



**DEBT BUY-BACK OPERATIONS AND GROWTH:  
EVIDENCE FROM HIPC's**

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## ABSTRACT

### DEBT BUY-BACK OPERATIONS AND GROWTH: EVIDENCE FROM HIPC<sub>s</sub>

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Governments with unsustainable debt burden have relatively high potential to face the situations such as insolvency, default and/or debt crises. Such undesirable situations may make it necessary to restructure the government debt. It is a common situation in practice that the said debt restructuring transactions are in the nature of serial debt restructurings by being more than one and occurring at the same time. In cases where the government debt restructuring operations are realized in series as mentioned, the last of these restructuring processes is called final restructuring in the literature. Thanks to the restructuring of government debt, the credit ratings of debtor countries can be increased, their access to financial markets can be restored, the debt burden of countries can be alleviated and/or borrowing costs can be improved, thus the financial sustainability of debtor countries can be reestablished, and ultimately these countries will be able to increase their borrowing and economic growth compared to the period before restructuring and, become more stable in terms of growth and thus can show a high performance. All these developments are expected to take place especially after the final restructurings. As a matter of fact, since 1975, a total of 124 countries have experienced various debt restructuring practices for these and similar purposes. However, the execution of government debt restructuring transactions in the form of debt buy-backs has the potential to adversely affect the macroeconomic dynamics of debtor countries. In general, this study aims to examine and analyze the

possible short and medium-term effects of government debt restructuring on the growth performance of debtor countries with positive and normative perspectives. However, the study focuses on how the growth performances of debtor countries are affected if government debt restructuring is carried out in the form of debt buy-back practices. This possible interaction is examined in the study with positive and normative approaches. In this framework, Pooled Ordinary Least Squares (OLS) panel regression model was applied in order to empirically analyze the aforementioned possible relationship on the basis of the positive approach. Within the framework of the normative approach, the general anatomy and application differences of the related debt restructuring practices and the findings of the empirical analyzes carried out within the study were analyzed comparatively and policy recommendations were made on the subject. The mentioned issues have been examined in the study specifically for Heavily Indebted Poor Countries (HIPCs). As a result of the study, it has been determined that the execution of government debt restructuring transactions in the form of debt repurchase agreements negatively affects the growth performance of debtor countries in the short and medium term.

**Keywords:** Sovereign Debt, Sovereign Debt Structuring, Debt Buy-back, Growth, HIPCs

## ÖZET

### **BORÇ GERİ-ALIM UYGULAMALARI VE BÜYÜME: HIPC<sub>s</sub> ÜLKELERİ ÖRNEĞİ**

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Sürdürülebilir olmayan borç yüküne sahip devletlerin; ödeme aczi, temerrüt ve/veya borç krizleri ile karşı karşıya kalma potansiyeli görece yüksektir. Bu tür arzu edilmeyen durumlar, devlet borçlarının yeniden yapılandırılmasına yönelik uygulamaları zorunlu hale getirebilir. Söz konusu borç yapılandırma işlemlerinin birden çok sayıda olmak ve aynı zamanda art arda gerçekleşmek suretiyle seri borç yapılandırmaları niteliğinde olması hali uygulamada sıkça karşılaşılan bir durumdur. Devlet borç yapılandırma işlemlerinin bahsi geçen şekilde seri halde gerçekleştirildiği durumlarda, bu yapılandırma işlemlerinin sonucuna literatürde nihai yeniden yapılandırma denir. Devlet borçlarının yeniden yapılandırılması işlemleri sayesinde borçlu ülkelerin kredi notları yükselebilir, finansal piyasalara tekrar erişimleri sağlanabilir, ülkelerin borç yükleri hafifletilebilir ve/veya borçlanma maliyetleri iyileştirilebilir, böylece borçlu ülkelerin mali sürdürülebilirlikleri yeniden tesis edilebilir ve nihayetinde bu ülkeler yeniden yapılandırma işlemleri öncesi döneme nazaran borçlanma ve ekonomik büyüme açısından daha istikrarlı ve böylece yüksek bir performans sergileyebilmektedir. Tüm bu bahsi geçen gelişmelerin ise özellikle de “nihai yapılanmaların” ardından gerçekleşmesi beklenir. Nitekim 1975 yılından bu yana toplamda 124 ülke bu ve benzeri amaçlar ile çeşitli borç yapılandırma uygulamaları tecrübe etmiştir. Ancak, devlet borçlarının yeniden yapılandırması işlemlerinin borç geri alım (debt buy-back) şeklinde ifa edilmesi borçlu ülkelerin

makroekonomik dinamiklerini olumsuz etkileme potansiyeline sahiptir. Bu çalışma, genel çerçevede, devlet borçlarının yeniden yapılandırılması işlemlerinin borçlarını yapılandıran borçlu statüsündeki ülkelerin büyüme performansı üzerindeki olası kısa ve orta dönem etkilerini pozitif ve normatif bakış açıları ile incelemeyi ve analiz etmeyi amaçlamaktadır. Bununla birlikte, çalışma, devlet borçlarının yeniden yapılandırılması işlemlerinin borç geri alım uygulamaları şeklinde gerçekleştirilmesi durumunda borçlu ülkelerin büyüme performanslarının bundan ne şekilde etkilendiği hususuna odaklanmaktadır. Bu olası etkileşim çalışmada pozitif ve normatif yaklaşımlar ile irdelenmektedir. Bu çerçevede, bahsi geçen olası ilişkinin pozitif yaklaşım temelinde ampirik olarak analiz edilmesi amacı ile Havuzlanmış En Küçük Kareler panel regresyon modeli uygulanmıştır. Normatif yaklaşım çerçevesinde ise ilgili borç yapılandırmaları uygulamalarının genel anatomisi ve uygulama farklılıkları ile çalışma dahilinde icra edilen ampirik analizlere ait bulgular karşılaştırılmalı olarak analiz edilip konuya ilişkin politika önerilerinde bulunulmuştur. Belirtilen hususlar çalışmada Ağır Borç Yükü Altındaki Yoksul Ülkeler (HIPC's) özelinde incelenmiştir. Çalışma neticesinde ise devlet borç yapılandırma işlemlerinin borç geri alım sözleşmeleri şeklinde icra edilmesinin borçlu ülkelerin büyüme performanslarını kısa ve orta vadede olumsuz olarak etkilediği tespit edilmiştir.

**Anahtar Kelimeler:** Devlet Borcu, Devlet Borç Yapılandırması, Borç Geri Alım, Büyüme, HIPC's

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## LIST OF ABBREVIATIONS

<b>CA</b>	: Annual Current Balance/GDP
<b>EXPD</b>	: Final consumption expenditure/ GDP
<b>FDI</b>	: Annual Foreign Direct Investment/GDP
<b>GDEBT</b>	: Public Debt Stock/GDP
<b>HIPCs</b>	: Heavily Indebted Poor Countries
<b>IMF</b>	: International Monetary Fund
<b>INF</b>	: Annual Inflation Rate
<b>OECD</b>	: Organization for Economic Co-operation and Development
<b>POP</b>	: Annual Population Growth Rate
<b>WB</b>	: World Bank
<b>Y</b>	: Annual GDP growth rate

## INTRODUCTION

Having an unsustainable debt burden has been a challenging problem for many countries. With the integration of the world economy, such problems have become more common. All these developments have the potential to lead to a number of unexpected and undesirable situations such as insolvency, debt crises and government debt restructurings. In this context, sovereign debt restructurings often present an option for countries that have difficulty meeting the requirements arising from their indebtedness. Therefore, many countries have restructured their debts due to unsustainable debt burden, insolvency problems and debt crises. Among these sovereign states, there are a large number of countries, a significant part of which are African countries which are also classified as Heavily Indebted Poor Countries (HIPCs) (World Bank 2023).

Overcoming financial crises and achieving sustainable growth again require a broad, sound and well-designed macroeconomic strategies and, a sovereign debt restructuring is expected to have a positive impact on growth by essentially solving solvency problems, controlling unsustainable debt, thereby improving debtor countries' credit ratings and re-accessing international financial markets. Therefore, government debt restructuring activities can have a notable impact on growth of debtor countries. As a matter of fact, the main factors that play an important role in the emergence of the government debt restructuring process are excessive debt accumulation, debt sustainability problems, debt defaults and national and/or global debt crises. All these factors are closely related to the growth performance of debtor countries. However, the execution of debt restructuring transactions in the form of debt buy-back has the potential to adversely affect the macroeconomic dynamics of debtor countries.

In this study, the issue of how the growth performance of debtor countries is affected if the restructuring of government debts to external private creditors is carried out together with the debt buyback treatments is examined in the context of Heavily

Indebted Poor Countries (HIPCs). Therefore, within the study, the effects of restructuring transactions carried out in the form of debt buy-back and restructuring transactions carried out in other ways on growth performance are analyzed comparatively. Within the scope of this study, only government debt restructuring transactions, which are defined as the restructuring of direct debts and/or government-guaranteed debts, are examined. In this framework, “the restructuring of the private sector’s debts to the private sector, the restructurings that mainly affect and concern the domestic debt market, and the independent debt restructurings with external private creditors, rather than the restructuring of government debts to official creditors” (Cruces and Trebesh 2014) are examined within the scope of the study. As a matter of fact, the related literature, which is relatively more related to the subject of this study, mostly focuses on the restructuring of government debts which include foreign debt creditors due to the relative importance of debt to foreign creditors especially for the developing countries. Other reason of why foreign creditors is more frequently studied is that the (empirically) modeling of them is relatively easy (Özcan Kalemli et al. 2016: 2). Additionally, this study focuses only on problematic debt restructurings and excludes government debt management operations and routine restructuring agreements that extended their maturity by less than one year. In addition, while only real implemented (realized) configurations were included in the analysis, applications that included incomplete negotiations, in-principle incomplete agreements and/or swap offers were excluded from the study.

HIPC country group includes 39 countries in total, mostly African countries. However, only the five of these countries could be included in the analysis due to data limitations. These countries are Cameroon, Republic of Congo, Mozambique, Nicaragua and Tanzania, respectively. The data is from 1997 to 2021. In this study only the HIPCs are analyzed and only the impact of restructuring of the debts to foreign private creditors are included in the econometric analysis. This is the scope of the study.

On the other hand, the last of the series of government debt restructurings is called final restructuring in the literature, and it is expected that the final restructuring is the process that provides the main relief in debtor countries (Reinhart and Trebesch 2016). In this direction, within the analysis mainly the existence of an effect of the

final restructurings on the growth performance of these debtor countries is investigated.

The government debt restructuring processes also affect the other basic macroeconomic dynamics of these countries, especially their fiscal sustainability as a result of reduced borrowing costs, by increasing the credit ratings of the countries. Improved fiscal conditions reduces the debt burden of these countries, thereby causes an increase in the resources that can be used in productive areas. However, there are studies in the literature that mention that debt restructuring processes are generally under the influence of global political forces and poor states that lack political power are not treated fairly in this process and may force to agree on less advantageous restructuring deals.

The main hypothesis of this work is “Sovereign debt restructuring operations have a positive impact on the growth performance of debtor countries in the absence of the debt buy-back agreements. In this context the research questions of this study are: (i) “Do government debt restructuring operations have a significant impact on growth in Heavily Indebted Poor Countries (HIPCs)?” (ii) “If so, is the potential impact of these operations on economic growth positive or negative?” (iii) “Do the execution of government debt restructuring in the form of debt buy-back agreements negatively affect the growth of the countries?”

The study is mainly based on econometric analysis. In accordance with this purpose, Pooled OLS panel regression method has been applied after the collection of available data. The data is from 1997 to 2021. In this study, only the HIPCs are analyzed and only the impact of restructuring of the debts to foreign private creditors are included in the econometric model. It should be noted that, the literature on the relationship between government debt restructuring and growth is growing, although narrow. Although there are studies examining the possible effects of government debt restructuring on various macroeconomic variables, there is no study that aims to examine the effect of these operations on economic growth, especially in HIPCs. In this sense, this study basically aims to shed light on this issue by analyzing the interaction between government debt restructuring and growth with the support of empirical evidence. It is expected that the study will contribute to the literature and

help sovereign states make healthier decisions by increasing the predictability of their actions.





## CHAPTER I

### CONCEPTUAL FRAMEWORK

In this sub-section mainly, the fundamental concepts related directly or indirectly to the concepts of sovereign debt, sovereign debt restructuring and economic growth are examined.

#### 1.1. THE CONCEPT OF SOVEREIGN DEBT

##### 1.1.1. Definition of Sovereign Debt and Authority to Borrow

Before defining the concept of sovereign debt, it is necessary to mention sovereignty. In this context, sovereignty is defined as the natural supremacy of the state in its territory and its independence in international relations. (Tunkin 1956: 15). On the other hand, Max Huber, who is a Swiss lawyer and diplomat, related the same concept to the concept of independence and defined the concept of state sovereignty as “the ability of a state to perform its functions on a specific piece of land without being influenced by any other state” (RIAA5 , 1928: 821 as cited in Gevorgyan, 2008: 434).

On the other hand, the concept of debt can be defined as an amount of money that is borrowed by one entity from another one. According to Oxford dictionary the definition of debt is “a sum of money that is owed or due.” (Oxford Dictionary 2022). Also, according to a broader definition proposed by Meriç (2013: 1) a debt is “*the obligation that must be met for anything borrowed*”. The concept of debt can also be expressed as the “obligation that a person or an institution has to give a certain amount of money previously taken out together with interest and other payments” (Yavuz 2014: 8). In this context, public debt -which is also called as government debt, government borrowing, or sovereign debt- can be defined in the most general sense as the amount of money that a government has borrowed. According to Ulusoy (2012) public debt is “*the legal obligation to repay interest and principal to the owners of*

*pre-determined rights in accordance with a determined timetable”* (Ulusoy 2012: 1). Common to all definitions a debt is generally an amount of money which was borrowed and is going to be paid back and a public debt is the sum of money that a government has borrowed. In short if there is a government on the borrowing side, we call these kinds of debts government debt.

In any country, the authority to borrow is defined by the legislation. Borrowing authority is generally under austerly of the legislative organ. On the other hand, implementer of this authority is generally government. Parliament may transfer the power to borrow to the government. The authority of borrowing is given to the government by a law. This law contains the general conditions of government borrowing (Ulusoy 2012: 30). Sovereign states may fund their deficit by “borrowing from bond markets” and the “accumulated government borrowings” realized in this way is mainly called as the “government debt” (Mankiw and Taylor 2006).

## **1.2. GOVERNMENT DEBT IN THEORY AND POLICY**

### **1.2.1. An Outlook on the Concept of Government Debt**

Governments have a number of financial, economic and social functions. The fulfillment of these functions requires significant financial resources. In order to perform the functions undertaken by the state, all the revenues obtained from various sources within the constitutional limits are called public revenues. Public revenues can be considered in a narrow and broad sense in terms of scope. While public revenues in the narrow sense express the revenues obtained from various revenue sources by the central government, public revenues in the broad sense include the revenues of parafiscal institutions, local governments and state economic enterprises (Akdoğan 2005: 99).

Government Borrowing is a subject that has been discussed for many years and that has been emphasized a lot in the related literature. The development of economics and finance disciplines throughout the history has also changed the perspective on government borrowing. In this process, the role of the government in the economy has increased, government borrowing has been applied to fund the increasing public expenditures and also the borrowing has set in to be considered as a fiscal policy tool used for the governments to intervene the economy. Today, the

government borrowing is among the ordinary (usual) sources of funds for the governments such as taxes, but it also is used as a policy tool (fiscal policy tool) in order to ensure the macroeconomic stability. Due to the fact that obtaining funds through borrowing is easier compared to taxes, its negative impacts usually do not appear immediately in the period in which it is obtained. Because of these the debt burden of countries tends to increase rapidly and has the potential to lead to the debt sustainability problems, sovereign debt crises, and/ or sovereign debt defaults. All these and similar facts inflame the debates over government debt.

The unplanned and uncontrolled spending of the funds obtained through borrowing has clearly revealed the negative effects of sovereign borrowing in many countries, and also the sustainability of these debts has been questioned due to the continuous borrowing. In many developing countries, especially in the post-1990 period, the public deficits that occurred due to the inability to fund the rapidly increasing public expenditures with taxes and the difficulties in funding these deficits with other sources made it necessary to resort to sovereign borrowing, and as a result, the sovereign debt stocks increased uncontrollably. The main issues that need to be considered in terms of the impacts of sovereign borrowing are: from which sources and under what conditions the sovereign borrowing is provided, whether the funds obtained are used or not, where and how they are spent. Accordingly, the potential effects of sovereign borrowing may appear in different forms according to the different cases and circumstances. In this sense, the structure of sovereign debt plays a crucial role in the effective execution of the macroeconomic dynamics. Borrowing is simply the receiving of money or similar values to be paid off after a certain period of time. To define it in another way, it is the provision of resources from individuals or institutions due to the inadequacy of the available resources to achieve a goal or for other reasons. Public debt, on the other hand, is a financing tool that does not cause a decrease in the real income of individuals or institutions when public legal persons (public institutions) receive monetary resources from individuals or institutions and use them to fund public services (Batirel 1979: 184).

With the transition from the classical understanding of the state to the understanding of the modern state, the duties of the state have increased, and now the state is faced with some services other than basic services and as a result increasing

public expenditures. These increased expenditures have created the need to generate more income. If the state cannot obtain necessary funds from its current revenues, it will resort to borrowing. Due to the unavoidable increases in debt stock and its negative effects, efforts are being made to improve the borrowing dynamics in many countries. Over the years, there have been different approaches to government debt. Classical economists have distanced themselves from borrowing and expressed the drawbacks of borrowing. According to David Hume, the first economist to address the issue of public debt, there are several drawbacks of borrowing. First of all, the public's use of debt instruments instead of productive activities will reduce production and employment. On the other hand, increasing taxes to pay the interest of public debts will affect the low-income group negatively, and on the other hand, it will cause a rentier class to form. According to Hume, public debt distorts income distribution and redistributes income between generations (Bağcı 2001: 19).

Economists who think in this way have described borrowing as an unfair tax imposed on future generations (Pehlivan 2000: 215). According to this view, resorting to borrowing instead of taxes will transfer the burden of public expenditures to future generations. The use of borrowing instead of taxation will put the financial burden of public expenditures on future generations, with the effect of curbing the savings and production potential in the economy, and today's expenditures will be financed by future generations (Önder 2001: 94-97). Adam Smith, on the other hand, examined the effects of borrowing, often together with the effects of extraordinary situations such as war. According to Smith, resorting to debt rather than taxes imposes less burden on the public. However, the burden of these expenditures will fall on future generations. According to Ricardo, there is no difference between fundings expenditures by increasing taxes or borrowing because both methods reduce the country's assets to the same extent. Taxpayers will reduce their consumption as much as these taxes if the public deficit is financed by increased taxes, while in debt financing, they will reduce their consumption by the amount of increased taxes necessary to pay the interest (Bağcı 2001: 19-25). Borrowed funds are considered as a form of revenue and are seen as an alternative to taxes. For this reason, resorting to borrowing in a sense means using the tax revenues that will be collected in the future. However, the important point in this regard is that the tax potential of a country should be fully used before resorting

to borrowing. It would be a mistaken policy to venture into debt without considering the country's taxable resources.

### **1.2.2. Difference Between Tax and Government Debt**

States need public revenues to finance public expenditures. Taxes have been one of the most important public revenues for many states from past to present. As a matter of fact, the primary purpose of taxes is to generate revenue for the state. In this respect, taxes have a privileged position among public revenues in terms of both providing significant public revenue and being a result/reflection of the existence of state sovereignty. In today's world, many national economies are faced with insufficient levels of public revenues and increasing public expenditures. In such an atmosphere where governments have to cope with various financial difficulties, increasing public revenues continues to be the most important function of taxes (OECD 2014: 30).

Şen and Sağbaşı (2016) defines the concept of tax as “*economic values obtained from real and/or legal persons and from a number of institutions and organizations that are not legal persons on the basis of legal force*”. In this context, the concept of tax; is the economic value obtained from real and/or legal persons by force, based on laws and gratuitously, in line with the principles of nationality and/or territoriality, in order to meet the public expenditures of the government. Governments collect these economic assets on the basis of their sovereign power with the intention of performing some financial/non-financial purposes. Regardless of how and by whom(s) it is defined, the concept of tax always has the characteristics of (i) being collected especially for the purpose of financing public expenditures, (ii) not having a special provision, and (iii) being algebraic in the legal sense (Şen and Sağbaşı 2016).

Based on the aforementioned definitions and explanations, the main elements of the tax concept can be determined. In this context, the fundamental features of tax are as follows:

- generally paid in cash and not for the performance of any service,
- collecting primarily for the purpose of financing public expenditure,
- there is a legal obligation (legal force element) for taxpayers,

- does not contain the meaning of a one-to-one equivalent of any good(s) or service(s),
- not arbitrary but requires a set of legal procedures (taxes are collected in accordance with the law and regulations)

After all these basic explanations about tax, we can summarize the differences between tax and borrowing. Both taxes and borrowing are ways of obtaining government fund and are mainly used to meet the needs of the public. While the government is trying to obtain the financing it needs from taxes and other legal obligations, which are the main and permanent sources of income, it will resort to borrowing if other sources of funds are insufficient. In this sense, borrowing is of a secondary and temporary nature. Since the borrowing costs incurred by the government will eventually be covered by the tax money, which is the real source of public finance, the continuity of borrowing will be rational within the framework of two assumptions. Either in the future, the tax potential of the country increases as a result of the formalization of the informal economy or the expansion of new employment areas in the economy; or the real growth rate of the country will be greater than the real borrowing cost (mainly the real rate of interest on borrowed funds). In such an economic situation, borrowing can be sustained for a long time. Otherwise, other alternative financing instruments, including seigniorage, may be more rational in public financing (Derdiyok 2001: 5).

Unlike tax revenues borrowing is a temporary source of financing because funds obtained from borrowing must be paid off with interest in the future. It is not the case in taxes. At the payment stage, income generated from taxes is used to make the repayments. In other words, borrowing is a kind of pre-use of future tax revenues (Nemli 1990: 252). If the income from taxes is not used to repay the debt, then it is necessary to go into continuous borrowing to pay off the old debts, which is called debt roll-over. This, in turn, leads to a rapid increase in debts and, consequently, to a narrowing of borrowing opportunities and to the complete disappearance of borrowing opportunities in the later stages. For this reason, while tax constitutes the main source of income of the state, borrowing is an additional and alternative source to taxation. The second important point is that while tax is collected from the citizens regardless of whether they are voluntary or not; borrowing is generally done on a voluntary basis,

except in cases where it is forcibly taken. Individuals or organizations determine their liquidity preferences by evaluating the loanable funds in their hands, the benefits to be provided to them by the state, the conditions of the debt and the return of the market (Erdem 1996: 209-210).

The other point where debt and tax are separated is where the funds obtained through borrowing will be used. However, there is no specific provision for taxes and all public services are paid for. The state or the borrowing public institutions undertake some obligations while borrowing and undertake to pay a certain interest to the creditors every year and to repay the principal when a certain period expires. This is not the case in taxation. Finally, in the case of external borrowing, these funds are added to the funds denominated in foreign currency of the borrowing country and increases the value of foreign currencies available. This situation may cause the borrowing country to import in excess of its expenditures and foreign exchange revenues. However, the tax does not provide such an additional opportunity since it will be provided from internal sources (Uluatam 2003: 414-415).

#### **1.2.2.1. Budgetary Policies at a Glance**

The development of the second and third generation rights<sup>1</sup> caused a transition from the concept of classical state to the social state; consequently, there has been a notable expansion in the duties and responsibilities of the governments. The concept of social state has gained considerable importance especially in the 20th Century. As a result, the control of economic fluctuations, the achievement of economic growth and development, the effective use of resources, the balance of foreign trade, the provision of a regular income distribution have become among the priorities of the governments. The fiscal policy instruments have an important place among the economic policy instruments that governments can use to manage this process. Since this policy is predominantly carried out through budgets, the importance of budget surpluses and deficits should not be ignored. If the budget policies are not implemented correctly, it can lead to serious economic problems such as economic crises with high inflation. This is vital especially for developing countries. For this reason, in time, fiscal discipline has become inevitable for both developed and

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<sup>1</sup> The second and the third generations rights are also called as the active and positive Status rights.

developing countries. Budget deficits in the US and European countries have led these countries to consider the concept of balanced budgets and to take strict measures implement this concept. Consequently, spending cuts and ensuring financial stability set in to be considered as a policy requirement. Government budget is a document which reflects estimated expenditures and revenues over a specified period. On the other hand, in general terms, a balanced budget refers to a budget in which total revenues are equal to total expenditures in a specified period. That means budget deficit and budget surplus does not exist.

However, today, budget is not only a document but also one of the most useful fiscal management tools for a government. Since it is a quantitative expression of a well-defined plan, it also reflects a reading of future financial conditions and administrative objectives. Therefore, we can say that it can be used as a plan of action for reaching quantified goals, a tool for measuring performance and an instrument for coping with unexpected situations. But, even today, there is not a consensus upon functions of a government budget. On the other hand, throughout history, functions of government budget have been a matter of debate. It is also a controversial issue in today's world. Different approaches give different missions to government budget, especially to its structure and its functions. While some budget theories advocate balanced budget, some others put forward that budget deficits are not only advantageous but also necessary for a government. In today's globalized economy it is getting hard for a government to achieve a balanced budget. While some countries suffer from budget deficits in the long run, some others achieve their macroeconomic goals by using the budget tool efficiently.

#### **1.2.2.2. Fiscal Discipline**

Fiscal discipline simply means that the public revenues and expenditures are equal to each other. "*It covers not only a balanced central budget but also equality of all public revenues and expenditures*" (Edizdoğan and Çetinkaya 2013: 148). After the World War II, governments enacted a number of fiscal rules in order to have fiscal discipline. It is believed that fiscal discipline is a factor which enhances the credibility of the country. On the other hand, in the same era, the concept of *welfare state* came to the fore and in time became the fundamental factor of the budget deficits. Today,



even USA, which is one of the major countries in the world, is facing the problem of budget deficits (Günay 2007). *“In the 1960s and 1970s, many western countries accepted that the budget needs to be adjusted to meet the requirements of economic equilibrium”* (Avcı 1988:6). Especially after stagflation in 1970s, fiscal discipline gained importance all around the world. Since inflation and unemployment co-existed, it was not possible to overcome the crisis by implementing the Keynesian anti-inflationist policies. However, most countries failed to have a systematic balanced budget even after 1970s until today.

*“The developments in the theory, starting in the 1930s, have led some countries (U.S. Germany etc.) to regard budget deficits as an inevitable consequence of certain public spending programs”* (Avcı 1988: 6) Sweden is the first country to accept the principle of usage of budget deficits and surpluses as a tool of budget policy in the struggle against conjuncture. Since the end of the 1940-1950 period, Britain has decided to follow a compensatory budget policy to be able to stimulate demand by leaving the balanced budget policy. In the United States, too, setting the aggregate demand through the budgetary policies developed after 1940s. But, in this country, principle of active intervention with the conjuncture through the budgetary measures is accepted after 1961 (Avcı 1988).

When expenditures exceed revenues a budget deficit occurs<sup>2</sup>. The budget deficits can have structural, economic, fiscal, social and political reasons. If the taxes, the most important source of government income, is not collected enough due to the tax system malfunction or ineffectiveness of the tax administrations budget deficits occur. On the other hand, due to natural disasters such as earthquakes, floods and wars, public expenditures increase. Decrease in tax revenues due to decrease in economic activities may also cause budget deficits. Also, while the general costs continue to increase in the current economic downturn, budget deficits come to the fore because of a decrease in revenues (Şen et al. 2007).

Different theories about the expansion of the state have been put forward. One of the well-known of these theories was developed by the German economist Adolph Wagner, known as the Wagner Law. According to this theory; There is social development of the society behind the increase in public expenditures. With this

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<sup>2</sup> Here mentioned “deficit” is the conventional budget deficit.

development, simply the increase in the demand of the society to the pure public goods (such as security, justice) and semi-public goods (such as education and health) causes public spending to increase. The public sector's social responsibility principle in the economic activities is the main element that increases the share of the public sector in economic activities (Gacaner 2005: 104). Politicians, bureaucracy and elections also causes the budget deficits. Politicians increase public spending to secure their place and to win more elections. Especially in election times, the government becomes very generous and increases the public expenditures in order to win the election again. On the other hand, the increase of the powers of the governments causes bureaucrats to desire to maximize their budget appropriations. This situation also causes the budgets to expand.

### **1.2.2.3. Government Budget as Fiscal Instrument and the Role of Government Debt**

*“Budgetary policy can create various economic effects on the whole economy and for this reason it can be used to provide short and long-term stability”* (Avcı 1988: 7). It is not a sound policy to follow a balanced budget theory in different economic conjunctures. Such a policy may worsen the existing financial and conjunctural problems. In this context, *“funding the budget deficits by borrowing does not always enhance the debt burden. Applying to domestic debts may increase the GDP and lower the total debt burden”* (Koğar 1996: 303). On the other hand, monetary expansion does not always cause the inflationist tendencies. Just as in Keynesian theory when the economy is in underemployment equilibrium, monetary expansion may induce the usage of idle funds and capacity thus can increase the real GDP. It expands the liquidity and increases the consumption and investments. If and only if the inflation is in full-employment the monetary expansion causes inflation (Koğar 1996: 304).

It should be noted that in stagnation, balanced budget policy may cause the depression to be worse. Because in depression era the economy shrinks, hence, tax revenues of the government decrease. If the government insists on having a balanced budget, despite depression, it must levy new taxes or increase the tax rates and decrease the public expenditures. Consequently, such a policy may deepen the economic stagnation. On the other hand, budget surpluses and budget deficits lead to a difference

on the total supply and demand. This is called budget multiplier effect. Also, this effect is called balanced budget multiplier when the budget is balanced. Balanced budget multiplier refers to the coefficient on the GDP when the budget deficit is financed by taxes (Gediz and Yalçinkaya 2001: 57):

$$\frac{\Delta Y}{\Delta G} = \frac{1}{(1-c)}$$

$$\frac{\Delta Y}{\Delta T} = \frac{-c}{(1-c)}$$

$$\frac{\Delta Y}{\Delta G} + \frac{\Delta Y}{\Delta T} = \frac{1}{(1-c)} + \frac{-c}{(1-c)} = \frac{(1-c)}{(1-c)} = 1$$

Where Y stands for output, G is government spending, T is taxes and c is marginal propensity to consume. The equation above indicates that even a country has a balanced budget this balanced budget increases the equilibrium level of GDP. That is, the national income increases by the amount of the budget. On the other hand, since the tax multiplier is  $-b/(1-b)$ , if the transfer expenditures are equal to the tax, the balanced budget has no effect on the national income. In this case, the balanced budget multiplier becomes zero:  $b/1-b + (-b)/1-b = 0$ . Thus, if the government funds the public expenditures by emission, the effect of the government budget on the national economy becomes quite expansionary. Emission means printing money or borrowing directly from the central bank. *“Monetary and fiscal policies must be consistent with emission. If the money supply is adjusted for public expenditure, the inflationary effect will be reduced”* (Gediz and Yalçinkaya 2001: 58). Such a policy may be inflationary but it should be noted that we can live with inflation but living with unemployment is more difficult and a much more serious problem.

Budget can also be used as a stabilizer. Inflation means a steady increase in the general price level. In inflationary times government should decrease the public expenditures, increase the taxes and vice versa. As noted, following a balanced budget policy in recessions and inflationary times may deepen the problems. In order to cope with inflation government should increase the budget revenues decrease budget expenditures or prepare a tighter budget. But when in deflation the general price level decreases, money demand and unemployment level increases, demand for goods and

services decreases. In such a situation government should decrease the budget revenues, increase the budget expenditures or prepare a larger budget. In other words, government should have budget surpluses in inflationary era and have budget deficits in deflation and depression. Under all these assumptions and premises, it seems to be impossible for a country-especially for undeveloped and developing countries- to always have a balanced budget. It is emphasized that it is not possible particularly for undeveloped countries; because, first of all aggregate demand in these countries are usually not sufficient. On the other hand, this kind of economies may need large-scale investments in order to achieve economic development and this kind of policies may require budget deficits. To have always balanced budget does not seem to be a sound decision for also developed economies because of the reasons underlined before in this study.

The conventional view puts forward that government deficits crowd out the private capital, diminish national income and become a burden on the future generations. Thus, it leads to lower living standards for the future generations (Ball et al. 1998: 1). According to Ball et al. (1998) the probability of this situation is relatively low. If the funds obtained through debt are used in productive areas, they may also help the country to grow itself out of its economic problems. Because, such a policy the growth rate of the economy may be higher than the growth of accumulation of the debt. Europe has pursued numerical targets to ensure fiscal discipline. Likewise, the U.S. controversy is about the costs of budget deficits, budget rules and repayment of the debts through the rules. These rules are often referred as an instrument for the relative reduction of the volume of state in the economy. In USA, the target is slowing growth of government spending. However, either Europe or USA cannot achieve these targets. Only a few countries in Europe can have budget surpluses and pursue the policy of balanced budget. Open budgets have become commonplace especially with the politicization of fiscal policies and expansion of share of public sector in the economy. Public expenditures and public revenues have now become politically motivated. Political factors such as the election economy also play an important role in budget deficits. The Constitutional Theory of Economics is now limited to the Maastricht Treaty in the EU. But as we see the regulation regarding this perspective are not enough to have a balanced budget.

### 1.2.3. Government Debt from Fiscal Policy Perspective

Governments can implement various policies to achieve the desired economic goals. These policies express a macroeconomic approach. As a matter of fact, the economy is examined as a whole in the field of macroeconomics (Mankiw 2003: 13). Concepts such as inflation, economic growth, unemployment, and national income are macroeconomic factors that are frequently encountered in daily life and that closely concern each individual. In this sense, the concept of economic policy is a macroeconomic<sup>3</sup> expression. It is defined as “*branch that covers approaches on how and in which direction the macroeconomic balances will be changed*”. In other words, the package of measures to be implemented to realize the desired changes in macroeconomic dynamics is called economic policy as an umbrella concept (Eğilmez and Kumcu 2015). Through economic policies, it is aimed to achieve certain macroeconomic goals. One of the most basic macroeconomic goals is macroeconomic stability, and this concept means the simultaneous existence of stability in the general level of prices and full employment (Türk 1989: 73; as cited in Akan et al. 2008: 109).

On the other hand, economic policy basically envisages taking and implementing measures that will eliminate macroeconomic imbalances (instability). In addition, economic policies can be applied to achieve a better macroeconomic balance, even when there is no deterioration/instability in the economic balances. In this case, economic policies include the measures to make changes in the current economic balance in the desired direction (Eğilmez and Kumcu 2015). One of the main components of economic policy is fiscal policy. Elements such as public expenditures, public revenues and borrowing, which are used in the execution of this policy, are called financial instruments or fiscal policy instruments. Therefore, the set of practices aim at achieving economic goals by using the said financial instruments is called fiscal policy. Fiscal policy can be used for the purposes of economic growth, balanced budget, economic stability, high employment rates, sustainable current account balance, balanced management of domestic and foreign finance, increasing savings and investments, and improving income distribution (Eğilmez and Kumcu 2015). For

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<sup>3</sup> The concept of “economy” is generally divided in two main categories as “macroeconomics” and “microeconomics” in the economics literature. Macroeconomics studies the economy as a whole. Therefore; the dynamics such as increase in incomes, changes in prices and unemployment rates are the subjects of macroeconomics. Microeconomics basically examines how households and firms make decisions and how these decision units interact in the market (Mankiw, 2003: 12-14).

example, changes in public expenditures and/or tax rates in a country can change the demand for the production of goods and services, the national saving, the level of investment and the equilibrium interest rate (Mankiw 2003: 61).

Government Debt (and government borrowing) is a fiscal policy tool used primarily to fund public expenditures, and it is a fiscal policy tool that allows the state to intervene in the economy. In this sense, borrowing policy can be used as a financial instrument in the cyclical fluctuations that sometimes occur. In such a case, the aim is not to provide the income-expenditure balance or to reduce the debt burden. In this way, borrowing is used for financial purposes on the one hand, and for some macroeconomic purposes such as inflation, deflation, income distribution, economic growth, on the other. For example, since it is necessary to balance monetary flows and real flows in the fight against inflation, excess liquidity in the economy must be absorbed. One of the measures to be taken in order to absorb the excess liquidity in the economy is to give importance to borrowing (Ulusoy 2001: 28; Türk 2005: 128-129).

In terms of the effects of government borrowing, the sources that the government borrow funds, and where to use the borrowed funds are important factors. The sources from which domestic debt can be obtained are individuals (by public offering of government debt instruments), banks, central bank, some social security institutions and other institutions. Governments can borrow from these sources through treasury bills, government bonds, treasury-guaranteed bills, short-term advances, contractor's bills and budget trusts (Sivrekli, Demircan and Dönmez 2007: 133). In order for borrowing to give results in line with the determined policies and to avoid undesired negative effects, all its economic effects should be carefully analyzed because the effects and results of borrowing from different segments will be different from each other (Işık et al. 2005: 72). One of the fiscal policy tools is borrowing. Thanks to government borrowing and borrowing policies, governments can design the existing macroeconomic and macro fiscal structure in the desired direction. In this sense, borrowing policies can be used as an important policy tool at the point of macroeconomic structures of countries.

#### **1.2.4. Economic Impacts of External Sovereign Debt**

It is essential to meet the needs in a country with internal financing sources. However, in underdeveloped and developing countries, internal resources, capital, technology and qualified manpower deficiencies have directed countries to seek external financing sources. Especially countries that live in terms of foreign exchange earnings are more frequently applied to this road.

The effects of external borrowing on the economy will vary according to the conditions of the borrowing. Accordingly, borrowing terms such as grace period, interest rate, and maturity structure are important. The effect of external borrowing on prices can be inflationary or deflationist. If the funds obtained by external borrowing are transferred to the economy for the acquisition of goods and services, these funds will be distributed to individuals in various form and as a result, the total demand will increase the general level of the prices which means an inflationary effect. However, the repayment of external debts and their interests require foreign exchange outflows and this encourages exports, especially the foreign currency generating activities such as tourism and foreign exchange inflows into the economy decreases the relative prices. On the other hand, while the amount of goods and services exported increases, the supply of goods to the domestic market decreases and this causes the prices to increase.

If the external debts are directed to imports to eliminate functions goods and services, prices may have deflationist effects, preventing the increase in the general level of the prices. In the payment stage of the debts, if there is no new borrowing and the funds for repayment of the debt come from tax revenues, in other words, if the external debt is paid by the taxpayers, it creates deflationist effect by reducing the funds available for consumption. As it is known, one of the main objectives of developing countries is to achieve a sustainable development. But the countries that have insufficient funds may resort to external debt for development. The major investments necessary for economic development require capital and technological knowledge. For this reason, the import of capital goods is a necessity especially for the developing countries. For the import of capital goods, external payment instruments must be obtained. Since the foreign exchange-earning activities of these countries are limited, it is highly possible for them to meet this need with external

borrowing. When we look at the effects of external borrowing on development in less developed and developing countries, it is seen that external borrowing increases the production. External borrowing also enables these countries to realize infrastructure investments. External borrowing also provides the necessary currency to meet the needs of industrial production that contributes to the development. The impacts of the external borrowing will change according to the nature and conditions of the funds obtained. Obtained funds may be in the form of donations or grants as well as borrowings that must be repaid after a certain period of time. Maturity of borrowings may be long or short. Interest rate on borrowed funds may be high or low. In less developed countries, internal savings are generally very low. Due to insufficient savings funds available for investment are also very low. That is why these countries use the savings of other countries, generally the developed ones, to make up the saving deficiency through external borrowing. In this way, the realization of investments becomes possible, which contribute to growth and development.

#### **1.2.5. The Rising Importance of Sovereign Debt**

Governments have to generate necessary funds to finance the public expenditures. For this, there are three fundamental tools that the governments can use: Taxation, borrowing and printing money. There are only taxation and borrowing available for the governments that do not have the means to increase money supply. Undoubtedly, the most important and major share of the modern governments' sources (income) is taxation. Borrowing is, on the contrary, a temporary source of funding. Funds obtained through taxes will not be returned to the taxpayer as cash in the future; but in borrowing, the money received must be paid back with interest and principal. For this reason, although it is possible to meet the need for funds through borrowing for a while, it should not be forgotten that the repayment of the debts in the long run will also be realized through taxation. In this regard, if government borrowing is paid back with tax revenues, it actually means that the tax revenues that must be collected in the future are used beforehand (Doğanalp 2005).



### 1.2.6. Historical Approaches to the Concept of Sovereign Debt at a Glance

In the related literature, there are different historical approaches to the concept of public debt. In classical economic theory, it is accepted that in the market economy if any imbalances occur, the economy would automatically provide its own balance. So, classical approach accepts that the government interventions distort the natural functioning of economy. Thanks to the Say's Law<sup>4</sup>, economic crises are temporary. As a result of this idea, government is regarded as a consumer, government activities are restricted to internal and external security, justice and diplomacy services. Classical economists also advocated that private sector is more productive than the public sector. Adam Smith, one of the founders of Classical Approach, objected to public debt mentioning three notable impacts of this concept. Firstly, the government borrowing increases the governments' desire for spending. Secondly, reduces the level of adoption of taxes and thirdly, make capitalists willing to lend. In his book named *The Wealth of Nations* Adam Smith states that the increase in government debt could put the states in trouble and will ruin them (Shaviro 1997: 29) In the same book he advocates that government debt can be used to fund the wars. By proposing a similarity between individual debt and government debt he proposes that if an individual borrows excessive amount of debt, she/he goes bankrupt and according to Adam Smith this situation is valid for governments as well (Alan 1997). In a nutshell, the leading thinkers of classical school such as Adam Smith and David Ricardo suggested that debt financing would bring individuals into a situation where they would not be able to comprehend their real situation by making them less frugal. According to the Classical economists, the debt burden of the state is always at the expense of the future generations. They considered the expenditures made using by borrowed funds during the maturity of the debt as a consumption and suggested that this consumption burden would be paid in future with higher interest and costs. Advocates of the classical view argue that most of the government debt will be paid off by tax revenues and that economic, social and political troubles will arise. On the other hand, Neoclassicals have argued that if debts are used in financing the budget deficit, today's debts will create a burden on future generations. In this view, government debt is usually paid off through tax revenues. By the end of the maturity of the debt borrower generation

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<sup>4</sup> Say's Law simply means that every supply creates its own demand.

will have been retired or dead. In this case, the remaining interests of the debts will be paid by the new generation through taxes. Therefore, the debt burden is transferred from current generation to the future generation. According to Ricardian Equivalence theorem the current generation will not increase their consumption by considering the future interest and principal payments of the borrowings, and will increase their savings enough to pay future taxes. Thus, today's generation increases its savings without changing consumption patterns and allows them to pay taxes to be collected for the principal and interest payments of today's borrowing, not leaving behind any inheritance. In Keynesian theory, it is argued that taxpayers cannot perceive the future burden of borrowing and accept public securities as a part of net wealth (Doğanalp 2005: 30). Also, according to Keynesians, the future generations do not undertake the real burden of the government debts but only the burden of interest is transferred to them. Contrary to Classical economists, Keynesians distinguish private debt from government debt (Alan 1997; Doğanalp 2005; Shaviro 1997).

#### **1.2.7. Main Characteristics of Public Debt**

The governments that want to meet the needs of the public at an upper level need more funds. Fundamental sources of these funds are tax money and borrowing. However, there are significant differences between these two sources of funds. Although there are compulsory debts, volunteerism is generally essential in government debt. But taxes are compulsory public funds. Taxes reduce the assets of individuals but government debt only transforms them. Taxes have a negative impact on the motivation of earning more but government debt does not have such an effect on individuals. While government borrowing is a temporary source of funds for governments, taxes are permanent and absolute source of funds. Because the debts must be paid off with interest and principal at maturity. Entities that lend money to the government receive interest payments but tax payers cannot demand any kind of private benefit through one-to-one payment of interest and the principle. Taxes cause a decrease in consumption, saving and investment of the individuals but since the lender receives interest payment, government debts increase the income of the lender entities. Taxes are generally received from domestic sources but public debt can be received from both internal and external sources. The burden of the taxation is

undertaken by current generations but the burden of the borrowing can be transferred to the future generations. Furthermore, taxes are generally used to finance current expenditures but public debts are usually received in order to fund large-scale public investments (Ulusoy 2012).

#### **1.2.8. Classification of Sovereign Debt**

Government debt can be classified according to the lender, the maturity and covenants. The first classification is voluntary and compulsory government debts. In principle, government borrowing is voluntary. In a borrowing transaction, there are two parties, one to ask for a loan and one to lend. The borrowing event also takes place in the form that the party with surplus funds gives it to the borrowing party on its own request. In public debt it is the government which demands debt. On the other hand, the lender may be individuals, some institutions and organizations, other foreign states, or international organizations formed by more than one state. The borrowing state applies to one or more of these parties according to the circumstances prevailing at that time. The lenders also decide on their own free will by examining the benefits that the borrowing government will provide to them. However, it can be seen that although borrowing as a principle is expressed as being dependent on demand, it does not always take place in this way in practice. The borrowing government may in some cases use material or moral coercion in order to receive debt. In this case, the free will of the party to lend is not taken into account. In this method, the amount of debt that the state will receive is unilaterally determined by the government and an individual or organizations is obliged to participate in this exchange. As expected, the coercion here is a legal force. In other words, borrowing is realized by putting a law into effect. In debts received by the threat of coercion the government does not use the direct force to lend. But it announces that the securities will be forcibly sold to the public or institutions. In other words, individuals or institutions have to buy the securities issued by the government to comply with the law. There are some debts also received by emotional forcing. Essentially, in this method of borrowing, the sales of the securities are left to the buyer's free will. However, the manner in which the government presented the securities to the market puts the people under moral pressure and forces them to buy the bonds. Compulsory debts also can be received by compulsory savings.

This type of borrowing method, which is generally referred to in extraordinary circumstances, is still being used to create capital accumulation and to direct some groups to the savings. The aim is to deprive the actors of a certain purchasing power and to use it in the direction of the government itself. On the other hand, the government debt can be short- or long- term. In this context, according to the trilateral classification, the debts with maturity up to one year are referred as short term, debts with maturity from one year to five years are called middle-term and, those whose maturities are more than five years are regarded as long-term debts. However, the government debt according to the binary classification, those with maturity up to five years are short-term and those which have more than five-year maturity are considered as long-term debt. The last classification of public debt is internal (domestic) and external (foreign) debts. According to this classification there are two criteria determining the difference between internal and external borrowing. The first criterion is nationality of the creditor. In accordance with this criterion if the creditor is citizen of the borrower country, this transaction is classified as domestic debt, on the other hand if the lender is citizen of another country this type of debt is classified as foreign debt. Also, according to second criteria, if the debt is sourced from the domestic market this debt is classified as domestic debt, on the other hand if the debt is sourced from an external market this kind of debt is classified as foreign debts (Ulusoy 2012; Doğanalp 2005; Meriç 2013).

## **CHAPTER II**

### **SOVEREIGN DEBT RESTRUCTURING TREATMENTS**

#### **2.1. MAIN REASONS OF SOVEREIGN INDEBTEDNESS**

Borrowing has different meanings in developing countries and developed countries. Here, differences emerge as a result of countries' goals. While developed countries are more concerned with the provision and protection of economic equilibrium, developing countries place priority to the problem of financing development. Therefore, the reasons for a developing country's debt and the reasons for a developed country's debt are not the same. In this framework, the reasons for borrowing of the developing countries can be summarized as; insufficient capital accumulation, insufficient domestic savings, funding of development and industrialization, external economic dependency, monopolization of the scientific/technological innovation and accumulation of knowledge from the developed countries, inadequate level of education and knowledge, chronic budget deficits, the fact that the democratic structure is not fully established, that the repressive administrations often come to the power, and the unsuccessful implementations of these governments regarding the debt management, increasing military expenditures, inadequacy of natural resources and inability to have adequate raw materials and intermediaries, the fact that the development of marketing techniques in financial markets makes it attractive to borrow for such countries, chronic deficits in the balance of payments, structural foreign trade deficits and insufficient foreign exchange inflows. On the other hand, developed economies may have different motives to borrow. These kinds of countries can borrow due to temporary budget deficits, temporary differences in budgets' current expenditures and current revenues, financing of extraordinary expenses, financing some major projects, to take advantage of low interest rates in financial markets (Özçelik 2005).

## **2.2. FUNDAMENTAL CONCEPTS REGARDING THE SOVEREIGN DEBT RESTRUCTURING**

According to the IMF (2011) a debt instrument is a “*financial demand by the borrower that requires payment of interest and/or principal at some future date or dates*” (IMF 2011: 3). On the other hand, if an entity cannot meet the requirements of a debt contract in time and properly, it defaults. In this framework, debt default refers simply to “*an unfulfilled promise or breach of contract*” (Ams et al. 2018: 2). After default, the borrower(s) and the debtor(s) may agree on starting a debt restructuring process. A debt restructuring treatment is a kind of “transaction in which an existing debt contract is replaced by a new contract with one of the following consequences: (i) reducing the required interest or principal payments on the debt; (ii) extending the maturity of the debt; or (iii) the issuance of certain securities (common stock or convertible securities) to creditors” (Gilson et al. 1990: 325). This is a general and overarching general concept. In this context, the concept of sovereign debt restructuring is the “exchange of outstanding government debt instruments such as loans or bonds with new debt instruments or cash through a legal process” (Das et al. 2012: 7). “*The restructuring of a debt on less favorable terms than the original bond or loan terms*” called problematic debt restructuring (Das et al. 2012: 7). On the other hand, the “settlement of debt instruments not paid by paying cash (usually at a discount)” is named as debt repurchases (Forni et al. 2016: 25). But, the “*exchange of sovereign debts against cash possibly at a discount*” means debt buy-back (Das et al. 2012).

## **2.3. LEGAL ASPECT OF SOVEREIGN DEBT RESTRUCTURING**

There are various sort of laws and legislations regulating the sovereign debt restructuring process and these legislations are simply governing laws, collective action clauses and further key bond clauses. Sovereign bonds and loans can be regulated by different governing regulations. Generally, international bonds are issued under foreign regulations in financial centers like London, New York, Tokyo. Although the most popular regulations regulating international bond issues are New York and British regulations, there have been international bonds issued in accordance with German, Luxemburg, Italian and Japanese regulations. Contrary to the

international bonds, domestic bonds are regulated by domestic regulations. A governing regulation of a sovereign debt plays a major role in sovereign debt restructuring since it is a determining factor in contractual provisions in the process of debt restructuring. The governing regulation also determines whether the government bonds involve collective action clauses or not and it is relevant in the event that a creditor sue the sovereign in a commercial court. In this context, New York regulations and London regulations dominate the sovereign lending and legal processes. The other element to be emphasized is collective action clauses. Collective action clauses determine the creditors' representation in the sovereign debt restructuring negotiations and the majority of votes to change the terms of the sovereign debts and also may limit the rights of creditors to take a legal action against the sovereign (Das et al. 2012).

#### **2.4. PITFALLS TO AVOID SOVEREIGN DEBT RESTRUCTURING**

There are a number of pitfalls in sovereign debt restructuring process which may cause the restructuring process to be delayed, disputes between debtor government and its creditors and even failure of the restructuring process. One of these dangers is namely holdout which means a creditor refuse to join the restructuring offer in order to have an agreement with better conditions for themselves or to sue the borrower government in a court in London or in New York. Another challenge is the coordination of all the creditors. When the number of creditors is too large, it becomes harder to coordinate and establish a communication between them. Borrower country policies such as lack of transparency and information sharing can also have the potential to impede the sovereign debt restructuring processes. Also, political economy problems and political instability components such as wars, riots, uprisings play a role in the restructuring process. The new government that come in power after an election may cancel the agreements that were signed by the previous governments. The last vital factor that has an impact on a well-functioning debt restructuring process is the size of haircuts. Excessive haircuts may increase the possibility of failure of the debt restructuring processes (Das et al. 2012).

## **2.5. SOVEREIGN DEBT RESTRUCTURING TREATMENTS IN HIPCS**

Having an unsustainable debt burden has been a challenging problem for many countries. With the globalization of the world economy, such problems have become more common. All these developments have the potential to lead to a number of unexpected and undesirable situations such as insolvency, debt crises and government debt restructuring. In this context, government debt restructuring often presents an option for countries that have difficulty in meeting the requirements arising from their indebtedness. Therefore, many countries have restructured their debts for reasons such as unsustainable debt burden, insolvency problems and debt crises. Among these sovereign states, there are a large number of countries, a significant part of which are African countries, which are also classified as Heavily Indebted Poor Countries (HIPCs). HIPCs consists of 39 countries and are as follows:



**Table 1:** List of HIPC

1	AFGHANISTAN
2	BENIN
3	BOLIVIA
4	BURKINA FASO
5	BURUNDI
6	CAMEROON
7	CENTRAL AFRICAN REPUBLIC
8	CHAD
9	COMOROS
10	CONGO, DEM. REP.
11	CONGO, REP.
12	COTE D'IVOIRE
13	ERITREA
14	ETHIOPIA
15	GAMBIA, THE
16	GHANA
17	GUINEA
18	GUINEA-BISSAU
19	GUYANA
20	HAITI
21	HONDURAS
22	LIBERIA
23	MADAGASCAR
24	MALAWI
25	MALI
26	MAURITANIA
27	MOZAMBIQUE
28	NICARAGUA

**Table 1 Continued**

29	NIGER
30	RWANDA
31	SAO TOME AND PRINCIPE
32	SENEGAL
33	SIERRA LEONE
34	SOMALIA
35	SUDAN
36	TANZANIA
37	TOGO
38	UGANDA
39	ZAMBIA

Source: World Bank

The latest government debt restructurings are called *final restructuring* in the literature, and it is expected that *the final restructuring is the process that provides the main relief* in debtor countries (Reinhart and Trebesch 2016). Due to data constraints, there are a total of five HIPC countries in the analysis of this study. These countries are Cameroon, Republic of Congo, Mozambique, Nicaragua and Tanzania. In this context, the final debt restructuring dates of these countries are as follows:

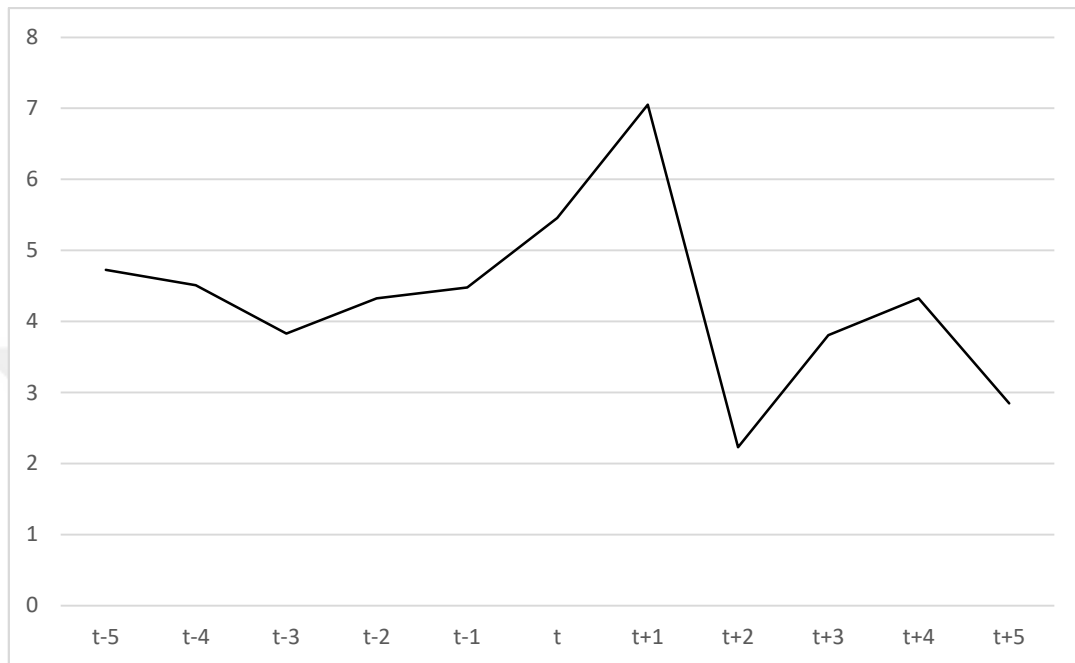
**Table 2: Final Debt Restructuring Treatments in HIPCs**

COUNTRY	FINAL RESTRUCTURING	TREATMENT
Cameroon	2003	DEBT BUY-BACK
Republic of Congo	2007	NA
Mozambique	2007	DEBT BUY-BACK
Nicaragua	2007	DEBT BUY-BACK
Tanzania	2004	DEBT BUY-BACK

Source: Cruces & Trebesch (2014)

Below, the short-term growth performances of the analyzed countries are presented based on after and before the final restructuring. The Figure 1 below indicates growth of Cameroon before and after final restructuring.

**Figure 1:** Growth Performance of Cameroon Before and After Final Restructuring

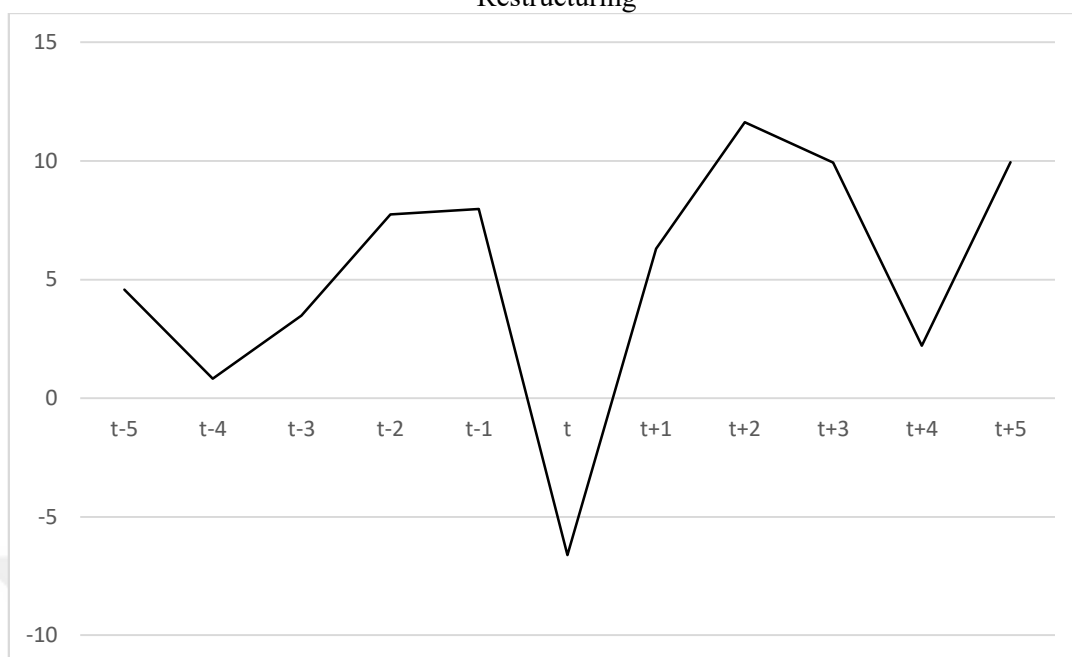


Source: World Bank.

According to the Figure 1 above it is obviously seen that the growth rates consist of the positive values before the final restructuring. However, there is a dramatic decline in growth just after the debt buy-back operation.

The Figure 2 below indicates growth of Republic of Congo before and after final restructuring.

**Figure 2: Growth Performance of Republic of Congo Before and After Final Restructuring**

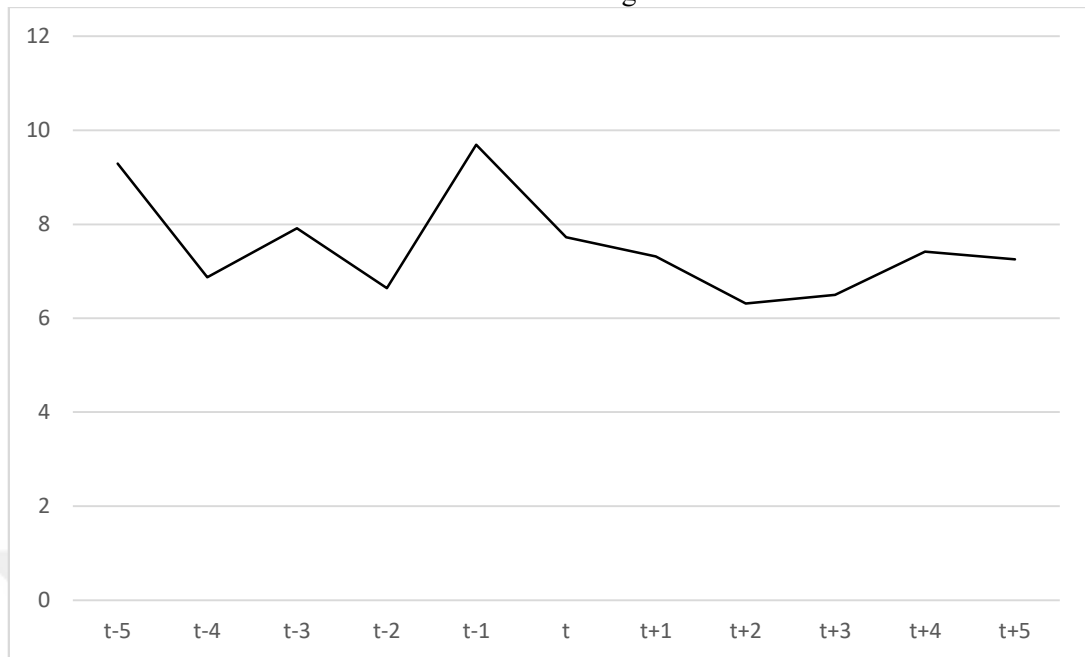


Source: World Bank.

According to Figure 2, recovery in the growth rates is observed after the final restructuring. In this operation, there is no debt buy-back.

Figure 3 below indicates growth of Mozambique before and after final restructuring.

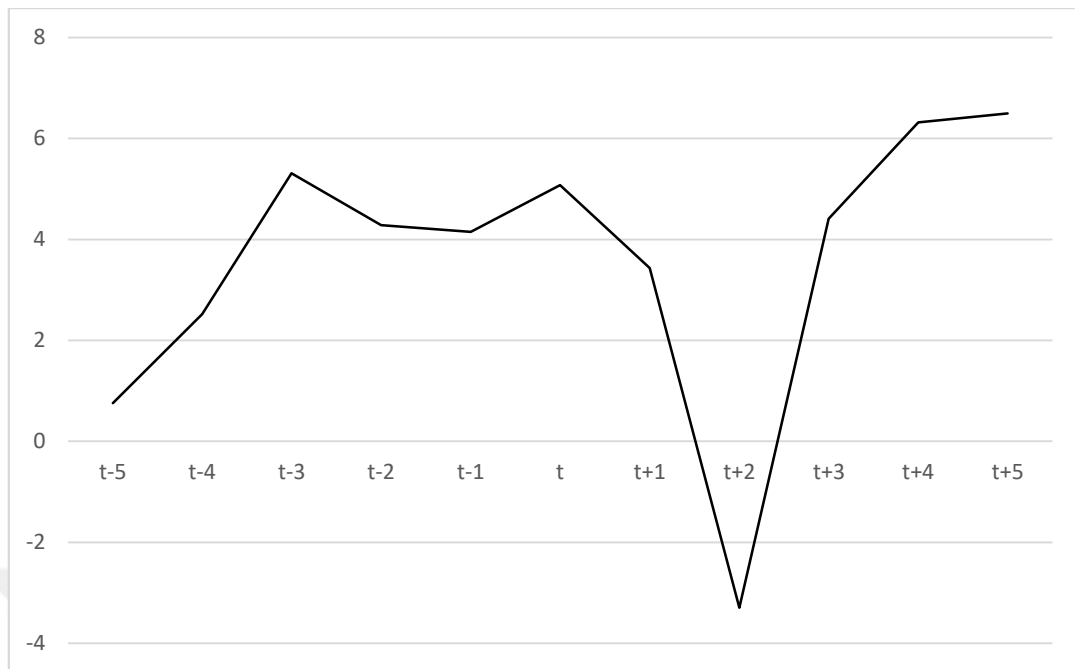
**Figure 3: Growth Performance of Mozambique Before and After Final Restructuring**



**Source:** World Bank.

According to Figure 3 slight recovery in growth before the final restructuring is observed but there is a sharp decline in the period following the debt buy - back operation. The Figure 4 below indicates growth of Nicaragua before and after final restructuring.

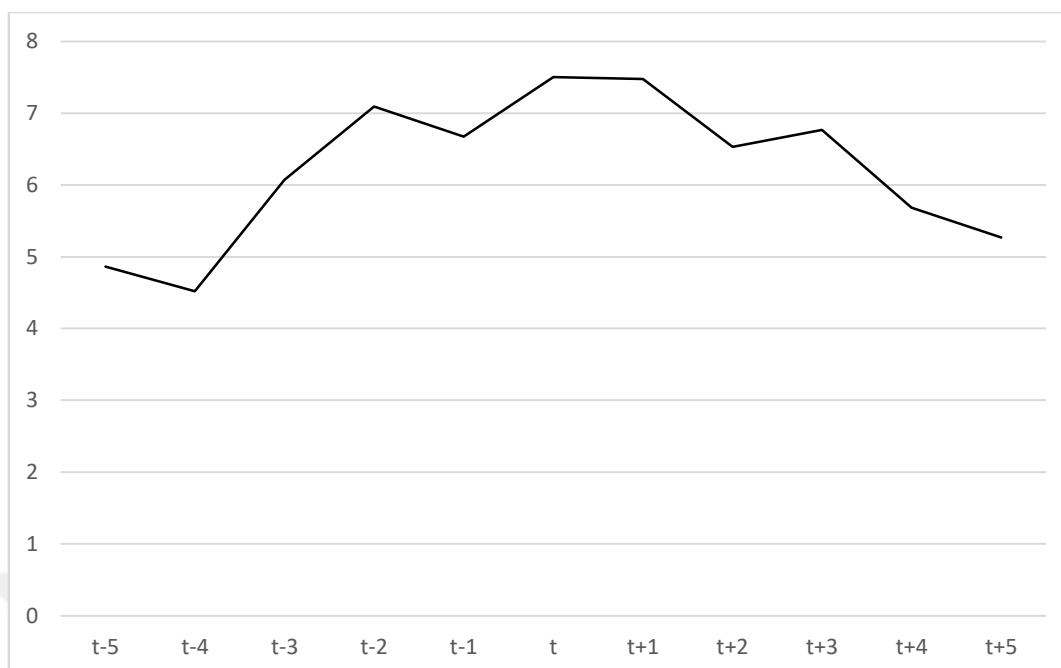
**Figure 4: Growth Performance of Nicaragua Before and After Final Restructuring**



Source: World Bank.

Final restructuring in Nicaragua included the debt buy-back treatment and there is a sharp decline in growth just after the debt buy-back treatment in Nicaragua. Figure 5 below indicates growth of Tanzania before and after final restructuring.

**Figure 5:** Growth Performance of Tanzania Before and After Final Restructuring



**Source:** World Bank.

According to the Figure 5 there is a relatively slight decline in growth rates in Tanzania just after the final restructuring operation which includes debt buy-back agreement.

A government debt restructuring operation is mainly expected to have positive impact on growth by essentially solving solvency problems, controlling unsustainable debt, thereby improving debtor countries' credit ratings and re-accessing international financial markets. The government debt restructuring processes affect the basic macroeconomic dynamics of the countries involved, especially their fiscal sustainability, by increasing the credit ratings and thus reducing the cost of borrowing, by reducing the debt burden, by creating an increase in the resources that can be used in productive areas. However, there are studies in the literature, which mention that debt restructuring processes are generally under the influence of global political forces and poor states that lack political power are not treated fairly in this process. The debt restructuring of some debtor countries is carried out in the form of debt buy-back. These countries generally appear as countries lacking political power. Debt buy-back operations are the exchange of outstanding debt instruments for cash, usually at a discount. A highly controversial feature of debt repurchase agreements is that the

debtor countries are forced to use their already scarce resources to buy back some of their debt in the secondary market. In the next section, the debts of governments to the foreign private creditors, which are one of the most complicated and politically sensitive debt restructuring type are taken as a basis and empirically examined in the case of HIPC's, which are the countries that lack political power. Negative effects of debt restructuring through debt buy-backs are observed specifically in this type of countries while the effect is expected to be positive for other type of restructuring treatments.





## **CHAPTER III**

### **EMPIRICAL ANALYSIS**

In this section, the purpose, scope and limitations of econometric analysis, as well as the empirical methodology, empirical model and data set used are explained. Following these explanations, the empirical findings and interpretations of the findings are also included. In this framework, within the empirical analysis, the impact of government debt restructuring on the growth performance of selected HIPC countries as borrowers is tested.

#### **3.1. EMPIRICAL EVIDENCE**

Overcoming financial crises and achieving sustainable growth again require a broad macroeconomic strategy. A government debt restructuring mechanism also has the potential to be a part of this strategy (IMF 2002: 4). Because a sovereign debt restructuring is expected to have a positive impact on growth by essentially solving solvency problems, controlling unsustainable debt, thereby improving debtor countries' credit ratings and re-accessing international financial markets. Therefore, government debt restructuring activities can have a significant impact on the economic growth of debtor countries. All these factors are closely related to the growth performance of debtor countries. However, the execution of debt restructuring operations in the form of debt buy-back has the potential to adversely affect the macroeconomic dynamics of debtor countries. In this framework, there are a number of academical papers investigate these issues. Bulow and Rogoff (1991) challenge the general argument that unilateral debt recovery practices benefit heavily indebted countries by providing debt relief. According to the authors, if a country in heavy debt has good investment projects, the debt buy-back practices will harm the countries macroeconomic circumstances. In such a case, it would not be beneficial for the country to use its resources to repay its debt at market prices. Asonuma et al. (2017)

studied the macroeconomic effects of debt restructuring practices, and focused on both preventive and post-default restructurings. As a result of the study, they determined that the post-default restructuring practices of the countries cause deeper effects than the preventive debt restructuring operations. The authors found that debt restructuring after countries defaulted resulted in much more dramatic and longer-lasting declines in both GDP and real exchange rates. Reinhart and Trebesch (2014) examined the effects of debt restructuring practices on macroeconomic dynamics in both developing and developed economies. The period examined is 1920-1939 and the period 1979-2010. As a result of the study, the authors stated that after the final debt restructuring, the growth rates of the debtor countries increased and their debt burdens decreased. Reinhart and Trebesch (2016) claim that if some debts are written off (executing the haircut application) within the scope of debt restructuring processes, these operations positively affect the growth performance of debtor countries. Moreover, according to the authors, the larger the amount of debt written off in a debt restructuring transaction, the higher the increase in the growth rate of the debtor country will be. Forni et al. (2016) states that after any debt restructuring implementation, there is a decrease in the growth performance of the debtor country, but after the final restructuring, the growth performance of the countries that have restructured their debts has improved. Marchesi and Masi (2017) examined 520 cases between 1975 and 2013 and focused on the effects of both private sector and government debt restructuring practices on the growth of debtor countries. In the paper, it was found that countries indebted to private creditors faced relatively lower growth rates both during the debt crisis and after default. In addition, there was no decrease in the growth performance of the countries that were indebted to official debtors during the crisis, moreover, it was found that the growth performance of these countries increased. On the other hand, Cheng et al. (2016), examined the macroeconomic effects of restructuring of debts to official creditors on debtor countries. As a result, the writers found that the growth performance of debt restructuring countries improved when debt restructuring practices included the nominal write-off of some debt.

As understood, in the related literature, it has been concluded that debt restructuring practices usually affect the macroeconomic dynamics of debtor countries positively. We will try to shed light on an even more specialized issue - the effect of

the restructuring of the sovereign debts of the HIPCs on the growth performances of these (debtor) countries in this study. In this sense, the question of whether the expected positive effect of such debt restructurings on growth also applies to poor countries will be examined. Most of the countries examined in this study are relatively poor African countries and there are claims that these countries are not treated fairly in debt restructuring practices because they are not politically powerful. A generally positive trend was observed in the growth of emerging market economies after debt restructuring processes. In this context, the study aims to shed light on whether the same effect applies to poor countries, and if not, to shed light on the possible reasons for this.

### **3.2. AIM AND SCOPE**

In this study, the issue of how the growth performance of debtor countries is affected if the restructuring of government debts to external private creditors is carried out through the debt buyback operations is examined in the context of Heavily Indebted Poor Countries (HIPCs). Therefore, in this study the effects of restructuring operations carried out in the form of debt buy-back and restructuring operations carried out in other ways<sup>5</sup> on growth performance are analyzed comparatively.

The research questions are: (i) Is there any relationship between the sovereign debt restructuring operations and the growth performance in Heavily Indebted Poor Countries (HIPC countries)? (ii) If so, is the potential impact of these operations on economic growth positive or negative? (iii) “Does the execution of government debt restructuring in the form of debt buy-back negatively affect the growth of these countries?

Within the scope of this study, only government debt restructuring transactions, which are defined as the restructuring of direct debts and/or government-guaranteed debts, are examined (Cruces and Trebesch 2014). However, the study focused only on problematic<sup>6</sup> debt restructurings and excluded government debt management operations<sup>7</sup> and routine debt restructuring agreements that extended their

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<sup>5</sup> The sovereign debt restructuring methods rather than buy-back treatments, such as haircut, consolidation and/or conversion.

<sup>6</sup> It is called restructuring of bonds (bank loans) to be less advantageous than original bonds (the loan itself) (Cruces and Trebesch: 2014).

<sup>7</sup> For example, debts are subject to clearing and buy-backs that occur in ordinary times.

maturity by less than one year. In addition, while only real implemented (realized) cases were included in the analysis, cases that included incomplete negotiations, in-principle incomplete agreements and/or swap offers were excluded from the study.

In the empirical work, the possible impact of government debt restructuring transactions on growth has been examined in the context of HIPCs. This country group includes 39 countries in total, mostly African countries. However, only the five of these countries could be included in the analysis due to data limitations. Therefore, there are a total of five countries in the empirical analysis. These countries are Cameroon, Republic of Congo, Mozambique, Nicaragua and Tanzania, respectively.

In accordance with this purpose of the empirical analysis, panel regression method is applied after the collection of available data. The data is from 1997 to 2021. In this study, only the HIPCs are analyzed and only the impact of restructuring of the debts to foreign private creditors are included in the econometric analysis. This is the scope of the study.

On the other hand, the last of the government debt restructuring series is called the “final restructuring” in the literature, and it is expected that the final restructuring is the process that provides the main relief in debtor countries (Reinhart and Trebesch 2016). In this direction, in empirical analysis mainly the existence of a statistically significant effect of the final restructurings on the growth performance of these debtor countries was investigated.

It should be noted that, the literature on the relationship between government debt restructuring and growth is growing, although narrow. Although there are studies examining the possible effects of government debt restructuring on various macroeconomic variables, there is no study that aims to examine the effect of these operations on economic growth, especially in HIPCs. In this sense, this study basically aims to shed light on this issue by analyzing the interaction between government debt restructuring and growth with the support of empirical evidence. It is expected that the study will contribute to the literature and help sovereign actors make more sound decisions by increasing the predictability of their actions.

### 3.3. DATA AND METHODOLOGY

#### 3.3.1. Data

In this study, it is aimed to investigate the effect of final government debt restructuring transactions with foreign private creditors on the growth performance of debt restructured countries. However, the sovereign debt restructuring operations are not the only factor affecting economic growth. There exist many other determinants of economic growth. In this context, in order to increase the explanatory power and reliability of the model, other variables that are expected to affect the economic growth should be selected. That is why the sovereign debt restructuring is not the only explanatory variable in our empirical model. In this direction, in line with the literature (Chirwa and Odhiambo 2016; Forni et al. 2016; Farhana and Chowdhury 2014), other explanatory variables rather than the final restructuring dummy variable are also included in the econometric model as control variables (the other determinants of economic growth). The data in the model is in the form of panel data and covers the years 1997-2021 (24 years) for HIPC countries. The impact of final debt restructuring on the growth performance of selected countries is tested using the panel regression method using the model below. The econometric model is as follows:

$$Y_{it} = \alpha + \beta_1 EXPD_{it} + \beta_2 FDI_{it} + \beta_3 POP_{it} + \beta_4 CA_{it} + \beta_5 GDEBT_{it} + \beta_6 INF_{it} + \beta_7 \lambda_i + \epsilon_{it}$$

The definitions of the variables in the model and the sources from which the variables are compiled are presented in the table below.

**Table 3: Data Description**

<b>Variable</b>	<b>Data Description</b>	<b>Source</b>
<b>Y</b>	Annual GDP growth rate	World Bank
<b>EXPD</b>	Final consumption expenditure/ GDP	World Bank
<b>FDI</b>	Annual Foreign Direct Investment/GDP	World Bank
<b>POP</b>	Annual Population Growth Rate	World Bank
<b>CA</b>	Annual Current Balance/GDP	World Bank and OECD
<b>GDEBT</b>	Public Debt Stock/GDP	World Bank
<b>INF</b>	Annual Inflation Rate	World Bank
$\Lambda_i$	Dummy variable for the first five years following the final debt structuring for country i.	Cruces & Trebesch (2014)

**Source:** Prepared by Author by utilizing the data on World Bank, OECD and Cruces & Trebesch (2014).

The last of the government debt restructurings is called final restructuring in the literature, and it is expected that the final restructuring is the process that provides the main relief in debtor countries.

On the other hand, the effect of debt restructuring on growth is explained with the help of a dummy variable. In this context, the latest of the debt restructuring treatments is called the final restructuring in the literature. These treatments are expected to provide the main relief for debtor countries. Due to data constraints, there are a total of five HIPC countries involved in the empirical analysis of the study. These countries are Cameroon, Republic of Congo, Mozambique, Nicaragua and Tanzania and the dates of the final debt restructuring operations of these countries are 2003, 2007, 2007, 2007, 2004 respectfully. Consistent with the literature<sup>8</sup>, the growth was observed in the first 5 years following the final debt restructuring year. For this purpose, a dummy variable for each country, which takes the value of 1 for the first 5 years following the year of the final debt restructuring, and which takes the value of 0 for the remaining years is used. The coefficient of the dummy variables gives us an idea about the significance, direction and size of the possible impact of debt restructurings on growth of the debtor countries.

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<sup>8</sup> See Forni et al. (2016).

### 3.3.2. Methodology

In the literature, panel data studies, in which both time dimension and cross-sectional dimension are taken into account have become widespread compared to time series and cross-section studies. Today, it can be said that the use of panel data analysis, which has become a frequently used method, has some advantages in econometric analysis, unlike other types of analysis. In this context, Hsiao (2003) and Klevmarken (1989) listed these advantages as follows (Hsiao 2003 and Klevmarken 1989; cited in Baltagi 2005: 4-6):

- *“It allows heterogeneity between the cross-sectional units.*
- *Panel data analysis exhibits more variability than time series and cross-section data analysis. Thus, the multicollinearity problem is less encountered in these data. Moreover, since the number of observations is relatively higher, these models have higher degrees of freedom.*
- *Panel data better reflect the dynamics of change in periodic analyses.*
- *Panel data can also be analyzed in cases where there are relatively short time series or insufficient number of cross-section observations.*
- *Finally; panel data increases the effectiveness of economic forecasters.”*

The method in this study is an example of a balanced panel, in the sense that the panel data set used includes a time series of equal length for each cross-section.

### 3.4. EMPIRICAL RESULTS

#### 3.4.1. Descriptive Statistics

In the study, first of all, descriptive statistics of the data are presented. The descriptive statistics give researchers a general idea on the series.

**Table 4:** Descriptive Statistics of the Variables

	Y	POP	INF	FDI	GDEBTS	CA	EXPD
<b>Mean</b>	4.53311	2.545410	6.32515	6.050124	1.740592	-7878660	78.8379
<b>Median</b>	4.63079	2.679666	5.50418	3.987136	1.182807	-6223525	83.8846
<b>Maximum</b>	12.0868	4.155897	67.1997	39.45620	8.034678	20.12894	98.6168
<b>Minimum</b>	-1078324	1.179570	-2116523	-1891777	0.074203	-4152687	35.0725
<b>Std. Dev.</b>	3.70606	0.679407	10.1419	8.679662	1.558821	11.29293	16.0302
<b>Skewness</b>	-112578	-0.42752	2.17107	1.601421	1.774047	-0.56369	-12294
<b>Kurtosis</b>	5.60876	2.718736	15.3218	7.007237	6.520982	4.221088	3.56054
<b>Jarque-Bera</b>	59.8707	4.084892	860.527	132.6773	125.9725	13.92551	32.0684
<b>Sum</b>	548.507	307.9946	765.344	732.0650	210.6117	-9533178	9539.39
<b>Sum Sq. Dev.</b>	1648.19	55.39120	12343.2	9040.385	291.5908	15303.65	30836.3
<b>Observations</b>	121	121	121	121	121	121	121

**Source:** Calculated by the Author.

Descriptive statistics reflect the basic statistical characteristics of the data and provide a preliminary idea before analysis results are presented. When Table 2 is examined, it is seen that the annual growth rate, which is the dependent variable, is evaluated as panel data, with a maximum value of 12% and a minimum value of -



10.7%. The cumulative average of the annual growth rates of the five countries is 4.5%.

### 3.4.2. Correlation Analysis

In addition, the correlation analysis table for the data is also presented below. According to the results of the correlation analysis, there is no relationship between the variables that causes a multicollinearity problem (For the multicollinearity problem, the correlation of the two variables should be 80% and above).

**Table 5:** Correlation Analysis- Correlation Matrix of Variables

	<b>Y</b>	<b>POP</b>	<b>INF</b>	<b>FDI</b>	<b>GDEBTS</b>	<b>CA</b>	<b>EXPD</b>
<b>Y</b>	1	0.23	0.19	0.09	-0.31	0.03	0.09
<b>POP</b>	0.23	1	0.05	0.12	-0.16	0.13	-0.52
<b>INF</b>	0.19	0.05	1	-0.02	-0.16	0.13	-0.04
<b>FDI</b>	0.09	0.12	-0.02	1	-0.05	-0.63	0.11
<b>GDEBTS</b>	-0.31	-0.16	-0.16	-0.05	1	-0.09	0.22
<b>CA</b>	0.03	0.13	0.13	-0.63	-0.09	1	-0.52
<b>EXPD</b>	0.09	-0.52	-0.04	0.11	0.22	-0.52	1

**Source:** Calculated by the Author.

### 3.4.3. Graphs of Variables

On the other hand, the plots of the series have the potential to provide a preliminary idea of the trends, breaks and stationarities of the series. In this direction, there are the graphs of the data sets used in the analysis below. The Figure 6 below indicates the annual Growth rates of the examined five countries in the empirical analysis:

**Figure 6: Y (Annual GDP Growth Rate) (1997-2021)**

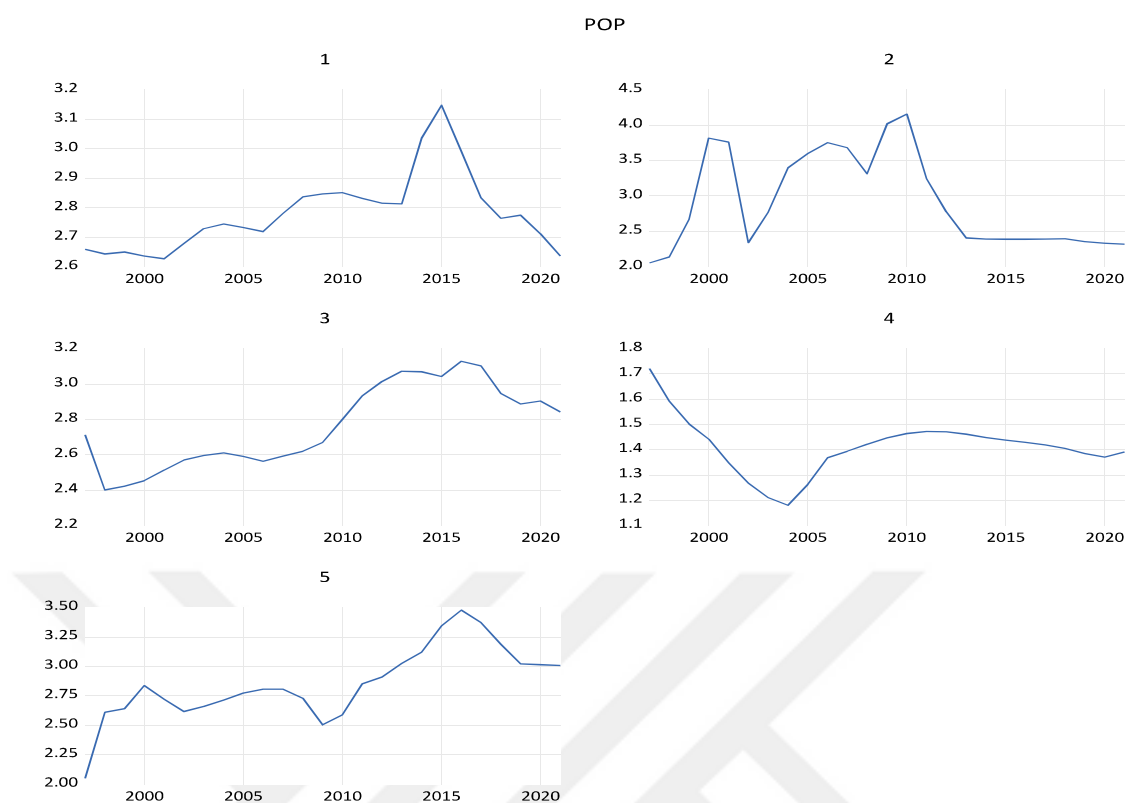


**Source:** Calculated by the Author.

The numbers on the internal graphs 1,2,3,4,5 stands for the countries Cameroon, Republic of Congo, Mozambique, Nicaragua and Tanzania respectfully. According to the graphs, while the growth of Republic of Congo is notably volatile, the other countries' annual growth rates are more stable relative to the Republic of Congo.

Figure 7 below demonstrates the annual population growth rates of the examined five countries:

**Figure 7: POP (Annual Population Growth Rate) (1997-2021)**

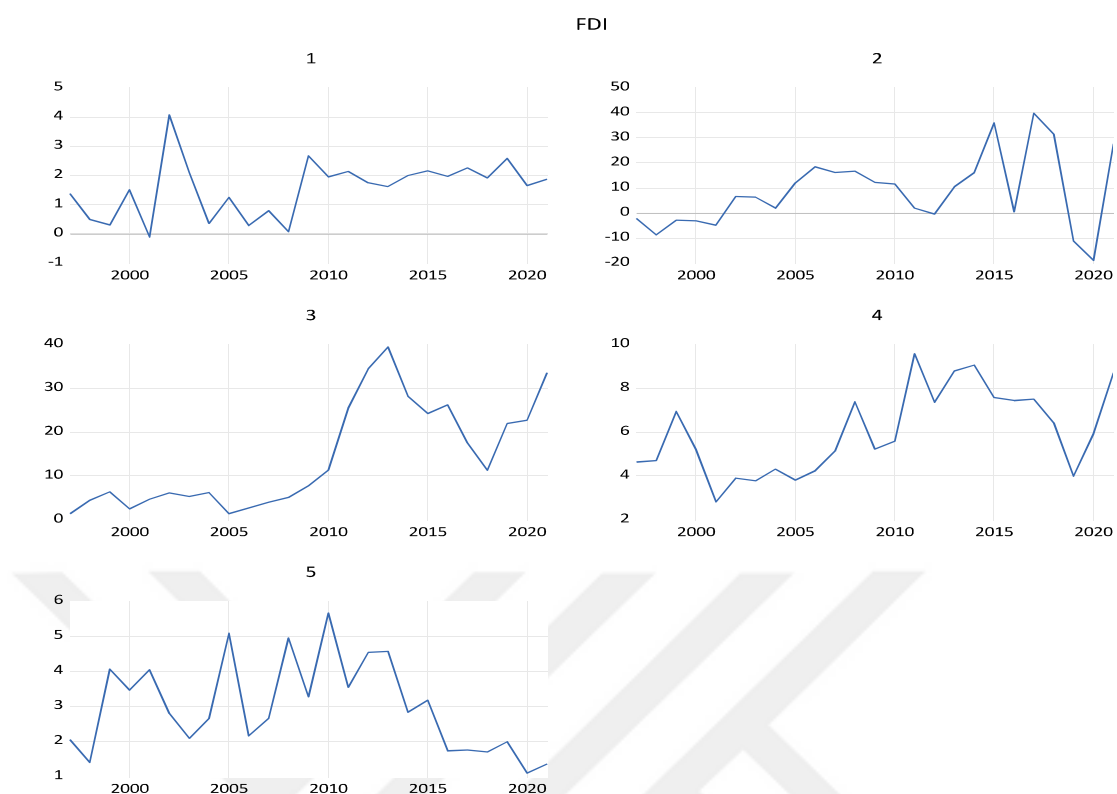


**Source:** Calculated by the Author.

Annual population growth rates tend to increase between 2000-2016 in Cameroon, Mozambique and Tanzania. There is a dramatic decline in 2004 in the annual population growth rates in Nicaragua and the same decline can be seen after 2010 in Republic of Congo.

Annual foreign direct investment/GDP ratio of the analyzed five countries are presented in Figure 8 below:

**Figure 8: FDI (Annual Foreign Direct Investment/GDP) (1997-2021)**

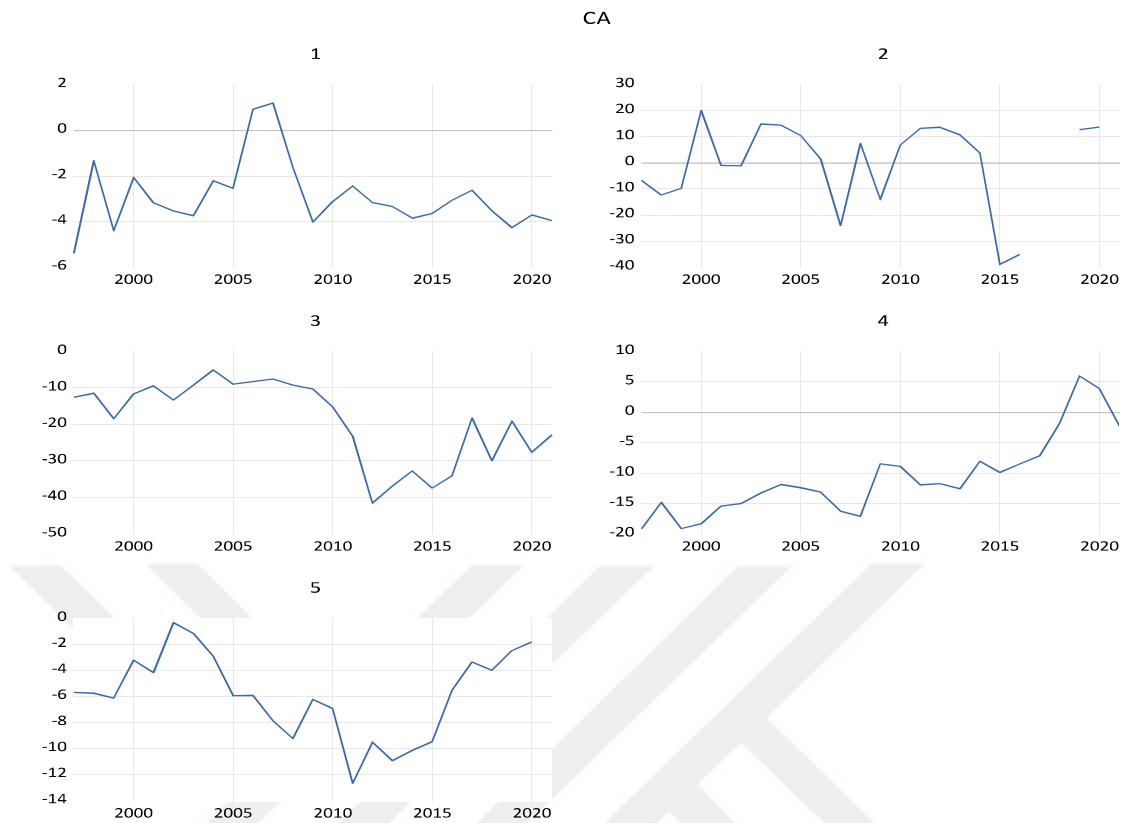


**Source:** Calculated by the Author.

While the annual foreign direct investment/GDP ratio is pretty stable in Cameroon, it follows a relatively instable path in other countries.

Annual current balance/GDP ratios of the countries are indicated in Figure 9 below:

**Figure 9: CA (Annual Current Balance/GDP) (1997-2021)**

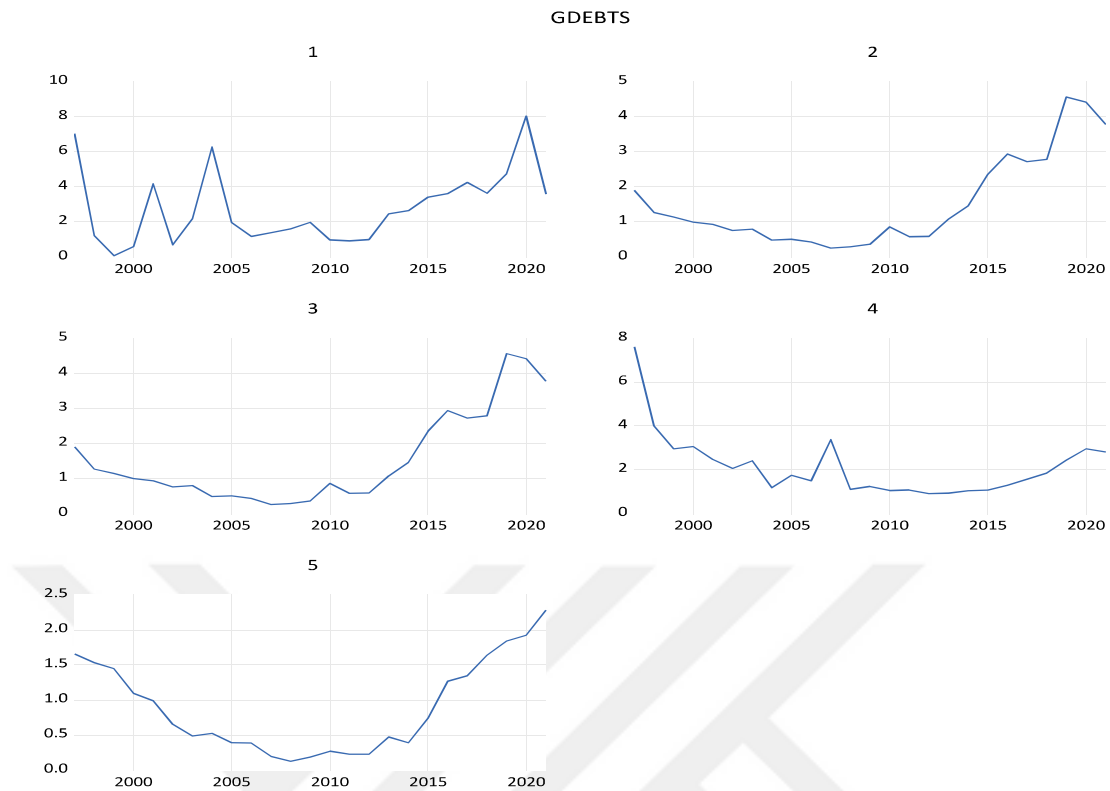


**Source:** Calculated by the Author.

According to Figure 9 above, the annual current balance/GDP ratio of Nicaragua tends to increase in the examined period. Mozambique experienced a dramatic decline in 2015 while the remaining countries experienced the similar decline between 2009-2011.

The Figure 10 below demonstrates the public debt stock/GDP ratio of the analyzed countries:

**Figure 10: GDEBT (Public Debt Stock/GDP) (1997-2021)**

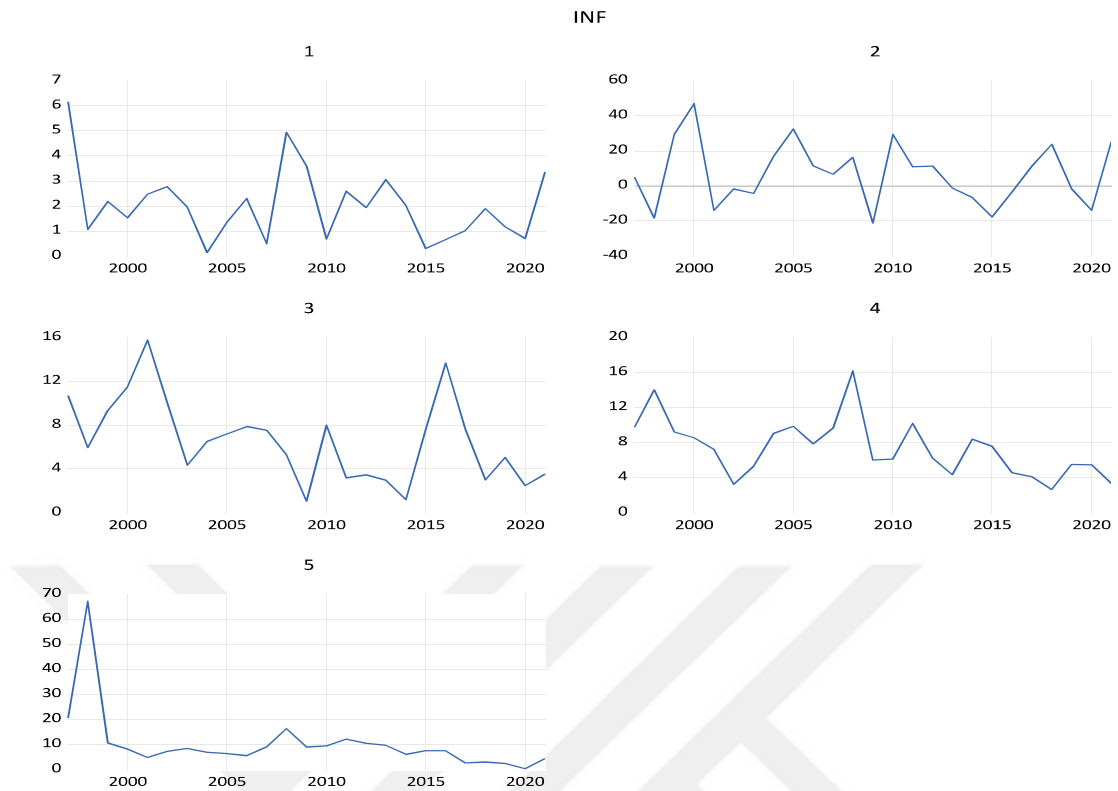


**Source:** Calculated by the Author.

According to Figure 10 above, while the public debt stock/GDP ratios of the countries tend to decline until 2010-2011, an upward trend is observed after this year in all the countries.

The Figure 11 below indicates the annual inflation rates of the examined countries:

**Figure 11: INF (Annual Inflation Rate) (1997-2021)**

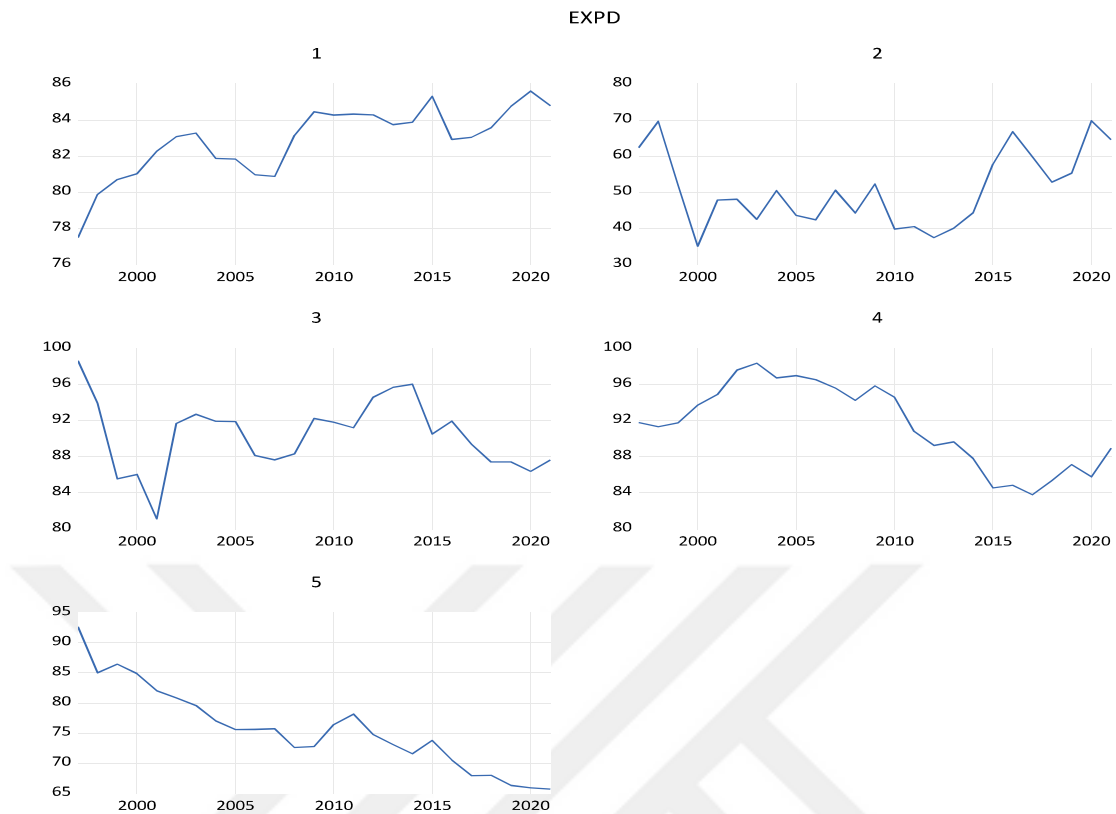


**Source:** Calculated by the Author.

According to Figure 11 above, a stable downward trend in Tanzania is observed while the annual inflation rate of the other countries is pretty unstable and seems to be more constant.

Lastly, the Figure 12 below shows the final consumption expenditure/GDP ratios of the examined countries.

**Figure 12: EXPD (Final Consumption Expenditure/GDP) (1997-2021)**



Source: Calculated by the Author.

According to the Figure 12 above, final consumption expenditure/GDP ratio tends to increase in Cameroon while a downward trend in Nicaragua and Tanzania is observed.

#### 3.4.4. LR Test

Firstly, in the panel regression, the LR test should be applied to determine whether the empirical model is bidirectional or unidirectional. The hypotheses of the LR test are as follows:

$H_0$ : No individual and time effects.

$H_1$ : There are individual and/or time effects.

In this direction, the following Table below contains the LR test results:



**Table 6: LR Test Results**

Variable	Coefficient	Std. Error	Prob. Value
<b>POP</b>	1.933.707	.5248624	0.000
<b>INF</b>	.0357304	.0282341	0.206
<b>FDI</b>	.0630176	.045725	0.168
<b>GDEBTS</b>	-.6708363	.1957206	0.001
<b>CA</b>	.1003016	.0406305	0.014
<b>EXPD</b>	.1431404	.0268409	0.000
<b>d1</b>	-.8572364	1.432.448	0.550
<b>d2</b>	4.553.404	1.591.071	0.004
<b>d3</b>	-.060756	1.495.004	0.968
<b>d4</b>	-1.017.024	1.492.319	0.496
<b>d5</b>	1240138	1424391	0.384
<b>Cons</b>	-1048756	2872214	0.000
<b>Prob (chi<sup>2</sup>)</b>		0.9955	
<b>chi<sup>2</sup> (2)</b>		0.01	

**Source:** Calculated by the Author.

When we look at the LR test result, it is understood that  $H_0$  cannot be rejected at 5% significance level. Because the probability value of  $\text{Chi}^2$  is not less than 5% (Gujarati, 2004: 295-296). For this reason, it is concluded that the pooled OLS model is suitable for our analysis.

### 3.4.5. Pooled OLS Analysis Results

Following the diagnostic tests, our final empirical model is as follows:

$$Y_{it} = \alpha + \beta_1 \text{EXPD}_{it} + \beta_2 \text{FDI}_{it} + \beta_3 \text{POP}_{it} + \beta_4 \text{CA}_{it} + \beta_5 \text{GDEBT}_{it} + \beta_6 \text{INF}_{it} + \beta_7 d1 + \beta_8 d2 + \beta_9 d3 + \beta_{10} d4 + \beta_{11} d5 + \epsilon_{it}$$

In this framework, the Pooled OLS analysis results are presented in the table below:

**Table 7: Pooled OLS Analysis Results**

<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>Prob. Value</b>
<b>POP</b>	1.925.253	.5545264	0.001
<b>INF</b>	.0363343	.0297446	0.225
<b>FDI</b>	.0630088	.0481433	0.193
<b>GDEBTS</b>	-.6784832	.2055986	0.001
<b>CA</b>	.0997887	.0427654	0.021
<b>EXPD</b>	.1430314	.028348	0.000
<b>d1</b>	-.8417988	150.927	0.007
<b>d2</b>	4.531.975	1.677.308	0.008
<b>d3</b>	.0290077	1.575.847	0.985
<b>d4</b>	-1.054.664	1.572.626	0.041
<b>d5</b>	1.208.599	1.501.682	0.423
<b>Cons</b>	-1.044.766	3.033.471	0.001
<b>R-squared</b>		0.3328	
<b>Prob (F-statistic)</b>		0.0000	

**Source:** Calculated by the Author.

There are a total of five countries involved in the empirical analysis. These countries are Cameroon, Republic of Congo, Mozambique, Nicaragua and Tanzania, and the dummy variables d1-d2-d3-d4-d5 belong to these countries respectively. Except the dummies, there exist some other independent variables which are annual population growth rate, annual inflation rate, annual foreign direct investment, public debt stock, annual current balance, final consumption expenditure.

Firstly, the probability value of F statistic (Prob(F-statistic)) is 0.00 and thus the value is below the 0.05, which means that the econometric model is significant as a whole.

Interpreting the p-values and the coefficients of the dummy variables, in a collective manner, it is possible to observe both the positive impact of non-buy-back restructurings and the negative effect of debt buy-back deals on the growth

performance of the examined group of countries. However, the empirical results indicate that only three of the dummy variables, which represent the impact of sovereign debt restructuring treatments on growth in Cameroon, Republic of Congo and Nicaragua are statistically significant. This means that the final debt restructuring practices have a statistically significant effect on economic growth of only three countries which are Cameroon, Republic of Congo and Nicaragua. However, in Mozambique and Tanzania there is not a statistically significant relationship between final sovereign debt restructuring treatments and growth. In this framework, in accordance with the coefficients of the dummy variables in Cameroon and Nicaragua, the growth performance is negatively affected by the debt restructuring operations in the first five years following the years the countries had final restructuring operation. There are debt buy-back treatments in the restructuring processes of these two countries. On the other hand, the final debt restructuring treatment has a positive impact on the growth of Republic of Congo<sup>9</sup> and there is no debt buy-back operation for this country. On the other hand, there also detected statistically significant relationship between the growth performance of debtor countries and their annual population growth rate, public debt stock, annual current balance and final consumption expenditure. However, there is not a significant relationship between growth and the independent variables annual inflation rate and annual foreign direct investment.

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<sup>9</sup> Similarly, this positive impact belongs only to the first five years following the years the country restructured its debts.

## CONCLUSION

Overcoming fiscal crises and regain sustainable growth require a sound macroeconomic strategy. One type of fiscal crises is debt crises and debt crises might be triggered by numerous factors such as unsustainable/excessive debt burden, liquidity/solvency problems and/or broke out of global social and economic crises. In this context, especially in case of sovereign debt crises a government debt restructuring mechanism may has the potential to be a part of overcoming depressions and rebuilding a well-functioning macroeconomic strategy.

Over-borrowing might cause a number of macro-fiscal challenges specifically for developing economies. As a matter of fact, excessive borrowing may first lead to sustainability problems, then to the debt defaults and ultimately, sovereign debt crises. In this framework, sovereign debt crises are simply one of the common reasons for government debt restructuring and restructuring operations are expected to bring out some consequences in favor of the debtor countries. Sovereign debt restructuring treatments are expected to have a positive impact on economic growth by essentially solving solvency problems, controlling unsustainable debt, thereby improving the credit ratings of debtor countries and enabling them to re-access international financial markets. However, the execution of government debt restructuring transactions in the form of debt buy-back may have the potential to adversely affect the macroeconomic dynamics of the debtor countries.

As stated before, the sovereign debt restructuring treatments are expected to positively affect the economic growth of these countries by triggering many positive channels of influence. These operations may increase the credit rating of the countries that have restructured their debts, thus reduce the cost of borrowing for these countries and also may reduce the debt burden of these countries and therefore can create an increase in the resources that can be canalized into the more productive areas. However, it is also stated that debt restructuring processes are under the effect of political forces and poor countries that lack political power are not treated fairly in this

process. Sovereign debt restructuring operations of some debtor countries are carried out in the form of debt buy-back. The countries that restructure their debts through debt buy-back operations generally are the countries that lack political power. Debt buy-back operations are the exchange of debt instruments that have not yet been collected for cash, usually at a discount. A highly controversial feature of debt buy-back agreements is that the debtor countries are forced to use their already scarce resources to buy back some of their debt in the secondary market.

According to Acharya and Diwan (1989), voluntary debt buy-back practices and debt swaps can be a bad deal even if they allow a country to pay off debt with a substantial debt reduction. Conversely, a debtor country can benefit only if a country has the bargaining power to recover most of its debt through debt buy-back. In debt buy-back practices, a well-meaning donor government may be more helpful by helping the borrower country directly than by selling back the same funds to the borrower country. Also, according to Bulow and Rogoff (1991), if a country in heavy debt has good investment projects, the debt buy-back practices will harm the countries macroeconomic circumstances. In such a case, it would not be beneficial for the country to use its resources to repay its debt at market prices.

In this study, the debts of governments to foreign private creditors are taken as a basis and examined in the case of Heavily Indebted Poor Countries (HIPC countries - HIPCs), the countries that lack political power. Countries examined in the empirical analysis except for the Republic of Congo used debt buy-back method when they restructured their foreign debts. Positive effect of debt restructuring operation on economic growth is observed only for Republic of Congo that did not use debt buy-back method when it restructured its foreign debt. Debtor countries that used debt buy-back method used their scarce financial resources for this operation. Since they do not have enough cash after debt buy-back agreements they cannot pay their other debts and face more challenging circumstances regarding debt roll-over and their macroeconomic dynamics including growth performance further deteriorate. Therefore, the effect of final debt restructuring on economic growth is negative in Cameroon and Nicaragua, the countries that used debt buy-back method. In a nutshell, debt buy-backs can only make sense for the debtor countries when these treatments are subsidized by creditors. Moreover, when information asymmetries are not taken

into account, unilateral debt buy-backs are useful for a debtor country only when the debtor country's alternative investment projects are extremely weak. Debt buy-back practices result in a large transfer of resources from the debtor countries to the creditors. In these treatments, the net asset position of the debtor countries decreases significantly and the risks of re-default of these countries is expected to increase.



## REFERENCES

- ACHARYA Sankarshan and DIWAN Ishac (1989), “Sovereign Debt Buybacks as a Signal of Creditworthiness”, *World Bank Policy Planning and Research Working Paper*, No. 318, pp. 1-29.
- AKAN Yusuf, ARSLAN İbrahim and KAYNAK Selahattin (2008), “Türkiye’de Ekonomik İstikrarı Sağlamada Maliye Politikası Uygulamaları (Bir Ampirik Çalışma: 1980-2006)”, *Sosyo-ekonomi*, Vol. 7, No. 7, pp. 107-116.
- AKDOĞAN Abdurrahman (2005), *Kamu Maliyesi*, Gazi Publications, Ankara.
- ALAN Ömer (1997), *Türkiye’de İç Borçlanmayı Etkileyen İktisat Politikaları-İç Borçlanma ile İlgili Ekonometrik Çalışma Örnekleri (1978-1995)*, (Master Thesis), İstanbul University Graduate School of Social Sciences, İstanbul.
- AMS Julianne, BAQIR Reza, GELPERN Anna and TREBESCH Christoph (2019), “Sovereign Default”, *In Sovereign Debt: A Guide for Economists and Practitioners*, ed. Abbas Abbas S. Ali, Alex Pienkowski, and Kenneth Rogoff, pp. 275–326.
- ASONUMA Tamon, CHAMON Marcos, ERCE Aitor and SASAHARA Akira (2017), “Costs of Sovereign Defaults: Restructuring Strategies, Bank Distress and the Credit- Investment Channel”, *IMF Working Paper*, No. 19/69, pp. 1-91.
- AVCI Nihal (1988), *Bütçe ve Para Politikalarının Makroekonomik Etkileri*, Government Budget Expertise Research Report, Ankara.
- BAĞCI Hamdi (2001), *Kamu Borçları Yönetimi ve Türkiye için Bir Değerlendirme*, Capital Markets Board of Türkiye, No.135, Ankara.
- BALL Laurence M., ELMENDORF Douglas and MANKIWI N. Gregory (1998), “The Deficit Gamble”, *Journal of Money, Credit, and Banking*, Vol. 30, No. 4, pp. 699-720.
- BALTAGI Badi Hani (2005), *Econometric Analysis of Panel Data*, 3rd Edition, John Wiley and Sons, England.

- BATIREL Ömer Faruk (1979), *Kamu Maliyesi Teorisine Giriş*, 2nd Edition, İ.İ.T.A Nihad Sayar Yayın ve Yardım Foundation Publications, İstanbul.
- BULOW Jeremy and ROGOFF Kenneth (1991), “Sovereign Debt Repurchases: No Cure for Overhang”, *The Quarterly Journal of Economics*, Vol. 106, No. 4, pp. 1219-1235.
- CHENG Gong, DIAZ-CASSOU Javier and ERCE Aitor (2016), “The Macroeconomic Effects of Official Debt Restructuring: Evidence from the Paris Club”, *Working Papers*, No. 21, pp. 1-29.
- CHIRWA Themba Gilbert and ODHIAMBO Nicholas M. (2016), “Macroeconomic Determinants of Economic Growth: A Review of International Literature”, *South East European Journal of Economics and Business*, Vol. 11, No. 2, pp. 33-47.
- CRUCES Juan J. & TREBESCH Christoph (2014), *2014 Update of Sovereign Debt Restructuring Dataset*, <https://sites.google.com/site/christophtrebesch/data>, DoA. 10.11.2022.
- DAS Udaibir S. PAPAIOANNOU Michael G. and TREBESCH Christopher (2012), “Sovereign Debt Restructurings 1950- 2010: Literature Survey, Data, and Stylized Facts”, *IMF Working Paper*, No. 12/203, pp. 1-129.
- DEBT (2022), *Oxford Online Dictionary*, <https://en.oxforddictionaries.com/definition/debt>, DoA. 25.10.2022.
- DERDİYOK Türkmen (2001), “1980 Sonrası Borçlanma Politikaları”, *Maliye Dergisi*, No. 138, pp. 28-31.
- DOĞANALP Nihat (2005), *Kamu Borçlanma Teorisi ve Borçlanmanın Reel Kesim Üzerindeki Etkileri*, (Master Thesis), Erciyes University Graduate School of Social Sciences, Kayseri.
- EDİZDOĞAN Nihat and ÇETİNKAYA Özhan (2013), *Kamu Bütçesi*, Ekin Publications, Bursa.
- EĞİLMEZ Mahfi and KUMCU Ercan (2015), *Ekonomi Politikası Teori ve Türkiye Uygulaması*, Remzi Publications, İstanbul.
- ERDEM Metin, ŞENYÜZ Doğan and TATLIOĞLU İsmail (1996), *Kamu Maliyesi*, Ekin Publications, Bursa.



- FARHANA Poly and CHOWDHURY Md Niaz Murshed (2014), "Impact of Foreign Debt on Growth in Bangladesh: An Econometrics Analysis", *International Journal of Developing and Emerging Economics*, Vol. 2, No. 4, pp. 1-24.
- FORNI Lorenzo, PALOMBA Geremia, PEREIRA Joana and RICHMOND Christine (2016), "Sovereign Debt Restructuring and Growth", *IMF Working Paper*, No. 16/147, pp. 1-46.
- GACENER Aydanur (2005), "Türkiye Açısından Wagner Kanunu'nun Geçerliliğinin Analizi", *Dokuz Eylül Üniversitesi İktisadi İdari Bilimler Fakültesi Dergisi*, Vol. 20, No. 1, pp. 103-122.
- GEDİZ Burcu and YALÇINKAYA Hakan M. (2001), "Nasıl Bir Bütçe Politikası", *Yönetim ve Ekonomi*, Vol. 8, No.1, pp. 53-74.
- GEVORGYAN, K. (2008), "Concept of State Sovereignty: Modern Attitudes", *Proceedings of Yerevan State University*, pp. 431-448, [http://www.y-su.am/files/Karen\\_Gevorgyan.pdf](http://www.y-su.am/files/Karen_Gevorgyan.pdf), DoA. 16.09.2022.
- GILSON Stuart C., JOHN Kose and LANG Larry HP. (1990), "Troubled Debt Restructurings: An Empirical Study of Private Reorganization of Firms in Default", *Journal of Financial Economics*, Vol. 27, No. 2, pp. 315-353.
- GUJARATI Damodar N. (2004), *Basic Econometrics*, 4th Edition, McGraw-Hill, New York.
- GÜNAY Ayşe (2007), *Mali Disiplinin Sağlanmasında Anayasal Denk Bütçe Yaklaşımı ve Türkiye'de Uygulanabilirliği*, (Ph.D. Thesis), Dokuz Eylül University Graduate School of Social Sciences, İzmir.
- Heavily Indebted Poor Countries (HIPC) (2023), *World Bank*, <https://data.worldbank.org/country/XE>, DoA. 10.01.2023.
- HSIAO Cheng (2003), *Analysis of Panel Data*, Cambridge University Press, Cambridge.
- IMF (2002), *Sovereign Debt Restructuring Mechanism - Further Considerations*, International Monetary Fund, Washington DC.
- IMF (2011), *Public Sector Debt Statistics Guide for Compilers and Users*, International Monetary Fund, Washington DC.
- IŞIK A. Kadir, KARAYILMAZLAR Ekrem, ORGAN İbrahim and IŞIK Hayriye (2005), *Devlet Borçları*, Ekin Publications, Bursa.

- KALEMLİ-ÖZCAN Şebnem, REINHART Carmen and ROGOFF Kenneth (2016), “Sovereign Debt and Financial Crises: Theory and Historical Evidence”, *Journal of the European Economic Association*, Vol. 14, No. 1, pp. 1-6.
- KLEVMARKEN N. Anders (1989), “Panel Studies: what can we Learn from them?”, *European Economic Review*, Vol. 33, No.2-3, pp. 523-529.
- KOĞAR Çiğdem İzgi (1996), “Denk Bütçe Teorisi ve Uygulanabilirliği Üzerine Bir Not”, *The Central Bank of the Republic of Türkiye, Directorate of Research and Monetary Policy Notification Paper*, No. 9630, pp. 299-308.
- MANKIW N. Gregory (2003), *Macroeconomics*, 5th Edition, Worth Publishers, New York and Basingstoke.
- MANKIW N. Gregory and TAYLOR Mark P. (2006), *Economics*, Thomson Learning, South East, United Kingdom.
- MARCHESI Silvia and MASI Tania (2018), “Life after Default: Private vs. Official Sovereign Debt Restructurings”, *Centro Studi Luca d’Aglia Development Working Papers*, No. 437, pp. 1-76.
- MERİÇ Metin (2013), *Devlet Borçları*, Şafak Publications, Ankara.
- NEMLİ Arif (1990), *Kamu Maliyesine Giriş*, 3rd Edition, Filiz Publications, İstanbul.
- OECD (2015), “Addressing the Tax Challenges of the Digital Economy, Action 1 - 2015 Final Report”, *OECD/G20 Base Erosion and Profit Shifting Project*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264241046-en>, DoA. 10.10.2022.
- ÖNDER İzzettin (2001), Vergi Yerine Borçlanma, *Mükellefin Dergisi*, No. 98, pp. 95-97.
- ÖZÇELİK İsmail Yüksel (2005), *Kamu Borç Yükü-Borçlanmanın Sürdürülebilirliği İlişkisi ve Türkiye Uygulaması*, (Master Thesis), Erciyes University Graduate School of Social Sciences, Kayseri.
- PEHLİVAN Osman (2000), *Kamu Maliyesi*, Derya Publications, Trabzon.
- REINHART Carmen M. and TREBESCH Christoph (2014), “A Distant Mirror of Debt, Default, and Relief”, *National Bureau of Economic Research Working Paper Series*, No. 20577, pp. 1-61.

- REINHART Carmen M. and TREBESCH Christoph (2016), “Sovereign Debt Relief and Its Aftermath”, *Journal of the European Economic Association*, Vol. 14, No. 1, pp. 215–251.
- RIAA (1928), *Island of Palmas case (U.S. v. Netherlands)*, 1928, Reports of International Arbitral Awards, Vol. 2.
- ŞEN Hüseyin and SAĞBAŞ İsa (2016), *Vergi Teorisi ve Politikası*, Kalkan Publications, Ankara.
- ŞEN Hüseyin, SAĞBAŞ İsa and KESKİN Abdullah (2007), *Bütçe Açıkları ve Açık Finansman Politikası-Teori ve Türkiye Uygulaması*, Orion Publications, Ankara.
- SHAVIRO Daniel (1997), *Do Deficits Matter?*, The University of Chicago Press, Chicago.
- SİVEREKLİ DEMİRCAN Esra and DÖNMEZ Canan Öykü (2007), “Türkiye’de Mali Disiplinin Sağlanmasında İç Borçlanma Politikasının Yeniden Yapılandırılması”, *Vergi Dünyası*, No. 306, pp. 1-13.
- TUNKİN Grigoriĭ Ivanovich (1956), *Basics of Contemporary International Law*, Progress Publishers, Moscow.
- TÜRK İsmail (1989), *Maliye Politikası*, Türkmen Publications, İstanbul.
- TÜRK İsmail (2005), *Maliye Politikası*, Turhan Publications, Ankara.
- ULUATAM Özhan (2003), *Kamu Maliyesi*, 8th Edition, İmaj Publications, Ankara.
- ULUSOY Ahmet (2001), *Devlet Borçlanması*, 1th Edition, İber Publications, Trabzon.
- ULUSOY Ahmet (2012), *Devlet Boçlanması*, Aksakal Publications, Trabzon.
- YAVUZ Hakan (2014), *Türkiye’de Devlet Borçlanmasının Ekonomik Büyüme Üzerindeki Etkisi: 1990-2012 Dönemi Analizi*, (Ph.D. Thesis), Sakarya University Graduate School of Social Sciences, Sakarya.