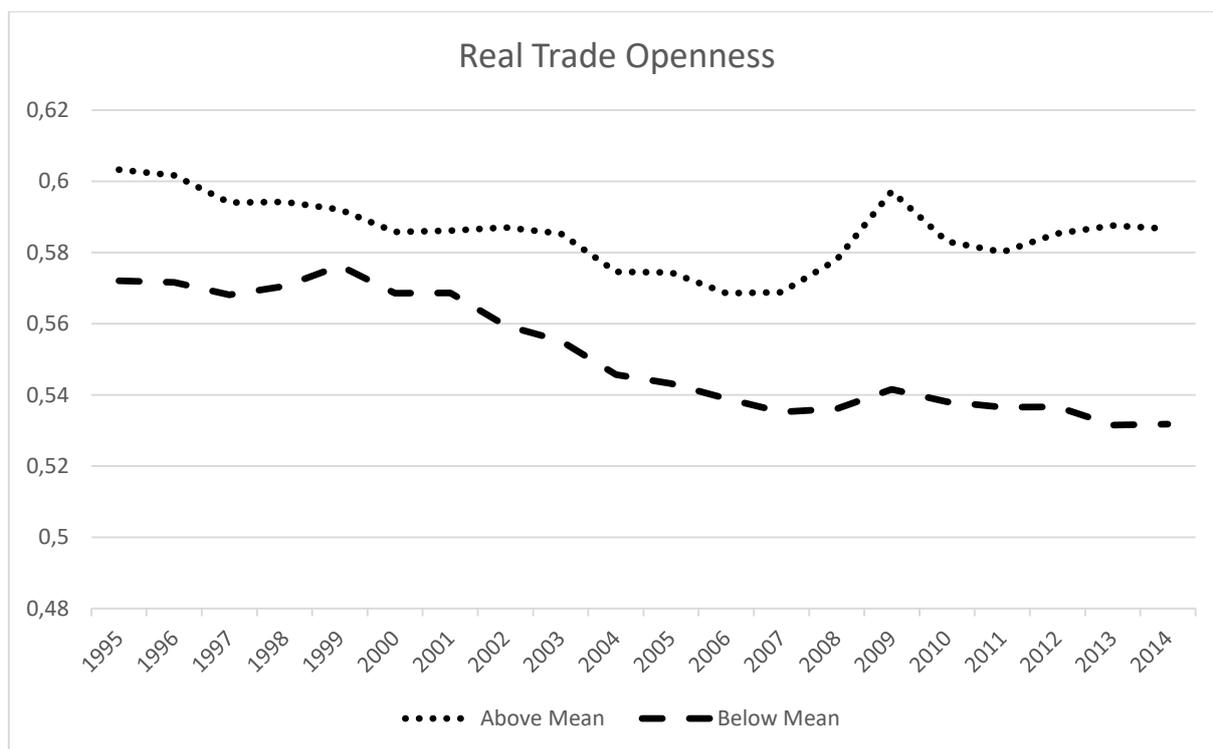
Real Trade Openness

Source: Author's own calculations based on the World Bank, World Development Indicators Database and Penn World Table 9.0

Figure A7.12: Time Trend for Labor Force Participation Rate

Labor Force Participation Rate
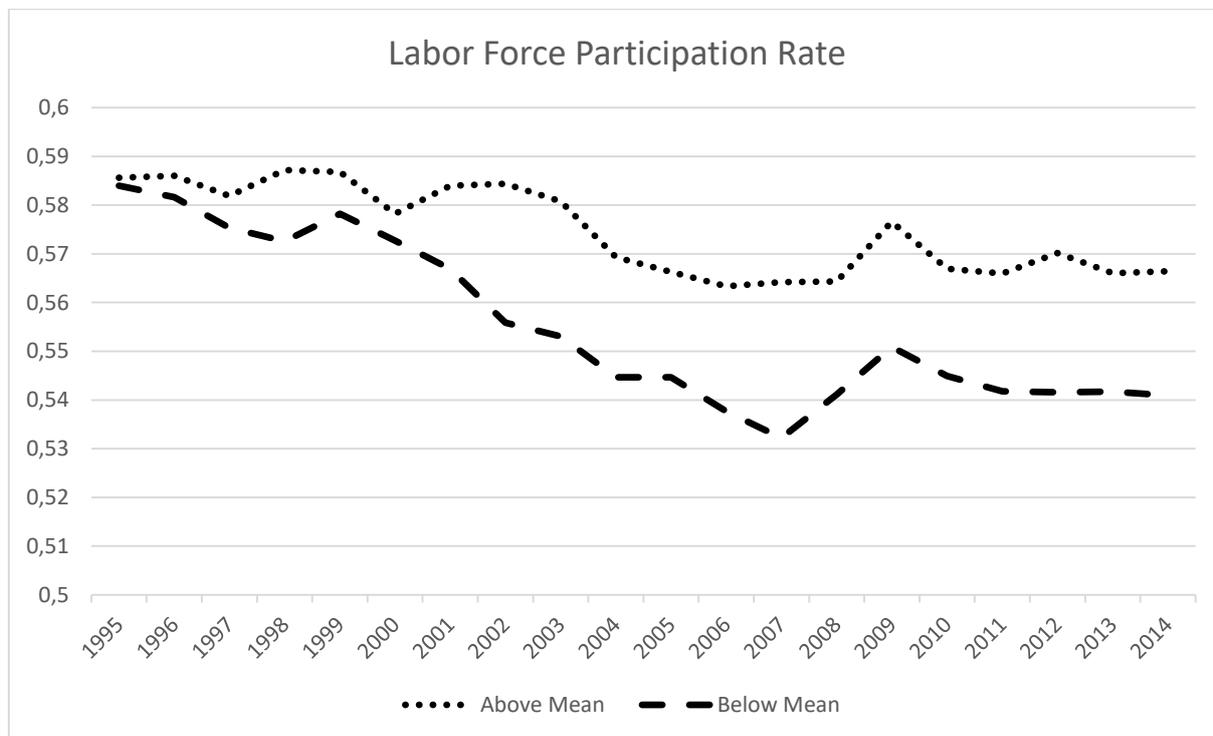
Source: ILO KILM Database

Figure A7.13: Time Trend for Investment Share
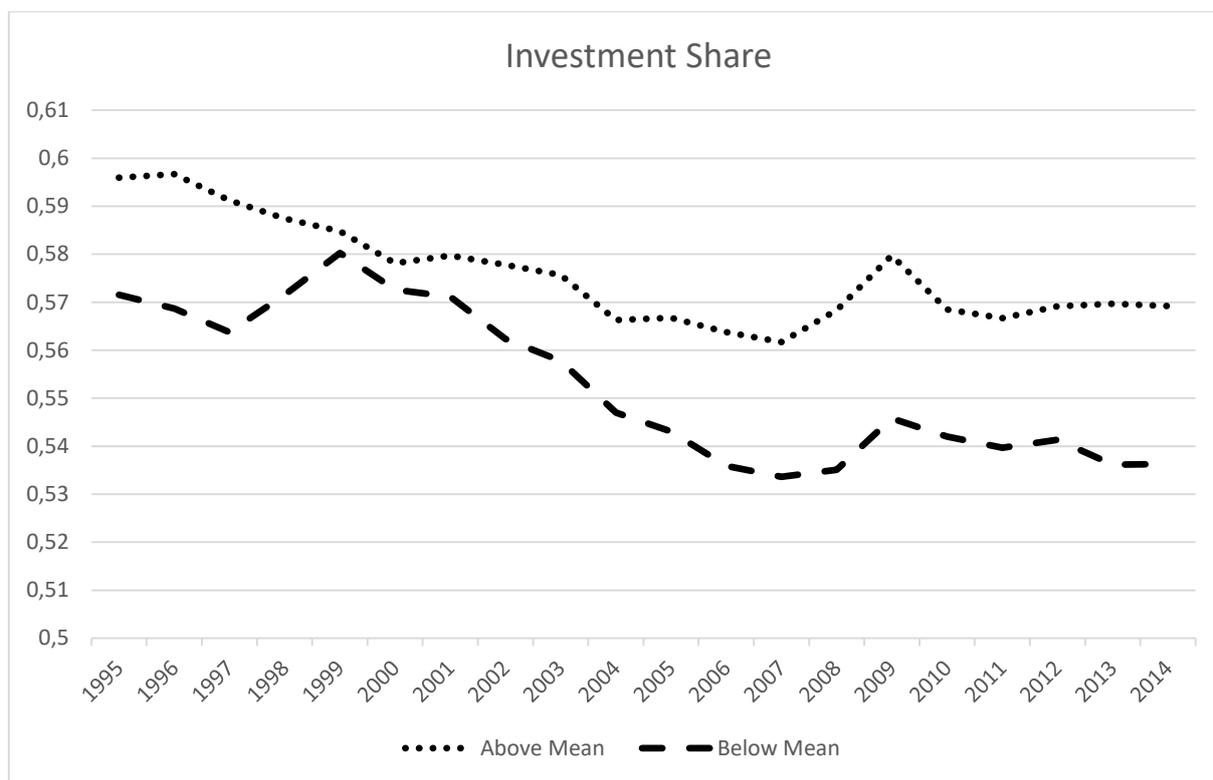

Source: Penn World Table 9.0

Figure A7.14: Time Trend for TFP Index
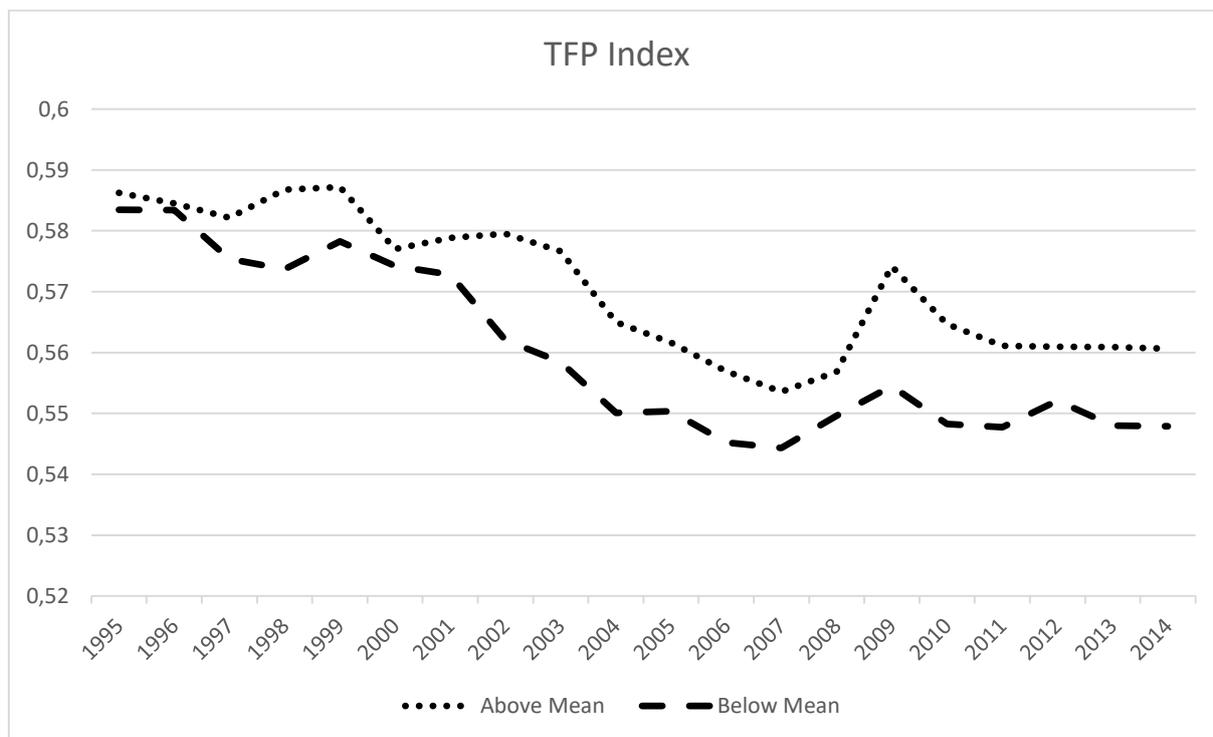
Source: Penn World Table 9.0

370

Figure A7.15: Time Trend for Output per Worker
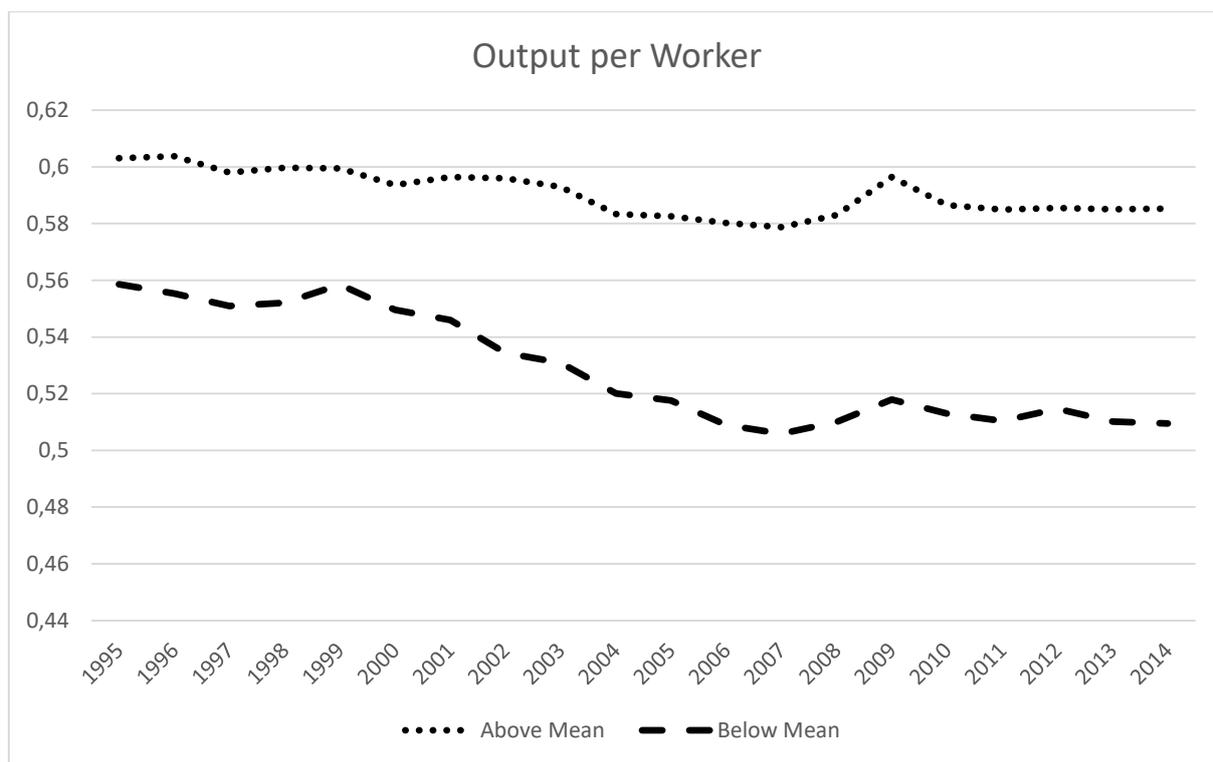
Source: ILO KILM Database

Figure A7.16: Time Trend for Human Capital Index
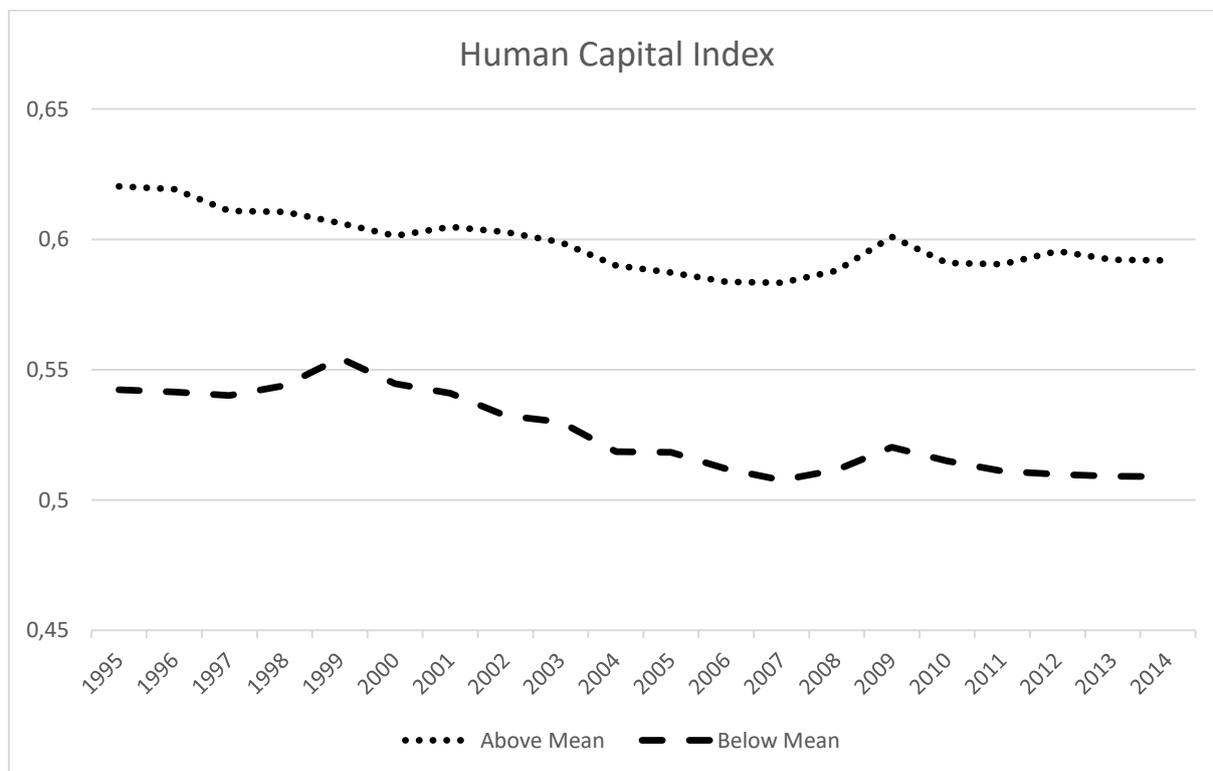
Source: Penn World Table 9.0

Figure A7.17: Time Trend for Capital Account Restrictions

Capital Account Restrictions
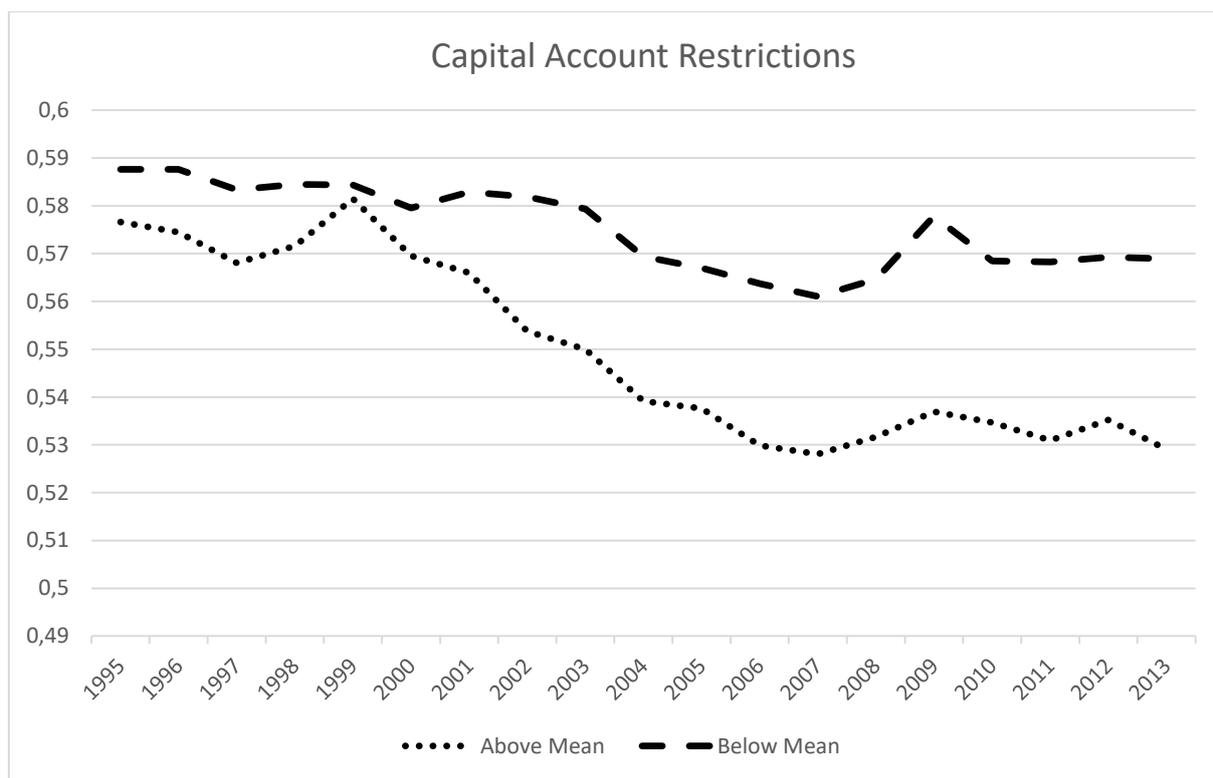
Source: Fernández et al. (2015)

Figure A7.18: Time Trend for Population

Population
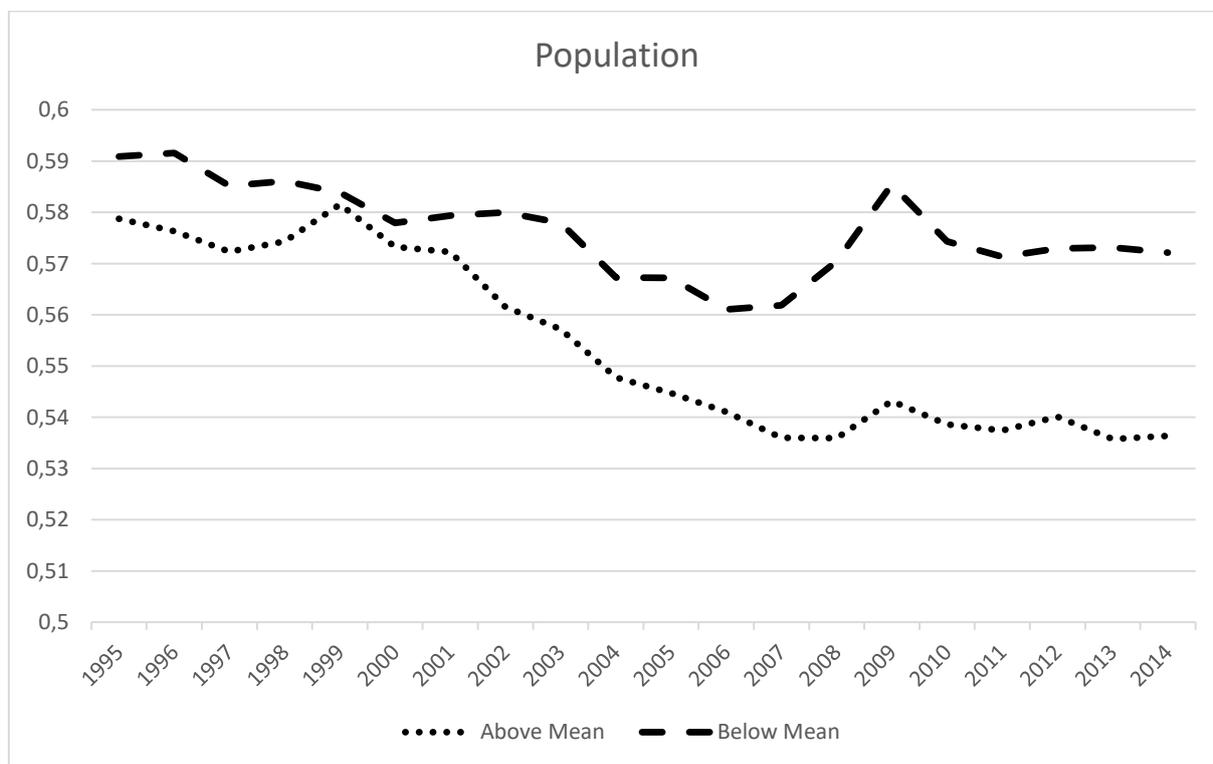
*Source*: ILO KILM Database

Figure A7.19: Time Trend for Human Development Index
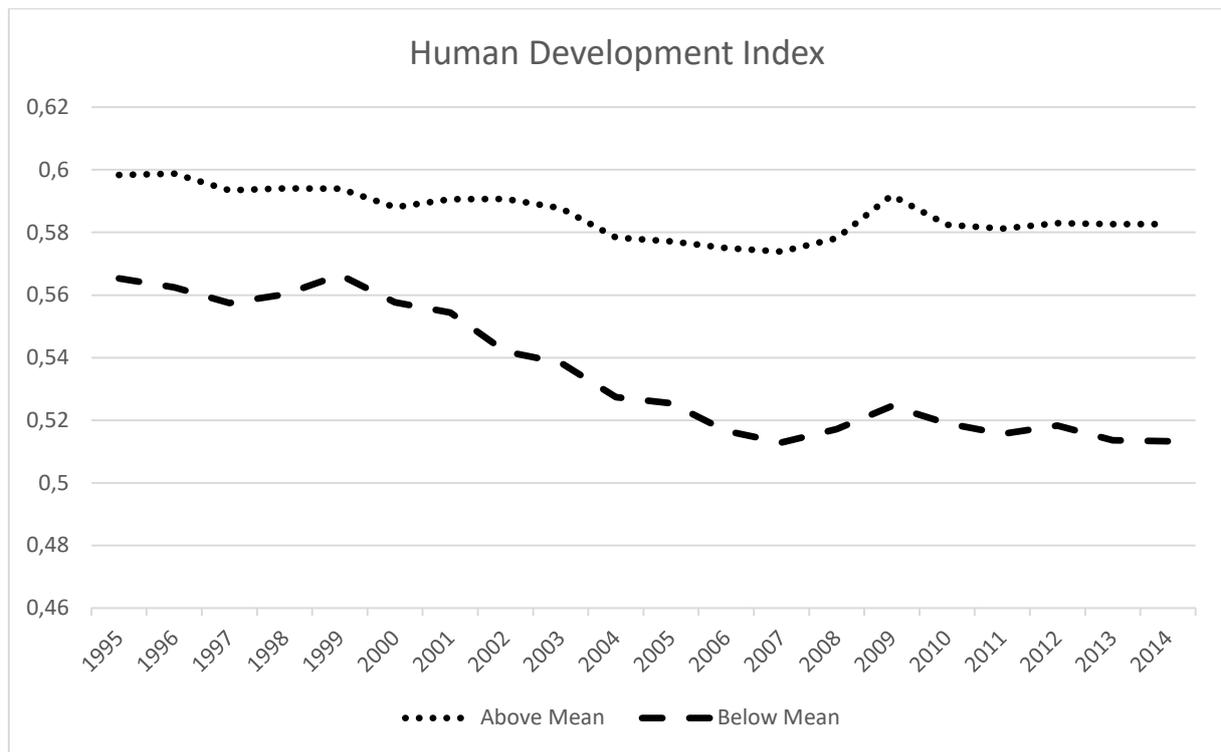
Source: United Nations Development Programme (UNDP)

APPENDIX A8: CORRELATION MATRIX

Table A8.1: Correlation Matrix

	Trade Openness	Real Trade Openness	Capital Account Openness	Capital Account Restrictions	Financial Development	Government Share	Government Effectiveness	Overall Globalization	Unemployment Rate
Trade Openness	1.0000								
Real Trade Openness	0.8368	1.0000							
Capital Account Openness	0.1754	0.4173	1.0000						
Capital Account Restrictions	-0.0865	-0.3556	-0.8668	1.0000					
Financial Development	0.1702	0.4236	0.5625	-0.5718	1.0000				
Government Share	0.0631	0.0287	-0.0332	0.0270	-0.1520	1.0000			
Government Effectiveness	0.3205	0.5693	0.6580	-0.6482	0.7408	-0.0271	1.0000		
Overall Globalization	0.3874	0.6075	0.7160	-0.6832	0.6676	0.1838	0.8039	1.0000	
Unemployment Rate	-0.2459	-0.2372	-0.1410	0.0277	-0.2330	0.0959	-0.2352	-0.0879	1.0000
Log (Population)	-0.4096	-0.5520	-0.3685	0.4367	-0.2296	-0.2074	-0.5907	-0.5767	0.0678
Labor Quantity Growth	0.0870	0.0118	-0.0576	0.1021	-0.1130	-0.2133	-0.0658	-0.1418	-0.1333
Labor Force Participation Rate	0.1049	0.1546	-0.0508	0.1771	0.2131	-0.0635	0.2162	-0.0316	-0.4628
Real Effective Exchange Rate	-0.0437	0.0406	0.1170	-0.1080	-0.0503	-0.2232	-0.0524	-0.1089	0.0491
Investment Share	0.3706	0.4330	0.1185	-0.0509	0.3253	-0.1353	0.3111	0.1901	-0.4041
TFP	0.0082	0.1501	0.4164	-0.4211	0.2570	-0.2367	0.2137	0.2839	0.0280
Log (Output per Worker)	0.1569	0.4832	0.6905	-0.7647	0.7381	0.0395	0.8463	0.8160	-0.0512
Human Capital Index	0.0781	0.3126	0.5449	-0.5259	0.5890	0.1826	0.6526	0.6352	-0.2105
Log (GDP per Capita)	0.1893	0.5110	0.7145	-0.7541	0.7635	0.0327	0.8630	0.8338	-0.1467
Human Development Index	0.1845	0.4880	0.6967	-0.7064	0.7203	0.1090	0.8001	0.8089	-0.1859

	Labor Quantity Growth	Labor Force Participation Rate	Real Effective Exchange Rate	Investment Share	TFP	Log (Output per Worker)	Human Capital	Log (GDP per Capita)	Human Development Index
Labor Quantity Growth	1.0000								
Labor Force Participation Rate	0.0312	1.0000							
Real Effective Exchange Rate	0.0397	-0.0358	1.0000						
Investment Share	0.0780	0.3148	0.0966	1.0000					
TFP	0.0596	-0.2874	0.1728	-0.0127	1.0000				
Log (Output per Worker)	-0.1680	-0.0226	-0.0613	0.1576	0.3345	1.0000			
Human Capital	-0.1924	0.1675	-0.0324	0.0841	0.0417	0.7303	1.0000		
Log (GDP per Capita)	-0.1580	0.1046	-0.0421	0.2063	0.3096	0.9813	0.7819	1.0000	
Human Development Index	-0.1823	0.1185	-0.0260	0.1878	0.2584	0.9218	0.8671	0.9518	1.0000

APPENDIX A9: OECD AND NON-OECD COUNTRY LISTS

Table A9.1: OECD and Non-OECD Country Lists

OECD Countries	Non-OECD Countries
Australia (1)	Argentina (34)
Austria (2)	China (35)
Belgium (3)	Colombia (36)
Canada (4)	Egypt (37)
Chile (5)	India (38)
Czech Republic (6)	Indonesia (39)
Denmark (7)	Malaysia (40)
Estonia (8)	Russian Federation (41)
Finland (9)	Singapore (42)
France (10)	South Africa (43)
Germany (11)	Thailand (44)
Greece (12)	
Hungary (13)	
Iceland (14)	
Ireland (15)	
Israel (16)	
Italy (17)	
Japan (18)	
South Korea (19)	
Mexico (20)	
Netherlands (21)	
New Zealand (22)	
Norway (23)	
Poland (24)	
Portugal (25)	
Slovakia (26)	
Slovenia (27)	
Spain (28)	
Sweden (29)	
Switzerland (30)	
Turkey (31)	
United Kingdom (32)	
United States of America (33)	
* Please note that the numbers in () show the country id using in Stata.	

APPENDIX A10: LIST OF COUNTRY GROUPS

Table A10.1: List of Country Groups

Advanced Countries	Euro Area	G7	Developing and Emerging Countries	G20	OECD	Non-OECD Countries	All Countries
Australia	Austria	Canada	Argentina	Argentina	Australia	Argentina	Argentina
Austria	Belgium	France	Chile	Australia	Austria	China	Australia
Belgium	Estonia	Germany	China	Canada	Belgium	Colombia	Austria
Canada	Finland	Italy	Colombia	China	Canada	Egypt	Belgium
Czech Republic	France	Japan	Egypt	China	Chile	India	Canada
Denmark	Germany	UK	Hungary	France	Czech Republic	Indonesia	Chile
Estonia	Greece	USA	India	Germany	Denmark	Malaysia	China
Finland	Ireland		Indonesia	India	Estonia	Russia	Colombia
France	Italy		Malaysia	Indonesia	Finland	Singapore	Czech Republic
Germany	Netherlands		Mexico	Italy	France	South Africa	Denmark
Greece	Portugal		Poland	Japan	Germany	Thailand	Egypt
Iceland	Slovakia		Russia	Mexico	Greece		Estonia
Ireland	Slovenia		South Africa	Russia	Hungary		Finland
Israel	Spain		Thailand	South Africa	Iceland		France
Italy			Turkey	Turkey	Ireland		Germany
Japan				UK	Israel		Greece
Netherlands				USA	Italy		Hungary
New Zealand					Japan		Iceland
Norway					Mexico		India
Portugal					Netherlands		Indonesia
Singapore					New Zealand		Ireland
Slovakia					Norway		Israel
Slovenia					Poland		Italy
South Korea					Portugal		Japan
Spain					Slovakia		Malaysia
Sweden					Slovenia		Mexico
Switzerland					South Korea		Netherlands
UK					Spain		New Zealand
USA					Sweden		Norway
					Switzerland		Poland
					Turkey		Portugal
					UK		Russia
					USA		Singapore
							Slovakia
							Slovenia
							South Africa
							South Korea
							Spain
							Sweden
							Switzerland
							Thailand
							Turkey
							UK
							USA

APPENDIX A11: LIST OF COUNTRY GROUPS (MADDISON, 1998-2015)

Table A11.1: List of Country Groups (Maddison, 1998-2015)

Northern, Southern and Western Europe	Western Offshoots	Latin America	Eastern Europe & former USSR	Asia (excluding Japan)	Africa
Albania	Australia	Argentina	Belarus	Afghanistan	Algeria
Austria	Canada	Belize	Bulgaria	Bangladesh	Angola
Belgium	New Zealand	Bolivia	Czech Republic	Bhutan	Benin
Bosnia and Herzegovina	United States	Brazil	Hungary	Brunei Darussalam	Botswana
Croatia		Chile	Moldova	Cambodia	Burkina Faso
Denmark		Colombia	Poland	China	Burundi
Estonia		Costa Rica	Romania	Hong Kong SAR, China	Cameroon
Finland		Ecuador	Russian Federation	India	Cabo Verde
France		El Salvador	Slovak Republic	Indonesia	Chad
Germany		French Polynesia	Ukraine	Iran, Islamic Rep.	Comoros
Greece		Guatemala		Korea, Dem. People's Rep.	Congo, Dem. Rep.
Iceland		Guyana		Korea, Rep.	Congo, Rep.
Ireland		Honduras		Lao PDR	Cote d'Ivoire
Italy		Mexico		Macao SAR, China	Djibouti
Latvia		Nicaragua		Malaysia	Egypt, Arab Rep.
Lithuania		Panama		Maldives	Equatorial Guinea
Luxembourg		Paraguay		Mongolia	Eritrea
Macedonia, FYR		Peru		Myanmar	Ethiopia
Malta		Suriname		Nepal	Gabon
Montenegro		Uruguay		Pakistan	Gambia, The
Netherlands		Venezuela, RB		Philippines	Ghana
Norway				Singapore	Guinea
Portugal				Sri Lanka	Guinea-Bissau
Serbia				Thailand	Kenya
Slovenia				Timor-Leste	Lesotho
Spain				Vietnam	Liberia
Sweden					Libya
Switzerland					Madagascar
United Kingdom					Malawi
					Mali
					Mauritania
					Mauritius
					Morocco
					Mozambique
					Namibia
					Niger
					Nigeria
					Rwanda
					Sao Tome and Principe
					Senegal
					Seychelles
					Sierra Leone
					Somalia
					South Africa
					South Sudan
					Sudan
					Swaziland
					Tanzania
					Togo
					Tunisia
					Uganda
					Zambia
					Zimbabwe

APPENDIX A12: GDP SHARES OF OECD AND NON-OECD TO WORLD GDP

Table A12.1: GDP Shares of OECD and Non-OECD to World GDP

	OECD + Non-OECD (% of World GDP)	OECD (% of World GDP)	Non-OECD (% of World GDP)
1980	0.848971	0.782519	0.066452
1981	0.846491	0.777915	0.068576
1982	0.846537	0.774517	0.07202
1983	0.850166	0.774351	0.075815
1984	0.855268	0.781262	0.074006
1985	0.858024	0.78323	0.074794
1986	0.86743	0.801641	0.065788
1987	0.875765	0.815377	0.060388
1988	0.881209	0.821635	0.059575
1989	0.90376	0.820194	0.083565
1990	0.90723	0.826724	0.080506
1991	0.905452	0.826892	0.078561
1992	0.914827	0.836631	0.078196
1993	0.913803	0.834229	0.079574
1994	0.912276	0.829572	0.082704
1995	0.907478	0.822841	0.084636
1996	0.902478	0.812165	0.090313
1997	0.897762	0.802693	0.095069
1998	0.899874	0.813153	0.086721
1999	0.909484	0.823731	0.085753
2000	0.905529	0.814644	0.090886
2001	0.907732	0.812094	0.095637
2002	0.910281	0.816069	0.094212
2003	0.911372	0.814044	0.097328
2004	0.907897	0.80452	0.103378
2005	0.897711	0.785374	0.112337
2006	0.888541	0.764526	0.124015
2007	0.881515	0.742174	0.13934
2008	0.869674	0.716113	0.153561
2009	0.872244	0.70694	0.165305
2010	0.860158	0.675251	0.184907
2011	0.854736	0.652648	0.202088
2012	0.852823	0.637861	0.214962
2013	0.851794	0.627164	0.22463
2014	0.853794	0.623885	0.229909
2015	0.863325	0.623265	0.24006

Source: Author's own calculations based on the World Bank, World Development Indicators Database

APPENDIX A13: VARIABLES AND EMPIRICAL CODES IN STATA

Table A13.1: Variables and Empirical Codes in Stata

Variables	Codes
Share of Labor Compensation (in GDP at current national prices)	labsh_pwt
(Nominal) Trade Openness	tradeopen
Capital Account Openness	kaopen
Financial Development	fd
Government Share	csh_g
Government Effectiveness	goveff
Unemployment Rate (% of Total Labor Force)	unemprate
Logarithm of Total Population	logpop0
Real Effective Exchange Rate	reer
Overall Globalization	ovglob
(Real) Trade Openness	rtradeopen
Labor Quantity Growth (Log Change, %)	labquangr
Labor Force Participation Rate	labforparrt
Overall Capital Account Restrictions	ka
Logarithm of Output per Worker	logoutperwor
Investment Share	csh_i
TFP (at constant national prices, 2011=1)	rtfpna
Human Capital	hc
Logarithm of GDP per Capita (constant 2010$)	loggdppercap
Human Development Index	hdi
Interactions (Capital Account Openness + Financial Development)	kaopenfd
Interactions (Overall Globalization + Financial Development)	ovglobfd
Interactions (Capital Account Restrictions + Financial Development)	karestfd
Interactions (Government Share + Government Effectiveness)	govsheff
Interactions (Nominal Trade Openness + Human Capital Index)	tradeopenhc
Interactions (Overall Globalization + Human Capital Index)	ovglobhc
Interactions (Real Trade Openness + Human Capital Index)	rtradeopenhc
Interactions (Logarithm of Output per Worker + Human Capital Index)	outperworhc
Interactions (Investment Share + TFP)	invsharetfp

APPENDIX A14: VARIABLES AND BALANCE PERIODS

Table A14.1: Variables and Balance Periods

Variable Name	Codes	Balance Period
Share of Labor Compensation (in GDP at current national prices)	labsh_pwt	1995-2014
(Nominal) Trade Openness	tradeopen	1995-2014
Capital Account Openness	kaopen	1995-2014
Financial Development	fd	1995-2013
Government Share	csh_g	1995-2014
Government Effectiveness	goveff	1996-2015
Unemployment Rate (% of Total Labor Force)	unemprate	1995-2015
Logarithm of Total Population	logpop0	1995-2015
Real Effective Exchange Rate	reer	1995-2015
Logarithm of GDP per Capita (constant 2010 US$)	loggdppercap	1995-2014
Overall Globalization	ovglob	1995-2013
(Real) Trade Openness	rtradeopen	1995-2014
Labor Quantity Growth (Log Change, %)	labquangr	1995-2015
Labor Force Participation Rate	labforparrt	1995-2015
Overall Capital Account Restrictions	ka	1995-2013
Logarithm of Output per Worker (constant 2005 US$)	logoutperwor	1995-2015
Investment Share	csh_i	1995-2014
TFP (at constant national prices, 2011=1)	rtfpna	1995-2014
Human Capital	hc	1995-2014
Human Development Index	hdi	1995-2014

APPENDIX A15: **DATA SOURCES AND DESCRIPTIONS**

Table A15.1: Data Sources and Descriptions

Indicator Name	Balance Period	Long Definition	Source	Available at
Labor Share	1995-2014	Share of labor compensation in GDP at current national prices	Penn World Table 9.0	http://www.rug.nl/ggdc/productivity/pwt/
(Nominal) Trade Openness	1995-2014	(Exports + Imports) / GDP	Author's own calculations based on the World Bank, World Development Indicators Database	http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators
Capital Account Openness Index	1995-2014	The Chinn-Ito index (KAOPEN) is an index measuring a country's degree of capital account openness. The index was initially introduced in Chinn and Ito (Journal of Development Economics, 2006). KAOPEN is based on the binary dummy variables that codify the tabulation of restrictions on cross-border financial transactions reported in the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER). This update is based on AREAER 2014, which contains the information on regulatory restrictions on cross-border financial transactions as of the end of 2013. The Chinn-Ito index (KAOPEN) is an index measuring a country's degree of capital account openness. The index was initially introduced in Chinn and Ito (Journal of Development Economics, 2006). KAOPEN is based on the binary dummy variables that codify the tabulation of restrictions on cross-border financial transactions reported in the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER). This update is based on AREAER 2014, which contains the information on regulatory restrictions on cross-border financial transactions as of the end of 2013.	The Chinn-Ito Index	http://web.pdx.edu/~ito/Chinn-Ito_website.htm
Financial Development Index	1995-2013	Based on both financial markets and financial institutions including both of their depth, efficiency and access	NBER Data (Financial Development)	http://www.nber.org/data/international-finance/#findev
Government Share	1995-2014	Share of government consumption at current PPPs	Penn World Table 9.0	http://www.rug.nl/ggdc/productivity/pwt/
Government Effectiveness	1996-2015	Government Effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5.	World Bank, World Governance Indictors	http://data.worldbank.org/data-catalog/worldwide-governance-indicators
Unemployment Rate	1995-2015	Unemployment rate can be defined by either the national definition, the ILO harmonized definition, or the OECD harmonized definition. The OECD harmonized unemployment rate gives the number of unemployed persons as a percentage of the labor force (the total number of people employed plus unemployed). [OECD Main Economic Indicators, OECD, monthly] As defined by the International Labor Organization, unemployed workers are those who are currently not working but are willing and able to work for pay, currently available to work, and have actively searched for work.	ILO (KILM Database)	http://www.ilo.org/global/statistics-and-databases/research-and-databases/kilm/lang--en/index.htm
Logarithm of Total Population	1995-2015	Logarithm of Total Population +0	ILO (KILM Database)	http://www.ilo.org/global/statistics-and-databases/research-and-databases/kilm/lang--en/index.htm

Real Effective Exchange Rate	1995-2015	REER = Real effective exchange rate (CPI-based) ; 138, 41, 67, 172 = the number of trading partners considered	Bruegel's REER Database	http://bruegel.org/2012/03/real-effective-exchange-rates-for-178-countries-a-new-database/
Logarithm of GDP per Capita	1995-2014	GDP per capita is gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in constant 2010 U.S. dollars.	Author's own calculations based on the World Bank, World Development Indicators Database	http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators
Overall Globalization Index	1995-2013	Weighted Average of 3 Globalization Indices (1. Economic Globalization, 2. Social Globalization, and 3. Political Globalization)	KOF Globalization Index	http://globalization.kof.ethz.ch/
(Real) Trade Openness	1995-2014	Trade Openness * Price level of CGDPo (PPP/XR), price level of USA GDPo in 2011=1	Author's own calculations based on the World Bank, World Development Indicators Database and Penn World Table 9.0	http://www.rug.nl/ggdc/productivity/pwt/
Labor Quantity Growth (Log Change, %)	1995-2015	Logarithm Change of Labor Quantity Growth	Conference Board	https://www.conference-board.org/data/economydatabase/index.cfm?id=27762
Labor Force Participation Rate (%)	1995-2015	(Labor Force/Total Population)*100	ILO (KILM Database)	http://www.ilo.org/global/statistics-and-databases/research-and-databases/kilm/lang--en/index.htm
Overall Capital Account Restrictions Index	1995-2013	Overall Restrictions Index (all asset categories) of overall inflow restrictions index (all asset categories) and overall outflow restrictions index (all asset categories)	NBER Data (Overall Capital Account Restrictions Index)	http://www.nber.org/data/international-finance/#cc
Logarithm of Output per Worker	1995-2015	Based on labor productivity (GDP constant 2005 US $)	ILO (KILM Database)	http://www.ilo.org/global/statistics-and-databases/research-and-databases/kilm/lang--en/index.htm
Investment Share	1995-2014	Share of gross capital formation at current PPPs	Penn World Table 9.0	http://www.rug.nl/ggdc/productivity/pwt/
TFP	1995-2014	TFP at constant national prices (2011=1)	Penn World Table 9.0	http://www.rug.nl/ggdc/productivity/pwt/
Human Capital Index	1995-2014	Human capital index, based on years of schooling and returns to education	Penn World Table 9.0	http://www.rug.nl/ggdc/productivity/pwt/
Human Development Index	1995-2014	The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.	United Nations Development Programme (UNDP)	http://hdr.undp.org/en/data