



T. R.
SIIRT UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
REGIONAL DEVELOPMENT ECONOMICS

**THE ROLE OF FISCAL AND MONETARY POLICIES IN ACHIEVING
ECONOMIC STABILITY IN TURKEY AND BRAZIL DURING THE PERIOD
2000-2015**

MASTER THESIS

PREPARED BY

**Ali Sabri Taher TAHER
(163202017)**

Department of Economics

Supervisor

Asst. Prof. Dr. Semih Serkant AKTUĞ

**December - 2018
SIIRT / TURKEY**

SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜ'NE

Siirt Üniversitesi Lisansüstü Eğitim-Öğretim ve Sınav Yönetmeliğine göre hazırlamış olduğum “**The Role of Fiscal and Monetary Policies in Achieving Economic Stability in Turkey and Brazil during the Period 2000-2015**” adlı tezin tamamen kendi çalışmam olduğunu ve her alıntıya kaynak gösterdiğimi taahhüt eder, tezimin kağıt ve elektronik kopyalarının Siirt Üniversitesi Sosyal Bilimler Enstitüsü arşivlerinde aşağıda belirttiğim koşullarda saklanmasına izin verdiğimi onaylarım.

Lisansüstü Eğitim-Öğretim yönetmeliğinin ilgili maddeleri uyarınca gereğinin yapılmasını arz ederim.

Tezimin tamamı her yerden erişime açılabilir.

12 /12/ 2018

Ali Sabri Taher TAHER

TEZ KABUL TUTANAĞI

SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜ'NE

Dr. Öğr. Üyesi Semih Serkant AKTUĞ danışmanlığında, Ali Sabri Taher TAHER tarafından hazırlanan bu çalışma 12/12/2018 tarihinde aşağıdaki jüri tarafından İktisat Anabilim Dalında Yüksek Lisans tezi olarak kabul edilmiştir.

Başkan (Tez Danışmanı) : Dr. Öğr. Üyesi Semih S. AKTUĞ
Jüri Üyesi : Dr. Öğr. Üyesi Mehmet DAĞ
Jüri Üyesi : Dr. Öğr. Üyesi Gökhan DÖNMEZ

İmza:

İmza:

İmza:

Yukarıdaki imzalar adı geçen öğretim üyelerine aittir.

12.12.2018

Doç. Dr. Veysel OKÇU

Enstitü Müdürü

CONTENTS

CONTENTS	I
ÖZET	IV
ABSTRACT	V
ABBREVIATION AND SYMBOLS	VI
LIST OF TABLES	VII
LIST OF FIGURES	VIII
ACKNOWLEDGMENT	IX
INTRODUCTION	1

CHAPTER ONE

FINANCIAL AND MONETARY POLICIES

1. LITERATURE RESEARCH	5
1.1. The Concept of Fiscal Policy	8
1.1.1. Public Expenditure and its Role in Economic Activity	9
1.1.2. The Tax System and its Role in Economic Activity	10
1.1.3. Budget Deficit	11
1.1.3.1. The Macroeconomic Relationship with a Budget Deficit	12
1.1.3.2. Budget Deficit and Economic Performance	13
1.1.3.3. Budget Determinants	13
1.2. The Concept of Monetary Policy and Its Variables	16
1.2.1. Money Supply	17
1,2,1,1 Money Supply and Exchange Rates	18
1.2.2. Interest Rate	19
1.2.2.1. Taylor Law	20
1.2.2.2. The Effect of Low-Interest Rates and Inflation Rates	22
1,2,2 Exchange Rate	23
1.2.3.1. The Main Forces that Determine the Exchange Rate	26
1.3. The Theoretical and Practical Framework of The Impact of Fiscal and Monetary policy on Economic Stability:	27
1.3.1. Fiscal Policy and Mechanism of Economic Stability	27
1.3.1.1. The Case Against the Discretionary Fiscal Stability Policy	29
1.3.2. Monetary Policy and Mechanism of Economic Stability	30
1.3.2.1. The Central Bank's Independence	31

1.3.2.2.	Monetary Conditions for Economic Stability	32
1.3.2.3.	Monetary Policies to Tackle Deflation	33
1.3.3.	The Importance of Coordination Between Fiscal and Monetary Policies to Achieve Economic Stability.....	33
1.3.3.1.	The Influential Between Fiscal Policy and Monetary Policy	34
1.3.3.2.	The Impact of Monetary Policy on Fiscal Policy.....	35
1.3.3.3.	Coordination Between Fiscal and Monetary Policies on Domestic and International Level	36

CHAPTER TWO

ECONOMIC STABILITY

2.1.	THE CONCEPT OF ECONOMIC STABILITY	37
2.1.1.	Economic Stability in Turkey	38
2.1.2.	The Role of Fiscal and Monetary Policies in Economic Stability	39
2.1.3.	A Clear Vision of Macroeconomic Stability	41
2.1.4.	Economic Stability Variables.....	42
2.1.4.1.	Inflation.....	42
2.1.4.2.	Unemployment	44

CHAPTER THREE

ANALYZING THE ROLE OF FISCAL AND MONETARY POLICIES IN ACHIEVING ECONOMIC STABILITY IN TURKEY AND BRAZIL DURING THE PERIOD 2000-2015

3.1.	DATA AND METHODOLOGY	46
3.1.1.	Turkey's Data Used in Study	47
3.1.1.1.	Turkey's Economic Stability.....	48
3.1.1.1.1.	Consumer Price Index (CPI).....	48
3.1.1.1.2.	Unemployment Rate	50
3.1.1.2.	The Role of Monetary Policy.....	51
3.1.1.2.1.	The Growth Rate of Money Supply.....	52
3.1.1.2.2.	The Role of Interest Rates.....	52
3.1.1.2.3.	Exchange Rates	53
3.1.1.3.	The Role of Fiscal Policy	54
3.1.2.	Brazil's Data Used in Study	55
3.1.2.1.	Brazil's Economic Stability.....	57
3.1.2.1.1.	Consumer Price Index (CPI).....	57
3.1.2.1.2.	Unemployment Rate	58

3.1.2.2. The Role of Monetary Policy	59
3.1.2.2.1. The Growth Rate of Money Supply	60
3.1.2.2.2. The Role of Interest Rates	61
3.1.2.2.3. Exchange Rates	62
3.1.2.3. The Role of Fiscal Policy	63
3.2. COMPARATIVE ANALYSIS BETWEEN TURKEY AND BRAZIL'S ECONOMIC STABILITY	64
3.2.1. The Role of Monetary Policy	65
3.2.2. The Role of Fiscal Policy	66
CONCLUSIONS	68
REFERENCES	70
APPENDIX	75

ÖZET

YÜKSEK LİSANS TEZİ

**2000-2015 DÖNEMLERİ ARASINDA BREZİLYA'DA VE TÜRKİYE'DE
EKONOMİK İSTIKRARI SAĞLAMADA PARA VE
MALİYE POLİTİKASININ ROLÜ****Ali Sabri Taher TAHER****Danışman: Dr. Öğr. Üyesi Semih Serkant AKTUĞ****2018, 75 Sayfa****Jüri üyesi: Dr. Öğr. Üyesi Semih Serkant AKTUĞ****Jüri üyesi: Dr. Öğr. Üyesi Gökhan DÖNMEZ****Jüri üyesi: Dr. Öğr. Üyesi Mehmet DAĞ**

Bu çalışmanın amacı, Türkiye ve Brezilya'nın hem arzını hem de talebini etkileyen dışsal şoklardan uzak, 2000-2015 döneminde bazı makroekonomik değişkenler ile mali ve parasal politikalar arasındaki etki ve ilişkilerin netleştirilmesi ve ekonomik istikrarı değerlendirmektir.

Bununla birlikte, ekonomik istikrar politikaları arasında hem tüketici fiyat endeksi hem de işsizliği belirli sınırlara göre kontrol etmenin yanı sıra enflasyonu sürekli olarak azaltma ve işsizlik oranını normale düşürme hedefine ulaşmak yer almaktadır.

Bir ekonominin verimliliği için istikrarlı bir çevre esastır. İstikrar konusu üç spesifik ekonomik hedefe ayrılabilir: reel çıktı artışı, tam istihdam ve fiyat istikrarı. Bu hedefler birbiriyle bağlantılı ve birbirine bağlıdır. Tam istihdam olmadan, bir ekonomideki potansiyel çıktı tam olarak gerçekleşmeyecektir. Bununla birlikte, fiyat dalgalanmaları belirsizliklere yol açabilecektir.

Araştırma hipotezi, gelişmekte olan ülkelerin ekonomik büyüme oranlarına ulaşmış olmaları ve düşük enflasyon oranıyla veya standart işsizlik oranına yakın olarak nitelendirilen kabul edilebilir bir ekonomik istikrar seviyesini sürdürmeleridir.

Çalışmanın en önemli bulgularına göre, mali ve parasal politikalar, Türkiye ve Brezilya'da ekonomik istikrarın sağlanmasına etki etmektedir. Ancak, para arzındaki artış, genişleme ve daralmaya dayalı politikalar kullanılmadan net ulusal ürünün büyümesine eşit ise, uzun vadeli ekonomik istikrar sağlamak için mali ve parasal politikalar kullanılabilir.

Anahtar Kelimeler: Maliye Politikası, Parasal Politikası ve Ekonomik İstikrar.

ABSTRACT**MASTERS THESIS****THE ROLE OF FISCAL AND MONETARY POLICIES IN ACHIEVING
ECONOMIC STABILITY IN TURKEY AND BRAZIL DURING THE PERIOD
2000-2015****Ali Sabri Taher TAHER****Supervisor: Asst. Prof. Dr. Semih Serkant AKTUĞ****2018, 75 Pages****Jury Member: Asst. Prof. Dr. Semih Serkant AKTUĞ****Jury Member: Asst. Prof. Dr. Gökhan DÖNMEZ****Jury Member: Asst. Prof. Dr. Mehmet DAĞ**

This purpose of this study is to clarifying the impact and relationships between some macroeconomic variables in the field of fiscal and monetary policies and achieving economic stability away from the external shocks that affect both the aggregate supply and the demand of Turkey and Brazil during the period 2000-2015. However, economic stability policies include controlling both consumer price index, and unemployment to certain limits, as well as achieving the goal of continuously reducing inflation and reducing the unemployment rate to normal.

A stable environment is fundamental to the efficiency of an economy. While the issue of stability can divide into three specific economic objectives: real output growth, full employment, and price stability. These objectives are interrelated and interdependent. Without full employment, the potential output in an economy will not fully realize. However, price fluctuations may lead to uncertainties.

The research hypothesis is that developing countries that have reached rates of economic growth and maintain an acceptable level of economic stability, which is characterized by a low rate of inflation or close to the regular rate of unemployment.

The most significant findings of the study, the fiscal and monetary policies impact on achieving economic stability in Turkey and Brazil, However, fiscal and monetary policies can use to achieve long-term economic stability if the increase in the money supply is equal to the growth of net national product without the use of policies based on expansion and contraction.

Keywords: Fiscal Policy, Monetary Policy, and Economic Stability.

ABBREVIATION AND SYMBOLS

<u>Abbreviation</u>	<u>Explanation</u>
CPI	: Consumer Price Index
INF	: Inflation
ER	: Exchange Rate
EMU	: European Monetary Union
GDP	: Gross Domestic Product
IMF	: International Monetary Fund
GEO	: Global Economic Outlook
ECB	: European Central Bank
TI	: Transformation Institutions
OCA	: Optimal Currency Area
FRB	: Federal Reserve Bank
CBI	: Central Bank Independence
BCB	: Brazil Central Bank
SDMO	: Separate Debt Management Office
JEC	: Joint Economic Commissions
M3	: Money Supply
AMF	: Arab Monetary Fund
VECM	: Variance Error Correction Models
US	: United States
<u>Symbol</u>	<u>Explanation</u>
%	: Percentage
\$: US Dollar

LIST OF TABLES

	<u>Pages</u>
CHAPTER THREE	
Table 3.1: Turkey's Economic Indicators During the Period 2000-2015	47
Table 3.2: Turkey's CPI, and the Unemployment Rate During the Period 2000-2015 .	49
Table 3.3: Turkey's Monetary Policy Indicators During the Period 2000-2015	51
Table 3.4: Brazils' Economic Indicators During the Period 2000-2015.....	56
Table 3.5: Brazil's CPI, and the Unemployment Rate During the Period	57
Table 3.6: Brazil's Monetary Policy Indicators During the Period 2000-2015	60
Table 3.7: Turkey and Brazil's Economic Stability Data During the Period 2000-2015	65
Table 3.8: Turkey and Brazil's Monetary Policy Indicators During the Period 2000- 2015.....	66
Table 3.9: Turkey and Brazil's Budget Deficit Over the Period 2000-2015	67

LIST OF FIGURES

	<u>Pages</u>
CHAPTER THREE	
Figure 3.1: Turkey's Consumer Price Index (CPI) During the Period 2000-2015	49
Figure 3.2: Turkey's Unemployment Rate During the Period 2000-2015	50
Figure 3.3: The Growth Rate of Money Supply in Million During the Period 2000-2015	52
Figure 3.4: Interest Rates in Turkey During 2000-2015.....	53
Figure 3.5: Exchange Rates in Turkey During 2000-2015	54
Figure 3.6: Turkey's Budget Deficit During the Period 2000-2015	55
Figure 3.7: Brazil's Consumer Price Index (CPI) During the period 2000-2015	58
Figure 3.8: Brazil's Economic Stability Indicators (CPI, and Unemployment Rate)....	59
Figure 3.9: The Growth Rate of Money Supply in Brazil During 2000-2015.....	61
Figure 3.10: The Interest Rates in Brazil During 2000-2015	62
Figure 3.11: The Exchange Rates in Brazil During the Period 2000-2015	63
Figure 3.12: Brazil's Budget Deficit During the Period 2000-2015.....	64

ACKNOWLEDGMENT

First, I would like to thank some individuals, especially who presented support in conducting this thesis study. Hence, I am very grateful for their supports, thoughtful discussions, and guidance.

I would like to express my most profound gratitude to my diligent supervisor Assist. Prof. Dr. Semih Serkant AKTUĞ. Without his encouragement, support, enthusiasm and continued optimism this thesis would hardly have been completed.

I would also like to express my gratitude and respect to my colleagues and fellows for their support and help in my experiment tireless in Siirt University.

Finally, I wish to thank my family for their support and encouragement throughout my study. My special thanks to my parents and my wife, without her continuous support and encouragement I would never have been able to achieve my goals.

I proudly dedicated this thesis to my family members, particularly to my father and my mother your lessons and endless support always respected. I also dedicated this thesis to my wife without her constant support and encouragement I would never have been able to achieve my goals.

INTRODUCTION

This purpose of this study is to clarifying the impact and relationships between some macroeconomic variables in the field of fiscal and monetary policies and achieving economic stability away from the external shocks that affect both the aggregate supply and the demand of Turkey and Brazil during the period 2000-2015. However, economic stability policies include controlling both consumer price index, inflation, and unemployment to certain limits, as well as achieving the goal of continuously reducing inflation and reducing the unemployment rate to normal.

Besides, minimizing the effects of external shocks that cause the economic cycle within its extreme limits. Also, access to price stability, the highest purchasing power of the money and budget balance. While, a stable environment is fundamental to the efficiency of an economy, and this issue of stability can divide into three specific economic objectives: the growth of real output, full employment, and price stability.

These objectives may be interrelated and interdependent. Without full employment, the potential output in an economy will not fully employ, and price fluctuations may lead to uncertainty and slower economic growth. Thus, given the damage caused by high inflation, it is clear that the recent decline in inflation in emerging markets is an acceptable development in different economies. The most important economic policy questions that still have to answer are whether this price environment stability and what steps should take to keep inflation under control.

The significance of the study is to choose the optimal macroeconomic policies that will succeed in achieving economic stability, especially after contemporary economic developments. These are the comprehensive economic reform approaches represented by IMF and IBRD reforms, which focused on reducing the public expenditure policies of the governments of different developing countries, (privatization) in these countries for the most prominent economic problems in the instability, high prices, and unemployment.

Further, this study is significant, while the study is very related as it will analytically demonstrate the role of fiscal and monetary policies in achieving economic stability in Turkey and Brazil during the period 2000-2015. However, it is essential to study the impact of the two policies to confirm the economic stability in Turkey and Brazil. Consequently, the main purpose of this study is to fill the gap by testing the real consequence of two policies.

However, many developing countries have reached the desired targets, mainly increasing rates of economic growth, low or controlled inflation rates, unemployment rates close to normal levels. Through the use of any fiscal or monetary instruments and others, however, what is important is how to maintain this achievement of goals through a comprehensive package of actions. Fiscal policy is an essential component of government's regulation, especially for dealing with the public budget deficit. Hence, the primary mechanisms of fiscal policy are the handling of revenue and expenditure of the country by manipulating its revenues.

The purpose of the study is to examine the role of macroeconomic policies such as monetary and fiscal on various instruments on both the controlled inflation rate target number one, as well as the unemployment rate near the regular rate by analyzing the effect of macro variables in inflation rate and unemployment rate. However, observing of the perspectives in the literature on the role of fiscal and monetary policies in achieving economic stability in developed and developing states. It is believed that in Turkey and Brazil, there is still a lack of analytical studies on the significant role of the fiscal and monetary policies in achieving economic stability. Therefore, the primary purpose of this study is to analyze the significant role of macroeconomic policies tools.

The study hypothesis, developing countries that have reached rates of economic growth can maintain a level of economic stability that is low inflation or close to the standard rate of unemployment. So, this study hypothesis is that fiscal and monetary policy have a significant impact on achieving economic stability in Turkey and Brazil over 2000-2015.

The methodology of this thesis study based on primary macroeconomic analysis for fiscal and monetary policies in achieving economic stability in Turkey and Brazil during the period 2000-2015, while monetary and fiscal policies are remarkable variables as well as significant issues not only for developed states but also for developing ones. Turkey and Brazil is also the case in this matter, that including the use of the consumer price index, unemployment rate, the growth rate of money supply, interest rates, exchange rates. Moreover, a budget deficit of individual states, which are starting points for discovering the behavior of both states and their in-depth analysis. The sample included two countries: Turkey-Brazil for the period 2000-2015. The data were collected and used for the analysis taken from the central bank of Turkey and Brazil.

The study concludes that Turkey's annual percentage changes of the CPI at the beginning of the period 2000-2015 declined. The fluctuating notably took place between 2004 to 2015. However, from 2000 to 2015 Brazil's CPI gradually increased without floating or declining, but, in ten years increased to nearly double from 52.5% in 2000 to 100% in 2010. Hence, the above results revealed that there are no much differences between Turkey and Brazil's CPI as economic stability over 2000-2015.

While the study found that the unemployment rate in Turkey increased from 6% in 2000 to 7.8% in 2001, However, unemployment in major metropolitan areas fell to 10.3% in 2015, from around 13.1% and 11.1% in 2009-10 respectively. In this regard, the unemployment rate in Brazil declined from 13.9% in 2000 to 12.5% in 2001, yet, during the period 2000-2015 unemployment rate in Brazil steadily declined with floating in 2003 were increased to 13.7%, compared to the previous year was 12.5 and increased in 2009 by 9.7% compared to 2008 was 9.4%. However, Brazil ended 2014 with an unsatisfactory economic growth rate valued at only 0.2%, which the lowest economic growth rate since 2009. Turkey's economy recovered dynamically just after the global crisis.

The study also found that the central bank of Turkey and Brazil during the period 2000-2015, took various actions on monetary policy and reached its objectives of achieving its economic stability, in the overall level of prices and maintaining the reliability of the banking system, constant with the purposes of the bank and the means to achieve these purposes, in accordance with the provisions of the law.

However, monetary policy affects the economic stability in general and inflation in particular by changing either a monetary comprehensive or an interest rate targeting. By employing some potential actions, so, the traditional actions of monetary policy comprise the fluctuations in money supply, interest rates, exchange rates, and changes in asset prices, which is Turkey effectively implement them, while at the beginning of the period indicated the central bank of Brazil had approached an inflation-target for monetary policy. Besides, increased money supply, as well as adopted floating interest rates and a free exchange rate regime. However, foreign currencies exchange systems have liberalized.

Further, the study concludes that the fiscal policy performed that to be a substance of Turkey's macroeconomic stability. Especially, since the crisis of 2001, Turkey has

reached to very remarkable fiscal results, especially for central government. Turkey sharply declined its chronic budget deficit. Thus, fiscal policy can significantly affect the future growth rate of the economy by stimulating the growth of the human capital stock. As well as through capitalizing into infrastructure developments. As a result, the Turkish government through implementing fiscal policy kept public finances on a maintainable path. However, during the same period Brazil managed to decline its public budget deficit, the lowest decline was in 2015 by -10.2 due to Brazilian currency (Real) lost more than half of its value against the U.S. dollar particularly between 2011 and the end of 2015. That forcing interest rates back up to 14.25 percent, while the country's economy came to a halt, and inflation rose rapidly, although the higher amount in declining reached in 2008 by -2%.

Consequently, the fiscal and monetary policies impact on achieving economic stability in Turkey and Brazil, However, fiscal and monetary policies can use to achieve long-term economic stability if the increase in the money supply is equal to the growth of net national product without the use of policies based on expansion and contraction.

The thesis came in three chapters. The first dealt with macroeconomic policy variables namely fiscal and monetary policies. The second chapter included the most prominent experiences of Turkey and Brazil aimed at achieving economic stability, so, it consisted of some topics. While the last chapter presented an analytical method of the study includes a 15-year time series spanning 2000-2015 for developing countries (Turkey-Brazil), time series have adopted in the standard analysis for their ability to illustrate changes in economic and monetary variables, besides the most important conclusions.

CHAPTER ONE

FINANCIAL AND MONETARY POLICIES

1. LITERATURE RESEARCH

Barbosa-Filho, (2008) studies the inflation targeting in Brazil for the period 1999–2006, so, this research defines the Brazilian involvement with inflation targeting in the period indicated above. However, the data offered in the research demonstrate that inflation targeting succeeded to reduce inflation in Brazil after its currency crises between 1999 and 2002, that with a considerable help of the rate of exchange appreciation. The data also reveals that economic growth was slow under targeting inflation than through exchange rate targeting in Brazil, however with a smaller instability and an apparent upward trend during targeting inflation than during targeting rate of exchange. However, as a result, it also indicates that targeting inflation reduced the real interest rate of the economy, that continued well above international standards and more than three times higher than the Brazilian gross domestic product growth rate.

In this regard, a research conducted by, (Garcia, et al., 2015) in this research examined the fiscal and monetary policies history of Latin America, Brazil in particular, while, Brazilian rate of inflation took off to three-digit levels in the early eighties, that despite main fiscal surpluses. However, Inflation kept increasing, reaching four digits in 1989 until it was stabilized by so-call the real plan (July 1st, 1994).

While, (Agenor & Da Silva, 2011), analyzed macroeconomic stability, fiscal stability, and monetary policy rules. So, this study analyses argument for and against attributing a fiscal stability objective naturally to monetary policy. While the argument conducted from the outlook of middle-income states, where bank credit shows an important role both in the money supply and demand. However, this study argues, supposing that a more proactive role needed, what monetary policy should respond to, to what extent it should combine with macro-prudential regulation (and possibly capital controls), and whether existing models provide adequate benchmarks for studying how these policies interact.

In the same context, a study conducted by Vuyyuri and Seshaiyah, (2004), where the researchers examined the budget deficits and other Indian macroeconomic variables. While this study attempts to analyze the collaboration of budget deficit with other

macroeconomic variables of India economic, such as actual nominal rate of exchange, GDP, Consumer Price Index (CPI) and money supply (M3) that obtaining a specific emphasis on the relationship between budget deficit and exchange rate using Cointegration approach and VECM for the period from 1970 to 2002.

However, the study results expose that the variables studied cointegrated and there is bi-directional linking between budget deficit and nominal effective exchange rates. Nevertheless, the researchers have not observed any significant connection between the budget deficit, the GDP, money supply, and consumer price index. While it also perceived that the GDP Granger causes budget deficit does not include the budget deficit.

While, a research conducted by (DeLong & Tyson, 2013) in this research they attempt to examine discretionary fiscal policy as a stabilization policy means. However, they mentioned that six years ago there was near-consensus between economists and policymakers alike in support of Taylor's (2000) argument that combined demand management was the near-exclusive domain of central banks. Today central bankers like Federal Reserve Chair Bernanke (2013) are actively asking for help from fiscal authorities.

Consequently, (Caprioli, et al., 2017) analyzes the discretionary fiscal policy in the euro area past, present, and future. So, the researchers mentioned that the depth and the length of the recent crisis encouraged a more positive re-assessment of a counter recurrent fiscal stance, particularly in the euro area. Also, against this background, they look at discretionary fiscal policy in the euro area from three different viewpoints.

First, they provide evidence that the discretionary fiscal policy in euro-area countries has been mostly a cyclical even if our estimates suggest that using it counter-cyclically could have been useful, particularly during the crisis. Second, they concentrated on the short-run – i.e., taking as given the economic and institutional restrictions that currently make a significant fiscal expansion entirely unrealistic in Europe – the researchers also argued some budget-neutral suggestions aimed at fostering economic growth. Finally, taking a more forward-looking viewpoint, they discuss the issue of the proper fiscal stance for the euro area as a whole and claim that the advantages of having a coordinated method.

As indicated, (Tcherneva, 2011) investigated the fiscal policy efficiency lessons from the great recession, while this research reevaluates fiscal policy effects in light of

the recent economic crisis. So, it examined the fiscal policy approach encouraged by the economics profession today and the specific policy movements started by the Bush and Obama administrations in the US. However, an analysis of the labor market renders the modern aggregate demand management approach wholly inadequate for realizing particular macroeconomic purposes, such as the stabilization of investment and investor expectations, the generation and upkeep of full employment, and the equitable distribution of incomes.

However, (Hussain & Saaed, 2014) conducted an empirical investigation to analyze the relationship among budget deficits and macroeconomic variables in the United Arab Emirates (UAE) over the period 1985-2011. While, the data obtained from the central bank of emirates various issues, namely: IFS, IMF and Arab Monetary Fund (AMF). So, to explain whether the exchange rate, money supply, consumer price index cause the budget deficit. So, the results from variance decomposition method, GDP, and exchange rates produce 19.24% and 68.23 of the variance in budget deficit at the end of ten periods, interestingly. The effect of GDP on the variance of the money supply has to decrease for the first five time periods and leftovers constant for the next five periods.

In this context, (Başkaya, et al., 2012) investigated the inflation expectations and central bank communications in Turkey for the period between April 2006 and May 2012. However, the researchers mentioned that this study assessed how inflation expectations react to inflation targets, predictions, and comprehensions with a specific concentration on whether the sensitivity of expectations to inflation realizations rises with the level of inflation. The study findings indicate that predictions, targets, and past inflation are critical determinants of inflation expectations. Furthermore, prospects are more sensitive to inflation understandings at higher levels of inflation. Stimulatingly, they found that sensitivity of expectations to inflation has decreased over time, particularly since the end of 2011 despite a very rapid and sizable increase in CPI inflation due to one-off factors.

However, another research conducted by (Kara, 2012) an attempt to examine the monetary policy in Turkey after the world crisis post-crisis spillovers and amplified capital flows have activated a search for other monetary policy frameworks, particularly for small open emerging economies. So, the researcher argued that Turkish practice since end-2010 set out a convincing case in this detail. While confronted with extreme instability in cross-border capital flows, rapid credit growth and a sharp descent in the

current account deficit. Central Bank of Turkey (CBT) has improved the predictable inflation targeting regime through approving financial stability as an additional objective and enriching the set of policy instruments with a specific emphasis on credit and exchange rate channels.

1.1. The Concept of Fiscal Policy

The concept of fiscal policy reveals the desires and objectives of the society in which it operates. The community has long sought to satisfy the general needs and to finance them from the resources of the general budget. In this regard, the economists focused their attention on the principles of the general budget and its balance. Wray, (2002) mentioned that fiscal policy is a set of policies relating to public revenues and expenditures with an understanding to achieve specific objectives.

Though, Abdel Aziz, (1980, p. 323) defined fiscal policy as the set of objectives, directions, procedures, and activities adopted by the State to influence the national economy and the society. To maintain its general stability and development, to address its problems and meet all changing circumstances are part of government policy relating to revenue. So, the State through taxes and other means and by determining the level and pattern of expenditure of these revenues.

According to Zurbrügg, (2012) in some countries, the possibility for fiscal policy action has recently come up against its limits. Governments nowadays find themselves in the position of being almost unable to finance their normal range of activities, since that there is also no possibility left for discretionary economic incentive measures.

In this regard, the researcher argues that fiscal policy is the policy by which the government uses its expenditure and public revenues programs, which are organized in the general budget to create desired effects and avoid the undesirable effects on income, production, and employment, i.e., development and stability of the national economy. In other words, this policy is to use tax policy, public expenditure and public loans to influence the economic activities of the community in desired ways.

However, the economists from a classical school defined fiscal policy as the process of changing government expenditure or public revenue in the event of an imbalance between the two sides of the general budget of the state. Instead, when there is a discrepancy between the size of public expenditures and the proceeds of state

revenues (Al-Mhar, 1981, p. 139). Nevertheless, Kenyans have defined fiscal policy as the tools through which the state intervenes to guide the national economy and make visible changes, leading to increased production, employment, and economic growth rates (Kanaan, 2003, p. 193). Fiscal policy is a means of achieving a general economic objective, not an end in itself. Keynesian thought that public expenditure, public loans, taxes and other financial tools can be used to achieve economic growth objectives, such as increasing aggregate demand, stimulating producers, and rising employment to bring the economy out of situations that suffer from better conditions.

1.1.1. Public Expenditure and its Role in Economic Activity

The governments need to reduce expenditure rise sharply in times of prosperity so that they only rise in times of economic stagnation. Effective financial rules that help contain spending during times of economic recovery are useful. While, Clements et al., (2007, p. 52) argues that the governments should also consider additional allocations to public investment. Also, support their ability to evaluate and manage investment projects and assist the implementation of merit-based recruitment and wage-based systems in achieving expenditure efficiency. The IS curve shows the production structures and the interest rate. For example, the actual and planned expenditures on production are equal. Planned and actual spending depend positively on real income, negatively on the real interest rate, positive on government consumptions of goods and services and adversely on taxes:

$$E = E(Y, i - \pi^e, G, T), \dots, 0 < E_Y < 1, E_{i - \pi^e} < 0, E_T < 0$$

As **E**: represents planned expenditures.

Y: real output, **i**: nominal interest rate and: expected inflation, **G**: actual government procurement, **T**: real taxes and the like denote partial derivations, both **G** and **T** have been taking as expected inflation, the adverse effect of interest rate. Real estate works through consumer spending, especially on durable goods. It has assumed that planned expenditures increase by less than one with income. Assumptions have made about how the determinants of proposed costs and the standard equation introduced:

$$E = C(Y - T) + I(i - \pi^e) + G$$

As: **C**: consumption, and **I**: investment and restrictions in this scroll may be unrealistic in no small degree. For instance, there is a great deal of evidence that the real interest rate affects consumption or there is often a comprehensive and dominant evidence that income affects investment. However, there is little basis for assuming that income and taxes have an equal and opposite effect on expenditure (Romer, 2001, p. 220).

There are several mechanisms in which private expenditure could reduce when public expenditure increases. For example, increased federal spending may lead to an increase in domestic economic activity, and thus private sector demand for cash declines. If interest rates have risen the sustainability portfolio balance will tend to other things remain unchanged.

To reduce the interest sensitivity of demand – which is assuming the financial clutter abroad. Even if interest rates do not rise abruptly and imbalance in the existing portfolio, increased demand for cash may cause individuals to spend less to collect some money. Nevertheless, private spending could fall further if public expenditure to increase the tax liability of the private sector, at present due to high taxes today or in the future because of the need to reduce public debt.

The private-sector taxpayers have no direct impact on local absorption but have an effect on private income as this indirectly affects private spending. In short, the impact of fiscal policy on aggregate demand appears to be more complicated than Keynesian theory proposes, and it is arguable whether the specific budgetary system can reduce domestic demand. Ultimately, the issue needs more empirical analysis (Khan, 1987, p. 26).

1.1.2. The Tax System and its Role in Economic Activity

The tax system of developing countries is stationary, so the conditions that generate coherently, integrated policies are often absent and lost, making their success partly as opposed to developed countries where the financial system has been very successful. State policymakers often use tax system and policy to incentive economic activity and to contend with other states to invite new capital. While researchers have surveyed the effectiveness of state and local tax policy as an economic stimulus, no consensus exists regarding whether and how state corporate income tax policies affect economies (McCarty & Bruce, 2010).

In Friedman's proposal, the size of the government will determine by what the population wants the government to provide, and then tax rates will somehow be adjusted to balance the budget only in the full employment level. Moreover, to build periodic counter-efficient oscillations to return the economy to full employment requires two conditions: First, the tax expenditure and its revenues must be payable to the government on a regular basis. Expenditure must be periodic, and it should be a previous tax period. So, this includes a secure social protection network. Consequently, expenditures will increase sharply in the case of stagnation and, alternatively, be linked to economic achievement, since sales or revenue taxes can do so. The second condition is that the government's activities need to be large (Wray, 2002, p. 2).

1.1.3. Budget Deficit

The global economic crisis has once again elevated the question of the future of international currencies that represent the global reserve. The US dollar has maintained its absolute sovereignty for almost a century. However, there is growing speculation from the observers pointing to the end of the era of control enjoyed by the dollar, and for many, the fate of the dollar began inevitably after the downfall of the US real estate market in mid-2007. That unleashed the biggest sudden coup in the financial markets in the USA.

According to Cohen, (2009, p. 26) since the great depression, it has shown that the crisis has proved to be critical to the dollar and has not even been spared the financial sector's troubles in the USA which required significant government interventions to overturn the preferences decisively. Instead, ironically, the crisis temporarily strengthened the global securities center greenback as investors fled to the dollar for safety in emerging markets in Latin America, the effects of a higher budget deficit in the interest rate are likely to be much stronger than in developed economies.

Thus, increases in the quantity of nominal debt ensue through deficits, and, liable on the reasons for the deficit, the increase in nominal debt may change beliefs about the future fiscal backing for the debt at the same time that it affects the amount of debt outstanding. The deficit might also lead to interest rate changes through a monetary policy reaction (Christopher, 2016).

While, Guell, (2007, pp. 118-119) mention that when the deficit is significant because the economy does not work well, then the whole economy will be a problem, not

a fiscal deficit. If the deficit is so high, even when the economy is good then the deficit will be the problem. Economists who believe that deficits can use to stimulate an economy that lacks consistency and with a set of restricted incentives and this is called job financing.

In this context, (Wray, 2002, p. 1) mentioned that Friedman's proposal to finance the budget deficit by creating money as the surplus cases would weaken the monetary unit. Moreover, assessed the creation of private money from banks through the need reserve 100% and something that Fisher and Simons obtained in their analysis so there will be no money creation by private banks that will expand bank money supply only when banking governmental money reserves. So, this proposed situation produces strong, counter-cyclical forces to help stabilize the economy. However, Friedman can maintain an excellent quantitative perspective, because he claims that it will be a fluctuation of money rather than a government spending that has stabilized the economy.

1.1.3.1. The Macroeconomic Relationship with a Budget Deficit

According to Saleh, (2003) the relationship between budget deficits and macroeconomic variables (such as interest rates, growth, trade deficit, and exchange rate) characterizes one of the most widely argued topics between economists and policymakers in both industrialized and developing countries. However, according to (Karel, 2004, p. 1) there are many types of the budget deficit, as follows:

1. Increasing public sector budget means increase net borrowing.
2. Decreasing public sector budget means less net borrowing.
3. Public sector budget increase means more customizations and grants to institutions (TI) Transformation Institutions.
4. Public sector budget decrease means fewer allocations, and grants to institutions (TI) Transformation Institutions.

In this regard, recent studies show that no direct correlations found between the budget deficit and macroeconomic instability. The emergence of any macroeconomic stability depends on how and how to finance the deficit. There are several options for financing the deficit:

1. The sale of government bonds.
2. The borrowing from abroad.

3. Issuing sock money.
4. The sales of state assets (privatization).

The effect of the budget deficit on macroeconomic stability is affected as well as the absorption capacity of the private economy. So, in general, long-term budget deficit more readily absorbed by countries that possess a high level of private savings and complete financial markets development, given that the least sophisticated own private savings less and never fully developed financial markets and pricing rules should attempt to reduce the budget deficit.

1.1.3.2. Budget Deficit and Economic Performance

According to recent studies on the effects of budget deficits in developing economies, we can conclude the follows:

1. The budget deficit is undoubtedly negative for economic growth in many cases.
2. The high budget deficit is explained mostly by the result of political decisions that have been planned and not as a result of external shocks or a response to the current domestic economic situation.
3. Although financing a short-term budget deficit through cash transfers do not necessarily lead to inflation, in the long run, the cash shift may cause growth in inflation.
4. There is some evidence that public investment is not always positive for private investment and this denies public opinion towards this issue. Public investment has adverse effects on private investment, and public investment replaces and does not complement private investment.
5. The budget deficit causes the deficit of the trade account. So, if the value of the trade account increases, the exchange rate becomes excessive. However, this negatively affects the growth of the economy, reduces exports and encourages imports.
6. Reducing the budget deficit is an effective policy in raising domestic savings.

1.1.3.3. Budget Determinants

The emergence of the deficit needs to addressed either from commercial sources or other non-monetary sources. The budget outline reflects the link between the budget

deficit and alternative resources to finance the deficit. In this way, we can analyze the relationships between fiscal and monetary policy and macroeconomic conditions in the budget deficit. We know the budget deficit linked to the change of net government debt in the following manner:

$$D_g - D_{g-1} = (G + I_g - T) + rD_{g-1} \dots \dots \dots (1)$$

Whereas expressing the change in net government debt between current and previous period, G represents government consumption expenditures, government investment, I_g , T taxes, r nominal rate of interest. Necessary to explain the difference between economic theory and government finance statistics, that equation (1) above is base on economic theory, so it is dealing with variables in net values especially expressions that we put between brackets and represents the net balance of the state budget ($G + I_g - T$).

Also, public expenditure is net values $G + I_g$, and T represents the net tax revenue (total taxes-transfers). There is a difference in the comparison between the government finance statistics giving the total values, the right side of the beyond equation signifies a budget deficit and shows that the change in net public debt is equal to the total budget deficit + debt service.

Thus, if the budget is negative (deficit) it is necessary to compensate it, and to this end, the government has several options to choose from how to settle this deficit if the deficit is covered and compensated by issuing bonds, there are four parties can be sold to these bonds:

1. Foreign institutions whether in the private sector or the public.
2. Families and institutions.
3. Local banking systems.
4. The central bank.

In developing countries, in particular, the most substantial amount of government bonds is purchased from the central bank because there is insufficient financial capacity for people in the private sector. The government usually does not need to pay interest to the central bank if there are problems. Moreover, when the government funds the central bank, this means just the transformation of public debt from the public institution to another because of the central bank in the other back to the state. Foreigners do not care

much about the bonds of developing country governments, and financial markets in these countries are underdeveloped.

Now suppose that part of deficit returns to the investor in the local private sector or foreign investor and the rest is up to the central bank. Moreover, according to the given situation, the total amount of government debt in the central bank's ownership is expressed by the following equation (Karel, 2004, pp. 1-4).

$$(D_{gc} - D_{gc-1}) = (D_g - D_{g-1}) - (D_{gp} - D_{gp-1}) \dots \dots \dots (2)$$

The left-hand side of the equation $(D_{gc} - D_{gc-1})$ shows the change in the public debt in the ownership of the central bank, and $(D_g - D_{g-1})$ the right-hand side, representing the overall change in the public debt. The change in public debt reduced it due to sampling in the private sector $(D_{gp} - D_{gp-1})$.

The following relationship shows how the public debt in the central bank's portfolio affects the monetary base along with the other elements and reflects the indirect effect of the budget deficit on the monetary base:

$$(MB - MB_{-1}) = (D_{gc} - D_{gc-1}) + e(R_c - R_{c-1}) + (L_{cb} - L_{cb-1}) \dots \dots \dots (3)$$

The variable R represents the foreign reserve of the central bank, e nominal exchange rate, refers to the total credit in the central bank, which gives to the commercial banks, under the assumption that the last equation of zero to obtain the following equation:

$$(MB - MB_{-1}) = (D_{gc} - D_{gc-1}) + e(R_c - R_{c-1}) \dots \dots \dots (4)$$

To compensate for the expression within the brackets $(D_{gc} - D_{gc-1})$ from equation (2) we conclude a new relationship that reveals the possibility of financing the budget deficit:

$$(D_g - D_{g-1}) = (MB - MB_{-1}) + (D_{gp} - D_{gp-1}) - e(R_c - R_{c-1}) \dots \dots \dots (5)$$

However, according to Karel, (2004, p. 4) equation (5) proposes three main alternatives to finance the budget deficit:

1. Increase the monetary base (currency issuance).
2. Issuing government bonds offered to the private sector (leading to private sector financing and hence the impact of crowding abroad).
3. Reducing foreign reserves.

The final impact of the budget deficit is dependent on the means of financing it and every alternative to finance causes macroeconomic instability when used substantially. Although the method of financing is essential in determining the impact of the deficit in the national economy, many economists believe that the deficit should be reduced or eliminated, because it has adverse effects on the economy and they mainly believe that the deficit causes inflation and lowers economic growth.

However, under certain circumstances, policies designed to reduce or eliminate deficits may be more undesirable. In a recession, attempts to eliminate deficits by reducing government spending or increasing taxes or both make the deficit worse. The budget balance is likely to be the best solution (Michael, 1988, pp. 534-537).

1.2. The Concept of Monetary Policy and Its Variables

The monetary policy is the process of using a variety of tools and policies aimed at influencing money supply in particular and overall economic performance (Ghadir, 2010, p. 31). Accordingly, (Kanaan, *The Economics of Money and the Financial and Monetary Policies*, 1997) believe that monetary policy is a group action by monetary authorities to influence the size of the money supply. Moreover, credit relations with the aim of influencing economic growth rates and maintain a stable price level.

However, Jagdish, (2009, p. 30) defines monetary policy as policy-induced changes in the money supply or interest rates. So, the control of monetary policy will take by the central bank or the monetary authority, using these terms as synonymous. Nowadays, in most advanced economies, monetary policy conduct by independent central banks, with the primary objective being to confirm price stability while taking due account of economic growths. If, for example, a central bank increases interest rates because inflation is edging upwards, it can expect this to have a reducing effect on the economy. At the same time, monetary policy experts should always bear in mind that monetary policy can only produce favorable conditions for growth temporarily; in the

long term, the expansionary monetary policy cannot achieve a lasting motivation of aggregate demand (Zurbrügg, 2012).

However, monetary policy is the policy and procedure for influencing the level of output and prices through money supply. So, monetary policy effect comes to affect spending like consumption and investment primarily for investment in the interest rate, which is affected by the change in the money supply (Nasr & Al-Mahdi, 2015, p. 146).

However, one reason why local bond markets substance for monetary policy is that they increase the opportunity for long-term domestic currency financing, therefore dropping currency and maturity mismatches. With borrowers' and lenders' financial health becoming less sensitive to changes in the exchange rate and interest rate, monetary policy can squarely focus on stabilizing output and inflation (Mohanty, 2012).

1.2.1. Money Supply

There is comprehensive agreement among economists that monetary inflation is a monetary phenomenon in the end except that measures the growth of cash, but did not appear prominently in most discussions of monetary policy so, in recent years and was one of the problems is that the pace of growth was volatile. Moreover, that different measurement of criticism given different indicators.

According to Taylor, (2000, pp. 6-10) the European Central Bank (ECB) chose to be cash growth policy as one of its tools but criticized for it. However, if we see that the monetary growth as an instrument of monetary policy is a necessary alternative to control inflation at least under flexible exchange rate regime, is the nominal rate of interest becomes a weak tool short when approaching zero, so it seems reasonable to examine the growth of the money supply.

Regarding the International Monetary Fund (IMF), the fact that the countries which possess currency controls could pay 75 percent of their money of dubious value. Meaning that despite owning the IMF for \$327 cash billion-dollar loan, about half of that money has real value in a typical year, about 20 global currencies borrowed, most of which are in dollars, euros, yen, and pound. Albania example member of the IMF, which has a share of just over \$50 million, 40 million of the money in the currency is used only by Albania itself, and it is not true that the \$40 million benefit mentioned by the Albanian government. The amount to the global dollar market, the IMF can exchange it for dollars

and the loan of those dollars if not convertible and therefore cannot be exchanged by the IMF against dollars or any other foreign currency (Guell, 2007, p. 160).

However, according to Al-Sabaawi, (2008, p. 30) money supply is a currency in circulation plus bank deposits of various types. Moreover, the narrow money supply (M1) includes only cash and deposit on current account in local currency. Based on the difference of economists about the types of deposits there appeared more than a definition of cash supply, as follows:

- $M1 = \text{currency in circulation} + \text{current deposits of the private sector in commercial banks.}$
- $M2 = M1 + \text{time deposits (for) and the provision of commercial banks.}$
- $M3 = M2 + \text{government deposits at commercial banks.}$
- $M1 = \text{currency in circulation} + \text{current deposits of the private sector in commercial banks.}$
- $M2 = M1 + \text{time deposits (for) and savings at commercial banks.}$
- $M3 = M2 + \text{government deposits with commercial banks.}$

Consequently, Fadel, (1997, pp. 41-42) argued that Keynes emphasize that the policy of flexible or active changes in money supply cause fluctuations in national income. However, Keynes famously described the motion to address the crisis through Increase the money supply to a higher level than it is if the production is at a level below the full use level. Then reduce the money supply to a lower level than it is if the production at full utilization which means managing the growth rate of the money supply.

Moreover, changes in inflation caused by a change in the growth of the money supply reflected in the nominal interest rate and the hypothesis that inflation affects the nominal rate of one to one known as the Fisher effect. So, Fischer's equation shows that inflation does not affect the real interest rate. Furthermore, that the higher nominal money supply rate would reduce real money reserves the increase in money supply would increase the expected inflation and thus increase the nominal interest rate (Romer, 2001, p. 474).

1.2.1.1. Money Supply and Exchange Rates

According to Colander, (2006, pp. 456-459), the effect of monetary policy on exchange rates can identify through the use of the money supply tool. So, if the monetary

policy adopted is expansionary in the sense of increasing the money supply that leads to Lower interest rates which in turn lead to a lower exchange rate. Increase income which in turn leads to increased import, and then lower exchange rate. Besides, increase prices and thus reduce competitiveness, and then lower nominal exchange rates.

However, In the case of a contractionary monetary policy constrained, it works by reducing the money supply to Increase interest rates which in turn lead to an increase in the exchange rate. Besides, lower income which in turn leads to reduced import, and then increase the exchange rate. Further, lower prices and thus increase competitiveness and then increase nominal exchange rates.

In this regard, Johnson, (2006, p. 51) mentions that the study of dollarization is becoming increasingly important as many countries are beginning to consider moving towards dollarization. While it has officially turned into dollarization since 1904 and that Ecuador, Salvador, and Guatemala have not become entirely controlled until recently. Ecuador, 2000, Salvador, Guatemala in 2001, Bolivia, Uruguay, Nicaragua, and Peru are informally governed countries.

1.2.2. Interest Rate

From an economic viewpoint, interest can consider as either the benefit received for deferring consumption, for instance, setting cash in a savings account rather than spending it or the cost of consuming when incomes are not available, e.g., using a credit card to make a buying rather than first saving the money. Some researchers have studied the effect of monetary policy given actual interest rates in achieving economic stability compared to the situations proposed and directed by monetary policy laws.

Taylor (2000, pp. 8-9) stressed that these laws are not in line with the policy that focuses on money supply growth. The laws of monetary growth and interest rates laws closely linked to, and that there are no such policy laws use analysis to suggest that these laws should use mechanically, although this proposal subjected to severe criticism. At the end of the eighties of the twentieth century, there was agreement that the actual increase in interest rates was lower than indicated in the laws of politics.

Further, Taylor, (2000, p. 19) argues that in April 1999, Hayami governor provided relevant information on the zero-interest rate policy that will continue until the deflation fears eliminated. In subsequent remarks, the governor explained how the bank

of Japan would determine when deflation fears end. So, that opening the production gap would indicate contractionary fears disposable proposal that the interest rate will not rise. However, narrowing the output gap from zero to zero will suggest that the interest rate is rising.

1.2.2.1. Taylor Law

Taylor's law has emerged in a series of studies examining the comparative performance of simple alternative interest rate policy laws across several different models. So, one of the most promising laws for these studies is the laws that describe the fed as setting up a research policy. That the short-term nominal interest rate deflection (R) for the equilibrium value of the line (R^*) respond linearly to inflation deflection (π) About his desired goal (π^*) production gap (y):

$$R - R^* = \theta(\pi - \pi^*) + \theta Y \dots \dots \dots (1)$$

However, Taylor (1993) supposed to develop special coefficients for this law that attracted considerable interest and put the sum of actual inflation and the short-term interest rate balance as the (r^*) approximation of (R^*) and the use of values:

$$r^* \theta = \text{and } r^* = 2 = \pi^*$$

While inflation and interest rates listed in the output gap percentage rates as well as percentage. This case of transactions has attracted attention as a guide to policy decisions, as it aims to promote performance in alternative ways. Nevertheless, several subsequent studies seem to correctly describe actual policy decisions for 1987-1992 that Taylor had initially studied.

Meanwhile, Orphanides, (2002, pp. 3-4) claims that the monetary policy of this period has successful, the similarity of the two outcomes suggests that Taylor's law may be a useful and reliable guide to monetary policy decisions. Since 1998, the federal reserve bank of St. Louis has published monthly updates to the Taylor law standards in its publications under the heading monetary trends.

Also, apart from the apparent simplicity, applying the Taylor act in practice is not straightforward. In addition to the variables identified above, including the difficulty of determining the real equilibrium interest rate, its application requires a precise definition of inflation and the output gap that falls under Taylor's rule. In some context, (Orphanides, 2002) mentions that a common practice in the literature is that Taylor has employed the

most recently available historical data and use the logarithmic difference in GDP deflator. There can overlap between the monetary policy instrument (interest rate) with budget deficits; economic theory suggests that the deterioration of the budget deficit increases in interest rates and invigorate the Government would have to increase the interest payments for the bonds and will want to sell an additional amount of bonds.

Because of the scarcity of financial funding and if the government wants to sell more bonds it has to lower the price or provide higher interest rates to stimulate the private sector to buy, but the more government bonds sold, the less funding for private investment. The continuing budget deficits and growing public debt growth cause a reduction in the overall capacity for the economy; this happens a decrease in demand for government bonds and a possible increase in interest rate (Karel, 2004, p. 5).

Thus, the micro-rational expectations model can use in the case of a fluctuating price to study how monetary policy affects the relationship between nominal interest rates and inflation expectations and real interest rates. The most common way to measure Fisher's effect is by miles the regression coefficients in ordinary least squares paradigm for inflation or inflation expectations on nominal interest rates:

$$\hat{\pi}^e = a + bi + \varepsilon_t$$

The value of (b) is slightly less than one, and this equation can use as an indicator of inflation expectations:

$$\hat{\pi}^e = a + bi$$

Though, based on Fisher's equation ($i = \pi^e + r$) since (r) is the real interest rate, so the real interest rate index is: ($\hat{r} = (1 - b) i$) minus the constant.

Taylor's rule, which belongs to prominent economist John Taylor, is an essential guide to assessing the correct position of monetary policy. While, it links the interest rates on bank deposits to the fundamental objectives of monetary policy - the extent to which inflation can achieve relative price stability and the extent to which it may achieve output and employment of maximum sustainable levels. Interest rates in the conventional closed model are the mechanisms of conversion between monetary policy and aggregate demand.

Khan, (1987, p. 25) therefore, if the exchange controls are sufficient, the authorities can determine the commercial basis by controlling the amount of foreign

exchange and the dependence of the central bank. Starting with the balance of the portfolio, the decline in the private sector credit offer will cause the borrower to turn into a limited market and push interest rates up there.

Since these rates represent marginal costs for financing in the economy, the critical elements of interest for aggregate demand will decline. In particular, the inherent value of real assets will fall relative to their production costs. Demand for these assets will also decline. So, the decline in aggregate demand is pressure on inflation. Similarly, the decline in money supply leaves the private sector with little cash in its portfolio relative to loans and real assets. As a result, the supply of secured market loans will decrease and lead to increased interest rates for restricted markets. Once again, demand for real assets will fall, and pressure will have placed on falling prices (Khan, 1987).

1.2.2.2. The Effect of Low-Interest Rates and Inflation Rates

Since that tax law does not differentiate between nominal and real interest rates, the decline in inflation fixed real interest rates will cause an increase in net real interest rate. Even when the inflation rate is zero or positive the decline in inflation causes an increase in net real tax rate.

One way to overcome this and sustain the same catalyst for investment is to modify the laws of extinction or formally adopt investment taxes as the real interest rate

r_n linked to the nominal interest rate (i) and tax rate (t) and rate of inflation (π) over

$$r_n = (1-t)i - \pi.$$

The change in inflation does not change the interest rate $r = i - \pi$ indicates that $di/d\pi = 1$ so the $dr_n/d\pi = -t$.

Take the example of the content of the real interest rate is, and the relevant tax rate institutional rate is ($t = 0.35$) if the inflation rate $\pi = 0.04$ nominal interest rates $i = 0.08$ the net tax rate 1.2% $(0.65(0.08) - 0.04) = 0.012$.

If the inflation rate falls to zero, the nominal interest rate drops to 4%, but the real net interest rate doubles more than doubled from 1.2% to 2.6%, $(0.65(0.04) = 0.026)$.

The effect of the catalyst on business investment to fall in inflation is, of course, more complicated because the fall in inflation further increases the present value of

nominal extinction rates. This dominant effect is more important for some types of assets than other assets, which depends on the age of assets and the laws of extinction.

In this regard, Johnson, (2006, pp. 51-52) argues that the econometric analysis suggests a multi-contrast that dollarization has generated great economic stability (low inflation) and economically (economic growth) for Latin America. Furthermore, the results are essential for the policies discussed such as, whether the dollarization phenomenon is expected to have a positive long-term impact on the Ecuadorian economy or whether the United States and Latin American countries should consider a single currency unit similar to the European Union in the case of the euro.

1.2.3. Exchange Rate

The exchange rates are a link between an open economy and the rest of the world economies and at the same time a significant influence both inflation, real growth, the balance of payments position as well as competitiveness. The increase in exchange rates would increase the price level domestically. There is a close correlation between the policy of inflation and exchange rate policy. If the exchange rate increases, i.e., the number of units of the local currency against one unit of foreign currency, real exchange rate, the competitiveness of the domestic economy increases but at the same time may increase inflation.

While, Grauwe and Gunther, (2008, p. 530) mentioned that some economists have analyzed the effect of inflation and exchange rate system output in the south-east and central Europe and reveal a bright impact assessment for exchange rate stability at low inflation as well as the significant impact of exchange rate stability in real growth. The period is divided by high inflation (1994-1997) and low inflation period (1998-2004). When the elimination of the sample removed, the proof is in the positive relationship between the stability of the exchange rate and inflation is almost invisible.

However, the recent decades have witnessed a significant expansion of the possible options for financial regulations and far-reaching institutional changes in the arrangements on which these systems based in emerging markets. These systems cover a wide range ranging from rigid rules to full discretionary discretion and can divide into the following groups (Global Economic Outlook, 2001, p. 130):

1. Hard exchange rate pegs, which include currency unions and using foreign currency then the only legal currency, and the currency board arrangements.

2. Soft exchange rate pegs, that including floating exchange rate systems or ranges, as the exchange rate may change at the discretion of the monetary authority without prejudice to any national law or international expenditure.
3. Floating exchange rate regimes, as a monetary authority empowered by law to make a direct inflation target or the inflation targets strategy.
4. Other floating exchange rate regimes, including those whose monetary authority specifies specific targets for the growth of monetary aggregates.

According to Grauwe and Gunther, (2008, pp. 531-542) there are many essential kinds of literature on the impact of the exchange rate system on economic growth. In general, this literature is fundamentally inconclusive as there are logical channels that highlight the positive impact of exchange rate stability on growth, and other channels that emphasize the adverse effects of fixed exchange rates on expansion the resulting. It is possible to identify two reasons for the stability of the exchange rate to lift economic growth above:

The first is the elimination of the external risk of exchange that stimulates global trade and thus stimulates the international division of labor. Second, reliable fixed-exchange regimes create a global economic stability environment and thereby reduce the hidden risk of real interest rates, while the resulting low long-term interest rates will stimulate investment, consumption, and growth.

Subsequently, the real exchange rate adjustments must make through relative price changes that are slow and expensive in the world of price, and this could create a heavy burden on the economy as it leads to low economic growth. Since economic theory does not allow to provide accurate forecasts the question if that exchange rate stability leads to economic growth more or less is primarily a problem.

While, the interest rate and exchange rate fluctuations will considerably increase and raise the expectations of the instability in the economy, so, the stability of production is apparently a significant role in inflation targeting (Debelle, 1999, p. 5). According to Al-Sadiq et al., (1997, p. 69) to choose a combination of factors including determines the type of exchange rate regime between fixed and flexible system

1. Economic objectives: The criterion of optimization has at the forefront of the choice of the exchange rate system, but at present, the principle of economic stability is at the forefront of determining the exchange system.

2. Type of shock, shock-type economy played an important role in deciding whether the exchange rate must be installed or modified.
3. The structural characteristics of the economy affect the choice of the exchange rate system. Adapting to external shocks through changing pay levels and prices or through movement of factors of production, under flexible exchange rates can be adapted to external shocks by raising the value of currency or reduced.

However, Siegel, (1987, p. 480) mentioned that in the critical theory, Friedman points out that the exchange rate is a monetary phenomenon because it is influenced by the real determinants of demand for money. After studying both the amount of money and the interest rate and their impact on the exchange rate, Friedman explained that the demand for money depends on the level of real income and interest rate.

According to Boughton, (1982, pp. 495-500), the selection of either system depends on achieving the primary economic objectives, especially a low rate of inflation and hence macroeconomic stability. Most decision makers do not favor monetary policy, which creates a pattern of monetary multipliers that generate economic shocks and lead to considerable volatility in their exchange rate.

The exchange rate has significant impacts on economic and resource allocation trends in income distribution among the elements of production through nominal exchange-rate fluctuations from the equilibrium real exchange rate, which achieves the economy's competitiveness in the international market. That will lead to attracting economic resources towards traded goods, as well as increasing domestic production as an alternative to imported goods. Under overvalued exchange rates, they will lead to reduced competitiveness in the international market by restoring the pattern of price relations between traded and non-traded goods (Najafi & Abdul Majeed, 2008, p. 181).

According to Michael, (1988, pp. 505-508), the adoption of a flexible exchange rate regime has many advantages which include:

1. Since supply and demand determine exchange rates, they change automatically and then working to minimize problems in balance of payments.
2. The authorities may focus on appropriate stabilization policies for full employment, although there is a conflict between this objective and appropriate balance of payments balance policies.
3. The needs for international reserves amounting to a minimum.

However, the researcher considers that exchange controls are ineffective, monetary policy has a lower ability to affect overall demand, and some of the effects of the reduction in aggregate supply will be overcome by the change in exchange rights or entitlements and weaken the impact of the market interest rate curve on demand for real assets. Where there are no exchange controls, of course, the standard cash-balance-sheet approach becomes relevant in the analysis.

1.2.3.1. The Main Forces that Determine the Exchange Rate

According to Colander, (2006, pp. 456-476), the primary determinants of the exchange rate of supply and demand forces on foreign exchange discussed, as well as the following vital determinants, one or all of which change the currency supply and demand:

The Level of Income in The Country: The demand for imports depends on the income of the country concerned when income falls in the country that leads to reduced demand for imports. Therefore, the demand for foreign currency in which we buy these imports will decline, which means that the presentation of the country's currency to purchase foreign currency will decrease. So that imports are dependent on income.

The Price Level in the Country: The country's request for imports and foreign demand for its exports depends on domestic commodity prices as compared to other competing countries' goods. If the country's inflation rate is higher than other countries, foreign goods will cheap, and the country's demand for foreign currency will increase. Moreover, foreign demand for the local currency of the country will fall, and then rising exchange rates. This increase in inflation will display the country's currency on demand abroad and at home.

The Interest Rate in the Country: The individuals are willing to invest their savings in assets that give the highest return possible or return it with other factors remain constant, a high-interest rate in the country for abroad will lead to increased demand for assets and assets inside and as a result the demand for local currency.

The Country's Trade Policy: The demand for imports influence by the trade policy of governments. So, the increase in trade restrictions increases import prices and thus reduces the demand for them, thus reducing the demand for foreign currencies needed to purchase these imports. Since the founding of the International Monetary Fund in 1944, there was an inflationary trend in world prices which seem to change unlikely,

and that global inflation had led to some countries have promoted the system of flexible exchange rates. Thus, politicians concluded that solving the fixed-exchange-rate quandary of countries with different inflation rates is a flexible exchange rate. In the latter, the external balance can have sustained. A country that adopts this price can adjust its monetary and fiscal policy to sustain full employment and price level (Glahe, 1985, p. 431)

1.3. The Theoretical and Practical Framework of The Impact of Fiscal and Monetary policy on Economic Stability:

1.3.1. Fiscal Policy and Mechanism of Economic Stability

The fiscal policy affects the volume of government spending and tax rates, while plays the second role in achieving economic stability. However, the fiscal policy is effective at low-interest rates and the subject of the study and taking into account the variables of macroeconomic stability and focus on two critical variables. While the role of the fiscal policy of the discretionary budget of the government is to equalize between its expenses and it fixed and recurrent revenues expenditure and revenues.

According to Guerrazzi, (2010, p. 1) the primary objectives of the fiscal policy are to contribute to the formulation of a sustainable growth environment and supporting efforts to reduce inflation and achieve a real level of a budget surplus for each year to ensure the sustainability of debt service and debt stocks. For fiscal policy to be economically feasible, its implementation must link to the right timing. Therefore, some economists believe that over time, the implementation of a new spending or tax program creates an impact on the economy, so the need for such a program necessity studied.

While, Lonela and Codreanu, (2010, p. 2) argue that their viewpoint is comparable to the continuous commitment to maintain the balanced budget. So, the total expenditure is determining by the size of the total recurrent revenues, taking into account the objective of proper management of the balance sheet of the government sector, i.e., the framework of the budget bold management framework for the state assets and financial levels and net value.

In this regard, Guell, (2007, pp. 126-127) argues that the difference between both policies is that one is subjective and the other non-subjective. For example, the non-

elective fiscal policy includes government policies that stimulate the economy when it needs incentives and discourages it when it needs to. The elective policy stimulates or discourages the economy at a specific time. In contrast to the emphasis on money supply, there is a school of thought that gives a great deal of weight to financial matters in the interpretation of the recession. While total demand and aggregate supply can use as a useful means to test the impact of fiscal policy. Both voluntary and non-discretionary fiscal policies act to shift the aggregate demand curve to the expansionary right and deflation. So, the choice of expansionary fiscal policy is the increased government spending or the reduction in taxes, and the deflationary fiscal policy options that include spending cuts and tax increases.

As indicated by Andres and Domenech, (2006, p. 2) the high level of debt accumulated in global economies developed from the mid-seventies to the mid-nineties of the last century may bring sustainability and financial stability in the forefront of the concerns of economic authorities. Besides, financial rules such as the stability and growth in Europe, which aims to achieve these goals when maintaining public budgets in the form of to perform its functions of stability.

According to Chowdhury & Siregar, (2004, p. 148), in some context Siregar-Ward (2002) found that fiscal policy has significant effects due to wage stagnation, nominal prices or nominal stability. Both findings on the relationship between inflation - growth and the impact of fiscal policy on production have essential policy indicators for Indonesia in particular during the phase restore to recover, and there is scope for more fiscal policies slackening reduces pressure on government finances, political position.

However, according to Guell, (2007, pp. 129-131), it was an inferior performance of these policies in the seventies of the last century and the analysis of aggregate supply and aggregate demand is a right approach. Furthermore, non- discretionary fiscal policy announced, but the fiscal policy choice was more than the level of the perception of economists. In the 1970s, it became clear to policymakers that options fiscal policy had not able to stabilize the economy. So, delays were essential to temporarily excluded. Whereas recessions have become too short for those observed, laws will have enacted, and money will spend at the time they have any influence, and despite previous warnings about the impact of the voluntary fiscal policy.

In this context, Keynesians focus on the effectiveness of fiscal policy, while critics believe that the budget deficit will only have a moderate effect on aggregate demand unless a change in monetary supply accompanies it. The critics focus on the statement that expansionary fiscal policy, a financial event that is not accompanied by a change in money supply, leading to higher interest rates. Moreover, then restrict private spending. Pure fiscal policy means a change in taxes or government spending that is not financed by borrowing from the central bank. Therefore, this policy does not change the money supply (Guartini & Astrup, 1999, p. 430).

Though, the governments have some functions, including the stability function, which is related to the use of budget policy to achieve full use and price stability and an appropriate rate of economic growth and equilibrium of balance of payments. According to Michael, (1988, p. 517) as for the budget, there are three concepts of the budget are:

- Unified budget
- National income budget
- High employment budget

Also, the latter means an estimate of the balance of national income accounting, which should be at the highest level of employment of resources, especially labor, as the unemployment rate does not exceed 4%.

1.3.1.1. The Case Against the Discretionary Fiscal Stability Policy

To illustrate why discretionary fiscal policy may be constructive in some individual cases that have characterized it? It is useful to start by reviewing the general issue today accepted that did not favor the use of discretionary fiscal stability policy under most circumstances, especially when the change in aggregate demand desirable.

According to Guerrazzi, (2010), the consensus against the discretionary fiscal policy is a truly unique reflection of Keynesian view of the proper policy of the 1960s and 1970s. The primary view was at the time is that falling aggregate demand can reflect through tax cuts or government spending policy. The logic of the economy today confirmed the rejection of this recipe for three main reasons:

1. The effect of the presumed active multiplier in the first Keynesian model in the textbooks had narrowed noticeably when economists realized that marginal propensity for saving temporary tax cut might relatively high, and the increase in

cash demand that accompanies economic expansion causes an increase of demand reduction interest rate.

2. The analyses summarized in the Guerrazzi, (2010) to cut taxes or increase spending has already stifled economic activity.

While Feldstein, (2002, pp. 1-4), mentioned that the early Kenyans rejected the idea of the burden of debt, pointing out that would have indebted to ourselves. James Meade later argued that even local, the national debt is a burden because of the loss of so-called net loss dead weight which associated with the taxes needed to pay interest rates on debt. On the other hand, the higher the change in fiscal policy, the higher the likelihood that it will lead to instability in total aggregate demand by adding or subtracting a significant catalyst that correlated with the implied shortfall or increase of demand. Therefore, fiscal policy is the only choice policy when it comes to reducing overall demand or stimulating a weak economy.

1.3.2. Monetary Policy and Mechanism of Economic Stability

The monetary policy is an essential tool that can use to achieve economic stability, and because it is most influential in achieving this goal, the central bank can play an essential role in this policy. The central bank in any country cuts or raises interest rates that lead to increased or decrease the money supply. The effectiveness of the fiscal and monetary policies undoubtedly measured by their impact on both the level of GDP and the interest rate variables. Interest in monetary policy was evident in economic thought in the nineteenth century, and this attention has to grow significantly during the financial crises and economic instability of the twentieth century.

According to Guell, (2007, pp. 137-139), the most important historical role of monetary policy and its implementation is the central bank, whereas the central bank can determine the course of prosperity and recession by regulating the operations of banks and other financial bodies. While the discouraging role of prosperity and failure remains an essential part of the business, the mechanism radically changed. When the central bank confirms merely the financial viability of the bodies and changes interest rates to change the borrowing behavior of banks, people in business, and consumers. However, Guell, further argues that the effect of monetary policy on the economy as a whole can realize the interest rate. Which is one of the determinants of aggregate demand, and that the effect

of the interest rate arises from the fact that investors want to borrow more for the purchase transactions.

In this context, given the extended period of slowdown in the effect of monetary policy and its changes. Friedman suggested that the monetary authorities have a significant effect on economic stability if they follow a simple rule based on making the increase in money supply grow at a rate equal to the growth rate of the net national product without the use of policies based on expansion and contraction. Because the link between the increase in money supply is growing the net national product, which works to achieve full employment, and avoids the society to expose to economic fluctuations. Some researchers argue that monetary policy corresponding to cyclical economic fluctuations involves changes from year to year in money supply to achieve stability in economic activity. However, Friedman believes that the problem is that it may take unemployment more significant than the expected rate of money supply as well as inflation (Al-Bayati & Al-Shammari, 2009, pp. 387-388)

1.3.2.1. The Central Bank's Independence

The independence of state's central bank means that the monetary policy delegated to unelected officials and that the government's influence on monetary policy restricted. Nevertheless, even the most independent central bank does not operate in a political vacuum (Fernández, 2015). The theoretical case for the independence of central bank rests on defying inflationary biases that may occur for several reasons in the absence of a central bank independent. So, one reason for such partiality is political pressure to boost output in the short run for electoral reasons. An additional reason is an incentive for politicians to use the power of the central bank to issue money as a means to finance government spending (Fischer, 2015).

Nevertheless, some have criticized the central bank for focusing on inflation as a single monetary policy goal and for excluding other goals, the most important of which is in production. However, empirical evidence suggests the absence of long-term negative exchange, but there is much evidence of short-term negative exchange. Moreover, if short-term exchange usually is short-term and Phillips curve indicates the exchange between the growth rate of production on the one hand and the other hand inflation changes (Debelle, 1999, p. 1).

However, monetary policy controls both the inflation rate and the change in aggregate demand, especially in the long term, because of its practical effects on growth rates and income distribution. High inflation may create uncertainty and macroeconomic instability. As well as the turmoil in the financial markets and creates high rates of capital tax which frustrates all types of investment either in the physical or human capital, as well as foreign direct investment to lead to lower rates of economic growth (Abdul Majid, 2004, p. 63). Moreover, raise the reserve requirement ratio and lending and deposit interest rates in 2006, the Bank began its earlier repeated precisely led to monetary policy to curb the excessive expansion of credit growth and avoid unnecessary shrinkage effect to withdraw liquidity sooner than he should have. Likewise, raising the ratio of reserve requirements and interest rates for lending and deposit. Since 2006, the bank followed its measures. The repeated adjustment of monetary policy has limited the excessive expansion of credit growth and avoided the effect of unnecessary contraction of liquidity withdrawal too quickly (Xiaolian, 2007, p. 36). However, Cerutti et al., (2016) argues that since the financial crisis, various central banks pay significant attention to financial stability, occasionally because they have given explicit responsibility for macro-prudential supervision, and sometimes because they now see financial stability as critical to the traditional pursuit of macroeconomic stability.

1.3.2.2. Monetary Conditions for Economic Stability

According to Egle, (1938, p. 483), two primary methods lead to achieving monetary conditions for economic stability: the first flexibility method, and second achieving monetary stability method. The first flexibility method: some writers have attacked the problem of the neutrality of money by calling for measures to restore the flexibility of costs and prices of these materials. The real prices formed and the general idea is to establish a monetary system that prevents contradictions between the value of money as a medium of exchange, on the one hand, and the value of money is the standard for postpaid, or future liabilities or deferred payments.

The monetary stability method: the second group of writers suggests that price stagnation in many cases is inevitable. Moreover, a particular type of inflexible price may become a monetary policy objective. Thus, they suggest that it is a matter of social policy that proves real income from capital, or from work. Alternatively, the amount of wealth controlled by fixed capital assets and trying to stabilize the level of the price of goods and

services in the diagnosis of the immediate goal of achieving monetary stability is the rate of flexible prices. While, the monetary policy required by the other to address the phenomena against the macroeconomic stability and is supported on a package of measures within the scope of monetary policy and tight back to counter rising inflationary phenomenon, built that package on exchange rate and interest rate instruments.

1.3.2.3. Monetary Policies to Tackle Deflation

Deflation refers to a state where prices decline determinedly. So, deflation was once perceived to be a phenomenon unique to Japan. Looking back to the late 1990s and 2000s, while Japan was suffering from deflation, other economies were performing quite well. Also, demand is weak; tight monetary policy must pursue and go beyond a reduction in interest rates that may seem a natural combination of inflation and unemployment. In other words, deflation may indicate real high-interest rates even if nominal interest rates have fallen to close to zero (Kurodo, 2016).

Though, according to Feldstein, (2002, pp. 4-6), the expansionary monetary policy could cause asset prices rise in stock and property markets or a further decline in the exchange rate, as well as higher speed of prices for goods and services. The opposite effect is when asset prices or exchange rates increase as creates instability. The overly loose monetary policy is one of the most dangerous instruments. Nevertheless, long-term nominal low prices produce favorable real prices if inflation is rapid, and a sharp drop in the exchange rate may generate an opposite effect of instability on the effects of other economies. In this case, the optional fiscal policy may use both to prevent the economy from sliding into recession or return to price stability after the recession.

1.3.3. The Importance of Coordination Between Fiscal and Monetary Policies to Achieve Economic Stability

There are three central concepts need to distinguished, namely: fiscal policy, monetary policy, and the concept of managing public debt. So, as already defined fiscal policy is procedures and decisions tend to budget revenue from taxes and duties besides what budget expenditures and takes all kinds to achieve economic and social objectives of the state. While the traditional concept of monetary policy refers to a set of tools that control the money supply to match the size of goods and services offered to stabilize

prices. The concept of managing public debt refers to the process of developing and implementing the government debt management strategy to provide more sources of financing that debt and to achieve the government's goals related to risk and cost (Fadl, 2016, p. 88). In addition to any other general objectives identified by the government in public debt management framework, such as the establishment of an efficient market for government securities trading.

The requirement for active coordination between policies are essential, so, becomes pressing with the independence of both authorities to implement their objectives. In recent years, the need for coordination fiscal and monetary policies has increasingly reinforced in the face of global financial and economic crisis (Abdel-Haleim, 2016).

In this context, Begg et al., (2002, pp. 21-22) define coordination as the essential preparations that assure the decisions taken by both authorities are not contradictory. In other words, a policy decision will not basis adverse indirect impacts and spillovers to the other policy with the aim of harmonizing the macroeconomic policy combination. Therefore, the importance of coordination between the policies develops financial markets, while showing the need to create a Separate Debt Management Office (SDMO) to achieve the goals above of public debt management strategy (Fadl, 2016).

Thus, the researcher believes that it is necessary to benefit from the long experience of the central bank in the field of public debt management. Moreover, to define the primary objectives of its monetary policy and the tools used to achieve these goals. Through coordination and consultation with the government so as not to contradict the objectives of monetary policy and the general objectives of the state.

1.3.3.1. The Influential Between Fiscal Policy and Monetary Policy

The impact of changes in fiscal policy on monetary policy multifaceted, so affecting directly the ability of the central bank to achieve the goal of price stability as a key policy objective. Those implications of fiscal policy linked to the government budget constraint.

However, Leopold, (2003, p. 1) highlighted the importance the limitation by contributing to highlighting the role played by both fiscal and monetary policies in achieving the goal of price stability. So, this limitation emphasizes that monetary policy

cannot play its role in controlling inflation unilaterally and that fiscal policy should support it. In one of the essential contributions, Taylor (1995, p. 153) stressed the possibility of highlighting the direct relationship between the fiscal and monetary policies through a government budget constraint. Which suggests that a change in the budget deficit must necessarily lead to a change in the size of interest-bearing government bonds or high-leverage money to finance fiscal deficits, although inflation is a monetary phenomenon, that the budget deficit is one of the primary determinants of long-term inflation through the channel of the proceeds of the issue.

In this regard, Neyapti (2003, pp. 458-475), presented an empirical study in which the inflationary effects of the budget deficit demonstrated in the absence of development of financial markets and the lack of independence of the central bank. These factors in addition to the lack of an efficient mechanism for collecting taxes, depend on the creation of money as a single source to finance the fiscal deficit.

1.3.3.2. The Impact of Monetary Policy on Fiscal Policy

The implement of monetary policy and related institutional arrangements effects fiscal policy. For example, the adoption of the arrangements of the currency supervisory board - as one of the fixed exchange rate system contributes to reducing the enormous and persistent fiscal deficit. And not to rely on inflation tax to finance this deficit which contributes to the achievement of fiscal discipline (World Economic Outlook;, 2001, pp. 130-131).

While, Dahan (1998, pp. 5-9), studied the financial impact of monetary policy action, the dominant feature in many developed and developing countries alike, to afford monetary policy bore the burden of achieving a stable inflation rate and advancing macroeconomic performance in the short term. Although the primary objective of monetary policy, in that case, is to control inflationary trends and contribute to financial stability, monetary procedures may have expansionary effects on short-term budget deficits.

1.3.3.3. Coordination Between Fiscal and Monetary Policies on Domestic and International Level

It is also necessary to be aware of the coordination between the monetary and monetary policies at the local and international levels. The concept of coordination between the two policies, in this case, refers to the common understanding by the public debt managers, the fiscal and monetary authorities of the objectives of these policies in the light of the mutual influence of various instruments (Fadl, 2016). Moreover, public debt managers provide their vision of the costs and risks that coincide with the funding requirements of the government and the size of public debt and work to separate the management of debt and monetary policy objectives besides establishing the principle of accountability in the achievement of financial development.

While, Begg (2002), provides a simplified definition of coordination between the fiscal and monetary policies whose content goes to measures that ensure that decisions taken by decision makers in either policy have no indirect and undesirable effects on other policies. Stresses that the best image coordination at all is those that involve the participation of decision makers to durable in setting their goals, which leads to maximizing results from both policies together.

As Marszalek, (2003, p. 48), presents another definition, the coordination between the two policies defined as the mechanism by which negotiations between the two enjoy each other independence the central bank and the government to achieve the best results from both and create the appropriate framework for leveraging both branches. However, Begg et al., (2002), further defined the coordination of policies in that case, which refers to rules or principles that are transnational and agreed upon by all member states. The primary responsibilities delegated to the governments of the states with limits of complete freedom act.

CHAPTER TWO

ECONOMIC STABILITY

2.1. THE CONCEPT OF ECONOMIC STABILITY

Economic stability is defining as an economic environment free from volatility or fluctuations in macroeconomic variables. When the economy grows at a moderate rate under low and stable inflation, the economy is economically stable.

On the other hand, inactivity and economic cycles have a short time horizon, and an unsustainable balance of payments leads to gross foreign exchange volatility, a sharp rise in the financial budget and its decline. So, high inflation, constant or volatile leads to fears of financial instability, all signs of economic instability may increase uncertainty reduce investment promotion, slow down economic growth and reduce social welfare.

However, theoretically, macroeconomic instability refers to phenomena that make the national macroeconomic situation less expectable, and it is of concern because irregularity hampers resource allocation decisions, investment, and growth (Ulvedal, 2013, p. 5) So, in reducing economic instability. The economic system can increase the quality of life by enhancing standards of living by raising productivity and efficiency that lead to sustainable employment levels (Gormez & Yigit, 2009, p. 2).

Some recent studies suggested that active economic stability policies that respond to inflation and output gap may accrue at the same time on the low and stable inflation rate and a high degree of economic stability. There is also broad agreement that the goal of monetary policy in the United States of America and the past few decades was to seek price stability and increase sustainable growth over time.

According to Orphanides, (2002, p. 1), active stabilization policies that respond to inflation and the level of economic activity can achieve these goals and make a low and stable rate of inflation, and a high degree of economic stability.

While the benefits of economic stability discussed in detail by the staff of the Joint Economic Commissions (JEC) and they reach the following:

- Improving the central bank's credibility, accountability, and transparency, so, the apparent objective reduces the central bank's incentives to slide back from its long-term creeping inflation commitments and shows how the central bank is supposed to work and reduce the chances of interference for political purposes.

- Long-term high growth, economic theory, and evidence suggest that limited long-term inflation encourages employment and economic growth.
- High-quality exchange, under price stability, could serve as an intermediary function of monetary exchange and store of value.

In this regard, Taylor, (2000, p. 9) argued that the fight against the decline might difficult and economic instability may increase as well as when inflation gets down successive downwards with the low inflation that will raise the real interest rates and this leads to lower inflation.

However, a typical concern about price stability is that it leaves the central bank without much flexibility in monetary policymaking. In all countries that have inflation targets or other price stabilization targets, the central bank maintains a sizeable discretionary capacity. Consequently, the price stability act of 2003 puts price stability being targeted mainly for monetary policy although it may leave room for other objectives to the extent compatible with price stability (Saxton, 2004, p. 2).

As indicated by Saxton, (2004, p. 5) further argues that inflation targeting usually takes the form of a set package of goals or target band such as 1-3% of inflation in general and not a specific number. The range of the target is usually a medium-term goal which gives the central bank more flexibility.

The choice of macroeconomic policies and integrated sectoral policies has made it necessary for governments to ensure that privatization transferred in an economic environment that allows both competing and international forces to produce efficient production and thereby improve growth prospects. Private sector transformation in an environment of high and unstable inflation it is not spam.

2.1.1. Economic Stability in Turkey

Turkey experienced a severe economic crisis in November 2000 and again in February 2001. The crisis erupted after Turkey adopted an exchange-rate-based disinflation program led and engineered by the IMF. During the year 2001, GNP fell by 9.5% in real terms, consumer price inflation soared to 54.4%, and the currency fell 51% against the significant foreign monies. The rate of unemployment rose by two percentage points in 2001 and then by another three percentage points in 2002. Real wages fell by 20% in 2001, recovery of the Turkish economy was vigorous after the crisis of 2000/2001.

Gross national product (GNP) grew at an average annual rate of 6.9%. Price inflation was finally brought down to single-digit levels after nearly four decades of high inflation episodes. In the meantime, significant success in fiscal balance has achieved, and Turkey has successfully further penetrated European markets, raising the significance of full-membership negotiations with the EU (Erinc, 2007, p. 1).

The elimination of chronic inflation and systemic instability has become one of the primary objectives of the economic programs implemented since the year 1999 with the support of the IMF's position. While the policies adopted by the economic program covering the period from 2002 to 2004 will also contribute to the necessary transition of Turkey's membership to the European Union.

However, PRE, (2002, p. 3) indicated that the monetary policy aimed at transforming the inflation target under the volatile exchange rate system as well as the income policy that will determine by a standard base consistent with the objectives of the monetary and fiscal policy. While the Turkish economy has undergone a significant transformation over the seven years between the internal economic crisis of 2001 and the global economic crisis of 2008. As a result of this transformation that the GDP increased between 2002-2008 from \$300 billion to \$750 billion, with an average growth rate of 6.8% per capita income rose to Turkish citizen in the same period of \$3300 to \$10000 annually, as well as the continued decline in inflation rates and the steady increase in the volume of investments.

Accordingly, Turkey ranked 16th in the ranking of the largest economies on the world level and became its sixth ranking on the European level, and narrowed the gap for the first time between the Turkish development rates and of European development rates. Given the long-term changes that expect to emerge on the global economic map and the growing Turkish role at the international level, Ankara expects to be one of the most prominent emerging powers in a multi-polar world looming on the horizon (Öztürk, 2010, p. 47).

2.1.2. The Role of Fiscal and Monetary Policies in Economic Stability

The role of fiscal policy as subjective and discretionary fiscal policy stability during volatile economic activity tax and fiscal spending responds automatically to the road leading to economic stability. For example, during an economic slowdown, the

benefits of unemployment rises with increasing unemployment and this increases the expenditure so requires not only acted publicly by the government in parallel falling tax payments when the economy is slowing recession.

However, Ulvedal, (2013, p. 8), estimated that the elements of tax stability overcome about 8% of the impact of the economic shock on GDP while rationalization of expenditure leads to stability. Hence, local governments believe that tax revenues are falling during the recession, but because most of these governments are forced to balance their budgets annually, they often reduce spending during the recession. Governments may make voluntary fiscal changes in the face of an economic slowdown.

According to Lonela & Codreanu, (2010, p. 4) the expansionary fiscal policy aims to boost demand and production in the economy either directly over higher government spending or indirectly through tax cuts that stimulate private consumption and investment spending. The elements of financial stability help to moderate economic fluctuations. There is controversy over the contribution of fiscal policy to fighting the economic recession. The long-term slowdown that is characteristic of substantial changes in fiscal policy weakens the role of elective policy that can play during the relatively short recession faced by some countries.

While, Saxton, (2004, p. 7) mentioned that in the long term, gold maintains its purchasing power well, but the experience of the countries that possessed the gold standard was moderate, but the constant inflation or deflation lasted for several years.

In this context, Taylor, (2000, p. 3) indicated that among the relevant topics were the subject the of debate and controversy in an international conference held in 1987 are:

- 1) Causes of macroeconomic instability since 1973 until the early 1980s.
- 2) Choose an optimal monetary system to reduce future instability.

Accordingly, during the 1973-1980 period, macroeconomic performance was excellent in most developed countries, notably Japan, compared to the corresponding weak performance in the United States of America in the same period.

While, there is substantial agreement between Andrew Crocket, Stanley Fischer, Allan Meltzer, James Tobin and Ted Truman. That the difference in monetary policy may explain a large part of the difference in performance between Japan and the United States and other countries, mainly that there was broad agreement that a significant United States

monetary policy error is excessive expansion at the end of the 1970s and keep inflation low and stable.

In this regard, Grauwe and Gunther, (2008, p. 542) argued that the inflation target physical characteristics nominal income. So, a nominal target income does not give us evident dismantling elements of inflation and output element, so there is no clear anchor for inflation expectations, as well as the inflation rate, is usually a good concept by public opinion while the growth of nominal income may be the more ambiguous concept. Economic growth and stability are incredibly complex phenomena that even today regardless of economic theory very developed can't say positively whether all growth factors contribute to the realization and sustainability of stability or low inflation rate (Debelle, 1999, p. 12).

In other words, dynamic equilibrium is defining as the case in which growth is consistent with low and stable inflation and with a sustainable balance of payments position. So, this based on the assumption that in the short term, higher inflation can apply to growth and that the balance of payments deficit can reduce growth, Medium and long, high inflation and high indebtedness have a negative impact on economic growth. (Brkic, 1997, p. 17).

The equilibrium in the money market or the financial market derived from the general economic balance. So, the equivalent of the values of the variables in the economic system or its stability. While, this is the equation between the opposing forces, to balance several conditions, the full balance if the net power added to the balances equal to zero, and there is a stable equilibrium when it exceeds the marginal propensity for saving propensity to invest. Besides, when the equilibrium is an unstable and dynamic balance which includes the element of time,

2.1.3. A Clear Vision of Macroeconomic Stability

The concept of macroeconomic stability has taken on the vital importance because of the significant changes in economic thought in the past decades. However, (Ocampo, 2008, p. 1) mentioned that the Keynesian model dominated in the postwar years, macroeconomic stability means mostly a mixture of external and internal balance. Which, in the second case, shows full employment and allows for economic growth accompanied by a low level of inflation over time, changes in the financial equilibrium and stability of

the price in the form of stability of money by displaying Keynesian influences in real economic activity.

According to Ulvedal, (2013, p. 10), the world bank describes the macroeconomic context as stable, when the inflation rate is low and predictable, real interest rates are suitable, the real exchange rate is competitive and liable, and the balance of payments condition is apparent as viable.

However, financial stability is a useful indicator of proper macroeconomic, but despite this, there are a lot of developing countries facing a deficit in the budget recently. The budget deficit is a cause of macroeconomic problems among these problems high level of inflation, current account deficit and slow economic growth (Karel, 2004, p. 1). The objectives of monetary policy in the central bank act, which stipulates that the board of directors of the open market to seek to raise the objectives of maximizing employment and stable prices and moderate long-term interest rates and effective.

The stable prices in the long term be a circumstance in advance to maximize the sustainable growth of production and expand employment, as well as moderate and long-term interest rates when prices are stable and believed it would remain the same in the future.

2.1.4. Economic Stability Variables

There is an international consensus among policymakers, public opinion, and economists that the high inflation rate is costly and that the stability of the price necessary. The issue of inflation control has a significant challenge facing central banks worldwide and through the application of improved policy structures, requiring high transparency and increased independence from the effects of short-term policies.

As well as the constant comparison, central banks in achieving this goal, and advanced procedures against inflation raising from forecast stable economic environment and usability so undoubtedly contributed to improvements in economic performance.

2.1.4.1. Inflation

Inflation can define as a constant or continuous increase in the general price level or, instead, as a continued or incessant fall in the money value. Several things should note about this definition. First, inflation states to the movement in the general prices level. So, it does not refer to changes in one price relative to other prices. However, these

changes are characteristic even when the general prices level is stable. Second, the prices are those of stuff and services, not assets. Third, the rise in the price level should be somewhat considerable and continue over a period longer than a day, week, or month (Labonte, 2011, p. 3).

One of the critical issues is deflation and response through monetary policy. Monetary policymakers have faced the reality of deflation and zero interest rates. The latter is a cause of instability. According to Taylor, (2000, p. 1) the modern perspective is consistently for near-zero interest rate policy, which began in 1995 grew from policy changes in previous years.

That fiscal policy tools that increase reflationary can use to enhance the level of economic activity in the periods of recession or slowdown in economic activity, and this is through a tax cut and increasing government spending (Lonela & Codreanu, 2010, p. 3). However, some policies reduce inflation (deflationary) and can use during the boom of the level of economic activity when economic activity is growing above its potential; this is done through a tax increase and cuts government spending. There is an excellent theoretical explanation, why would deteriorate economic stability when approaching the negative inflation?

However, there are good reasons for the deterioration when inflation becomes high when the nominal interest rate approaches zero, one of the channels of monetary policy, the interest rate will not decrease. So challenging landing may be severe and economic instability may increase as well as when declining inflation gets down with the low inflation rate, which will raise real interest rates.

According to Berumeent et al., (2002, p. 22) the Turkish economy has practiced comparatively high inflation coupled with failed disinflation programs during the past 30 years. Although yearly inflation was over 100% in individual years, it never reached hyperinflationary levels but arise in a stepwise fashion over time. So, the average annual inflation rate was 20% in the 1970s, 35–40% in the early 1980s, 60–65% in the late 1980s and early 1990s, and around 80% before the government launched yet another disinflationary program in 1998.

According to Öztürk, (2010, p. 54) inflation and its price instability are one of the essential difficulties faced by countries' economies. After inflation in Turkey in 2001 reached 70%, it dropped to 8.4% at the end of 2007 and then rose slightly in 2008 due to

the increase in international prices to reach 10%. Due to lower prices and lower demand at the beginning of 2009, the consumer price inflation CPI at the end of March to 7.8%. The reason for this is that the proportion of foreign currency contents out of the total savings rate of banks in Turkey in 2001 was 75% and the remaining portion, which constituted 25% was the local currency.

However, according to Garcia et al., (2015, p. 3) Brazilian inflation rate took off to three-digit levels in the early eighties, despite primary fiscal surpluses. Inflation kept growing, reaching four digits in 1989 until it stabilized by the Real Plan (July 1st, 1994). Compared to classical hyperinflations, Brazil experienced a much more protracted process. Inflation edged up slowly but surely for several years, being occasionally "hammered" by stabilization plans that usually froze wages and prices, but did not change the fiscal deficits, and did not last long.

Brazil approved inflation targeting after a brief period of exchange-rate targeting that ended up in a major currency crisis. More specially, in 1994–1998 the Brazilian Government used high domestic interest rates and privatization to attract foreign capital and sustain an appreciated exchange rate peg. The principal objective of the Brazilian economic policy at that time was to decrease inflation, and the main side effect of exchange-rate appreciation was a substantial increase in the country's current account deficit and net public debt (Barbosa-Filho, 2008, p. 191).

2.1.4.2. Unemployment

Unemployment is a socio-economic phenomenon of a global character, as well as being a socio-economic problem for any society; whether developing or developed, they deviate from the known values and ethical norms of social life. However, the problem of unemployment is becoming increasingly important in developing countries to increase pressure on the production and service sectors as well as their effects on economic and social life. A further characteristic of the post-2001 era has been Turkey's jobless growth. High unemployment and low participation rates have accompanied rapid growth rates. The unemployment rate rose to above 10% after the 2001 crisis and has not come down to pre-crisis levels despite rapid growth. With relatively cheap imports, Turkey has been importing much more foreign products (Erinc, 2007, p. 1).

However, according to PRE, (2002, p. 27), labor wages, which fell sharply in 2001, are expected to rise after economic stability and real appreciation of the Turkish

lira, rising from 2.6 billion dollars in 2002 to 4.1 billion dollars in 2005. On this basis, the current account deficit which it values be 1.5 billion in 2002, it is expected that oscillates around 1.8 billion dollars in 2003-2005 in other words, the share of the current account deficit to GDP to be evaluated by 1% in the period before entering.



CHAPTER THREE

ANALYZING THE ROLE OF FISCAL AND MONETARY POLICIES IN ACHIEVING ECONOMIC STABILITY IN TURKEY AND BRAZIL DURING THE PERIOD 2000-2015

The purpose of this chapter is to analyze the role of fiscal and monetary policies in achieving economic stability in Turkey and Brazil during the period 2000-2015. The data that related to Turkey and used for the analysis taken from the central bank of the Republic of Turkey, (2018), and World Data Atlas, (2018), while the Brazil data collected from Banco Central Do Brazil, (2018), and World Data Atlas, (2018).

However, the years reflected for the data collection were from 2000 to 2015, so, the time series data related to all three study variables, namely fiscal policy, monetary policy, and economic stability, this provide a sample size of 45 which bigger than the generally acceptable size of 30 in economic studies. As it identified the primary purpose of this thesis study is to analyze the effect of independent variables which is fiscal and monetary policies on dependent variable which is economic stability, for both Turkey and Brazil.

3.1. DATA AND METHODOLOGY

The methodology of this thesis study based on primary macroeconomic analysis for fiscal and monetary policies in achieving economic stability in Turkey and Brazil during the period 2000-2015, while monetary and fiscal policies are remarkable variables as well as significant issues not only for developed states but also for developing ones.

Turkey and Brazil is also the case in this matter, that including the use of the consumer price index, unemployment rate, the growth rate of money supply, interest rates, exchange rates. Moreover, a budget deficit of individual states, which are starting points for discovering the behavior of both states and their in-depth analysis as the data set presented in tables and figures below.

3.1.1. Turkey's Data Used in Study

For analyzing the role of fiscal and monetary policies in achieving economic stability in Turkey during the period 2000-2015, this study concentrated on the growth rate of money supply, interest rates, exchange rates, and budget deficit as the economic indicators of the independent variables besides a consumer price index and unemployment rate indicators of the dependent variable. During the year 2000, Turkey experienced an economic crisis and again in February 2001. The crisis exploded after Turkey implemented an exchange rate based inflation targeting program led and planned by the IMF.

Table 3.1: Turkey's Economic Indicators During the Period 2000-2015

Time Series	Dependent Variables		Independent Variables			
	Consumer Price Index	Unemployment Rate %	Monetary Policy			Fiscal Policy
			The Growth Rate Of Money Supply Million	Interest Rates %	Exchange Rates per US Dollar	Budget Deficit %
2000	19.3	6.0	31.912	100	0.6	-
2001	29.8	7.8	47.241	59	1.2	-33
2002	43.2	9.8	61.879	44	1.5	-12.9
2003	54.1	9.9	82.712	26	1.5	-11.3
2004	59.8	9.7	108.539	18	1.4	-4.5
2005	65.9	9.5	238.801	13.5	1.3	-1.2
2006	72.2	9.0	297.734	17.5	1.4	-0.6
2007	78.5	9.2	344.376	15.75	1.3	-1.6
2008	86.7	10.0	436.38	15	1.3	-1.8
2009	92.1	13.1	493.06	6.5	1.5	-5.3
2010	100.0	11.1	587.261	6.5	1.5	-3.5
2011	106.5	9.1	674.409	5.75	1.7	-1.3
2012	115.9	8.4	743.043	5.5	1.8	-1.9
2013	124.6	9.0	908.01	4.5	1.9	-1
2014	135.7	9.9	1.015.896	8.25	2.2	-1.1
2015	146.1	10.3	1.189.494	7.5	2.7	-1

Source: Central Bank of the Republic of Turkey, (2018), and World Data Atlas, (2018).

Regarding the monetary policy, the central bank of Turkey adopt the programme aims to disinflation under the structure that has employed indirectly since 2001, and officially since 2006. While, the primary purpose of monetary policy has to accomplish price stability, with the short-term interest rate being the central mechanism to achieve this aim. So, this policy which has worked reasonably well to commentator inflation prospects and facilitated to build flexibility to international shocks, which brought interest to lower rates and inflation down to single digit after many years of chronic high inflation and interest rates.

However, a sharp decline takes place in exchange rate composed with the interest rates which motivated domestic demand. So, this mainly due to the early credibility of the programme, prosperity effect and protected consumption demand stemming from high real interest rates in 1999. In the same context, fiscal policy during the same period remains to be a key pillar of Turkey's economic stability, so, both policies played a significant effect on reducing the inflation rate, as well as on indicators of growth.

3.1.1.1. Turkey's Economic Stability

3.1.1.1.1. Consumer Price Index (CPI)

In this study we analysis Turkey's economic stability under two critical factors which is consumer price index (CPI), and the unemployment rate. As results revealed in the table below, the annual percentage changes of the Consumer Price Index (CPI) in 2000, declined to 19.3 percent due to Turkey experienced an economic crisis in this year. However, CPI reminds relatively decline from 2001 to 2003.

Nevertheless, (CPI) is annually reserved with annually updated weights. The primary source of weights is the household budget. While CPI gathered for the whole country and 26 statistical regions, CPI covers all household monetary consumption expenditure which takes place on the economic territory, as the figure (3.1) below showed CPI is steadily increased notably in 2004 at the rate 59.8. So, reached 146.1 in 2015, due to customers confident where back to Turkey's economy and household monetary consumption expenditure increased since the life standards obtained much better.

Table 3.2: Turkey's CPI, and the Unemployment Rate During the Period 2000-2015

Time Series	Dependent Variables	
	Consumer Price Index	Unemployment Rate %
2000	19.3	6.0
2001	29.8	7.8
2002	43.2	9.8
2003	54.1	9.9
2004	59.8	9.7
2005	65.9	9.5
2006	72.2	9.0
2007	78.5	9.2
2008	86.7	10.0
2009	92.1	13.1
2010	100.0	11.1
2011	106.5	9.1
2012	115.9	8.4
2013	124.6	9.0
2014	135.7	9.9
2015	146.1	10.3

Source: Central Bank of the Republic of Turkey, (2018), and World Data Atlas, (2018).

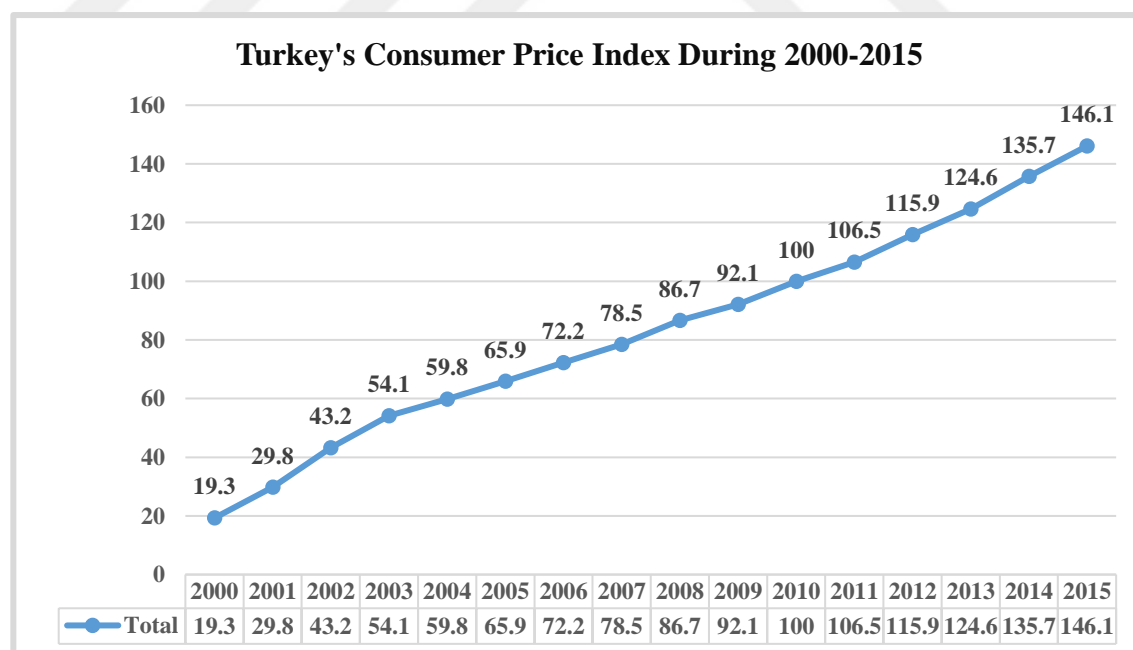


Figure 3.1: Turkey's Consumer Price Index (CPI) During the Period 2000-2015

Source: Central Bank of the Republic of Turkey, (2018)

3.1.1.1.2. Unemployment Rate

As figure (3.2) showed, the unemployment rate in Turkey increased from 6% in 2000 to 7.8% in 2001 due to February economic crisis that again exploded after Turkey implemented an exchange rate based inflation targeting program led and planned by the IMF.

However, unemployment in major metropolitan areas fell to 10.3% in 2015, from around 13.1% and 11.1% in 2009-10 respectively, in other words, the unemployment rate rose by 1.1 percentage points in 2010 and then by another 2.1 percentage points in 2010, before declining again to 9.1% and 8.4 in 2011-12 respectively. In the same context, Turkey's economy recovered dynamically just after the global crisis, nevertheless in the development of external and domestic macroeconomic imbalances emerged. Growth averaged close to 9% in 2010-11, with robust job creation.

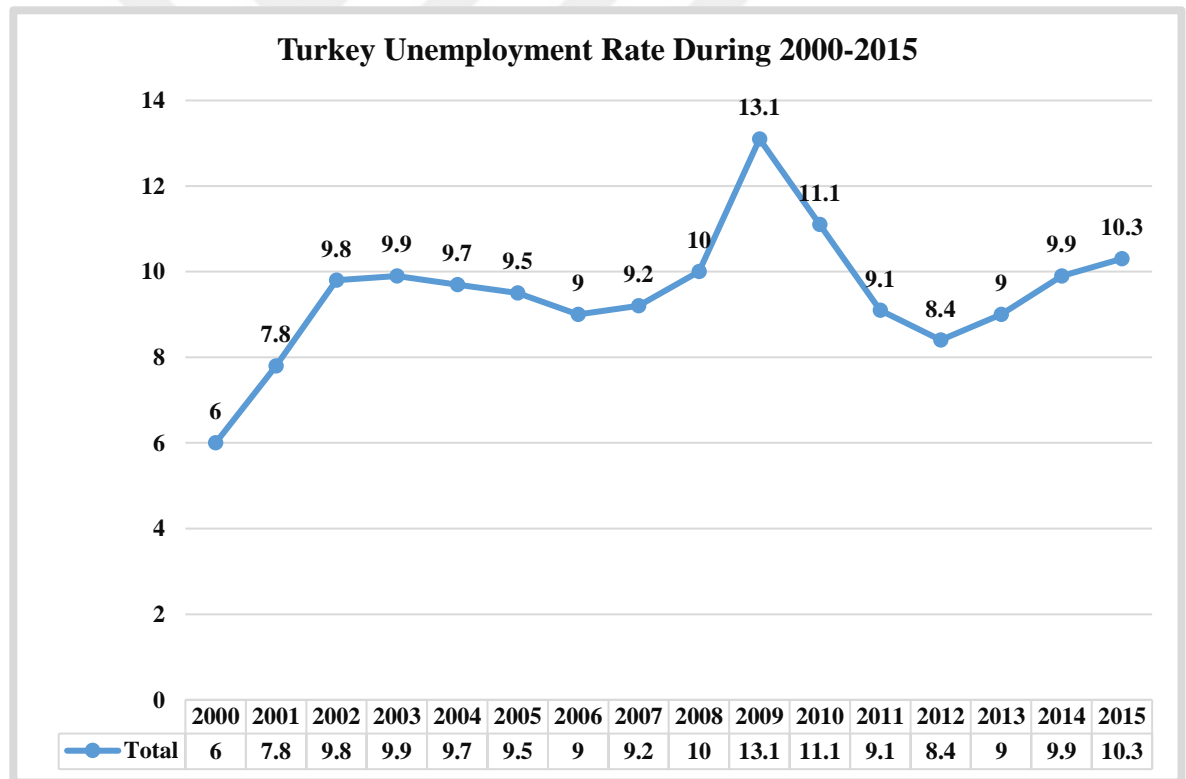


Figure 3.2: Turkey's Unemployment Rate During the Period 2000-2015

Source: Central Bank of the Republic of Turkey, (2018)

3.1.1.2. The Role of Monetary Policy

The central bank of the Republic of Turkey during the period 2000-2015, took various actions on monetary policy and reached its objectives of achieving its economic stability, in the overall level of prices and maintaining the reliability of the banking system, constant with the purposes of the bank and the means to achieve these purposes, in accordance with the provisions of the law.

However, monetary policy affects the economic stability in general and inflation in particular by changing either a monetary comprehensive or an interest rate targeting. By employing some potential actions, so, the traditional actions of monetary policy comprise the fluctuations in money supply, interest rates, exchange rates, and changes in asset prices.

Thus, recent studies in Turkey and around the world has also focused on the effect of monetary policy on credit, both through changes in bank lending and changes in borrowers' balance sheets. While in this study, we examine Turkey monetary policy by taking some indicators namely; (The growth rate of money supplies million, interest rates, and exchange rates per us dollar) as follows:

Series	Independent Variable		
	Monetary Policy		
	The Growth Rate Of Money Supply Million	Interest Rates %	Exchange Rates per US Dollar
2000	31.912	100	0.6
2001	47.241	59	1.2
2002	61.879	44	1.5
2003	82.712	26	1.5
2004	108.539	18	1.4
2005	238.801	13.5	1.3
2006	297.734	17.5	1.4
2007	344.376	15.75	1.3
2008	436.38	15	1.3
2009	493.06	6.5	1.5
2010	587.261	6.5	1.5
2011	674.409	5.75	1.7
2012	743.043	5.5	1.8
2013	908.01	4.5	1.9
2014	1, 015.896	8.25	2.2
2015	1, 189.494	7.5	2.7

Table 3.3: Turkey's Monetary Policy Indicators During the Period 2000-2015

Source: Central Bank of the Republic of Turkey, (2018), and World Data Atlas, (2018).

3.1.1.2.1. The Growth Rate of Money Supply

As shown in the table (3.3), and figure (3.3), the money supply for the period 2000-2015, as results indicated that money supplies gradually increased from 2003 just after the country passed economic crisis till 2007. Besides, even during the global economic crisis of 2008 and 2009, Turkey is the growth rate of money supply increased, and the country's debt rose only marginally to 41 percent of GDP. The general deficit fell from 15 percent GDP in 2002 to 3.5 percent in 2010. While the years 2015-14 witnessed an expansion in the money supply, which recorded an increase to 1.015.896, and 1.189.494 million respectively, compared to the previous years. The lowest growth rate decreasing in 2000 and 2001 by 31.912, and 47.241 million respectively because of the economic crisis Turkey experienced in late 2000 and again in February 2001.

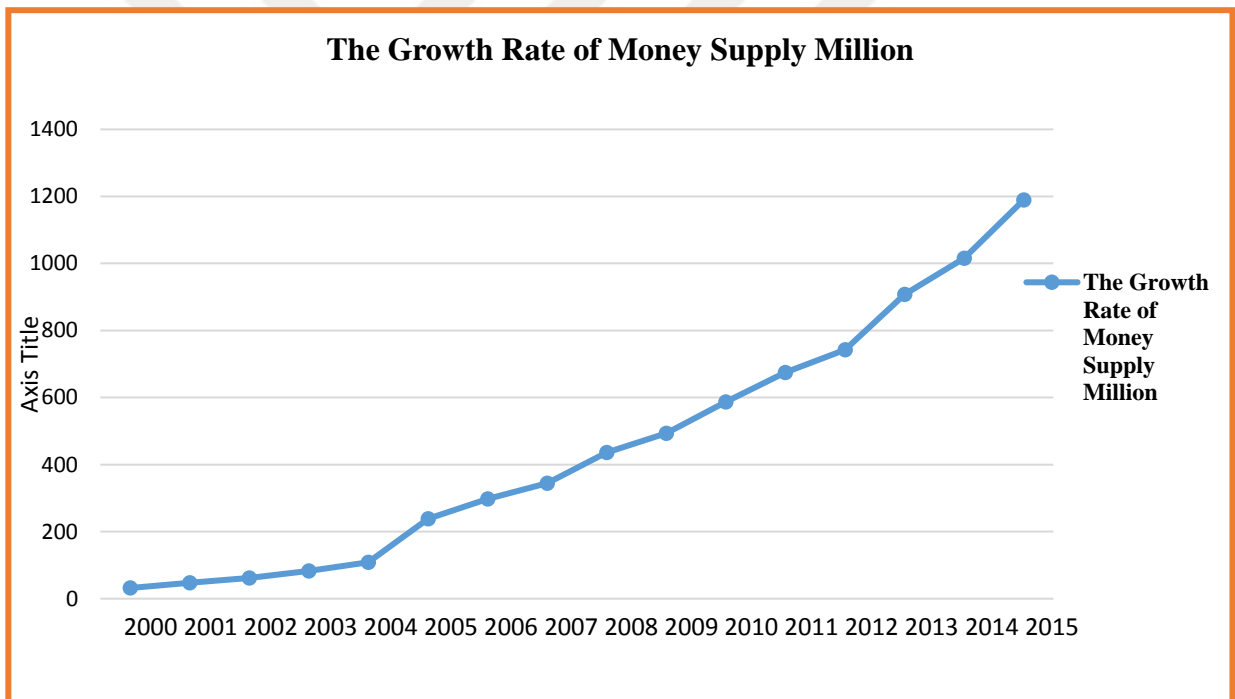


Figure 3.3: The Growth Rate of Money Supply in Million During the Period 2000-2015
Source: Central Bank of the Republic of Turkey, (2018)

3.1.1.2.2. The Role of Interest Rates

As the table (3.3) and figure (3.4) below, summarizes interest rates in Turkey during the period 200-2015. That interest rate charges in Turkey have remained significantly higher than in most emerging market economies especially from 2000 to 2002. While the credit interest rate has forced through a lower bound of 16% despite the

deceleration of price inflation, however, interest rates in Turkey have remained high through the inflation rate has not declined much since 2004.

As previously mentioned that Turkey implements the programme aims to disinflation under the structure that has employed indirectly since 2001, and officially since 2006. While, the primary purpose of monetary policy has to accomplish price stability, with the short-term interest rate being the primary mechanism to achieve this aim. So, as a result, brought interest to lower rates from 17.5% in 2006 to 7.5% in 2015. Which was inflation down to single digit after many years of chronic high inflation and interest rates, however, the lowest record of interest rates was in 2013, which is dropped to 4.5%. in this regard, the monetary policy targets low inflation has become a tool for output stabilization, while these results support the importance of central bank independence and credible policy.

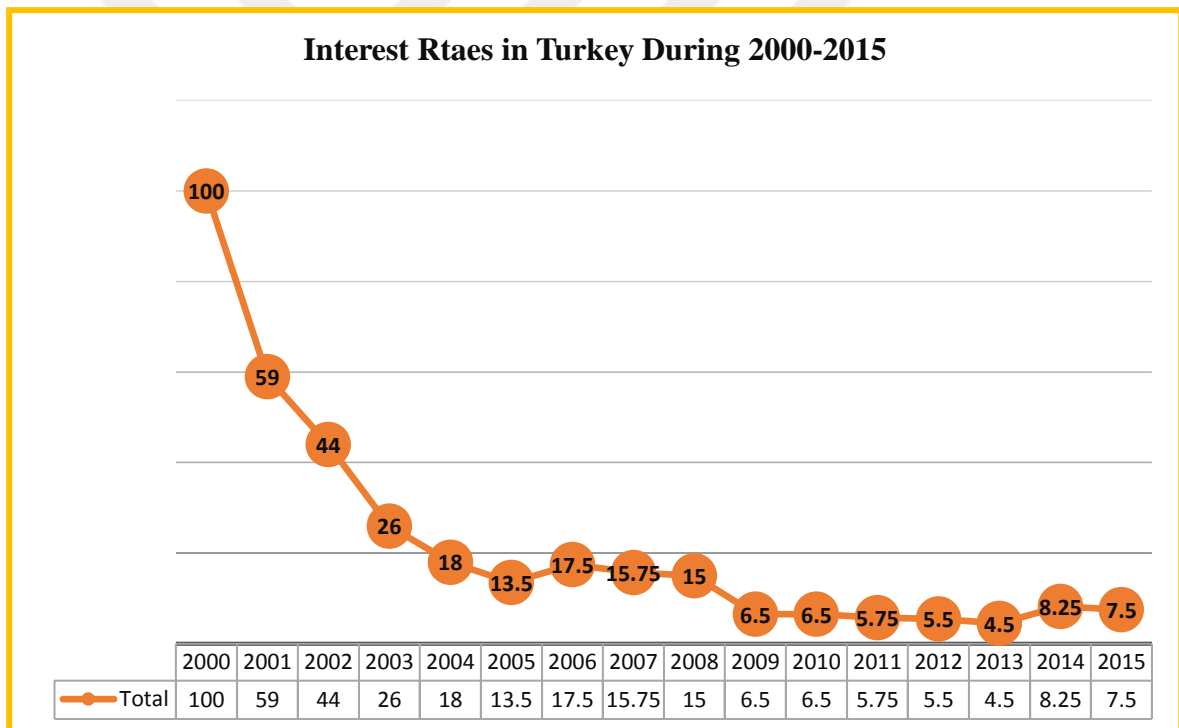


Figure 3.4: Interest Rates in Turkey During 2000-2015

Source: Central Bank of the Republic of Turkey, (2018), and World Data Atlas, (2018).

3.1.1.2.3. Exchange Rates

As a result, shown in figure (3.5), a progressively decreases take place in exchange rate per US Dollar from 2002 to 2008. While Turkey experienced the exchange rate-based stabilization for over 2000, however, it abandoned following the severe crisis in early

2001. Therefore, the central bank of Turkey forced to abandon the exchange rate peg and start to implement a floating exchange rate regime.

Hence the exchange rate steadily increased from 1.7% in 2011 to 2.7% in 2015. Accordingly, transferring to a floating exchange rate regime has reduced exchange-rate pass-through to prices, and weakened the dominance of dollarization. This change also improved the efficiency of monetary policy.

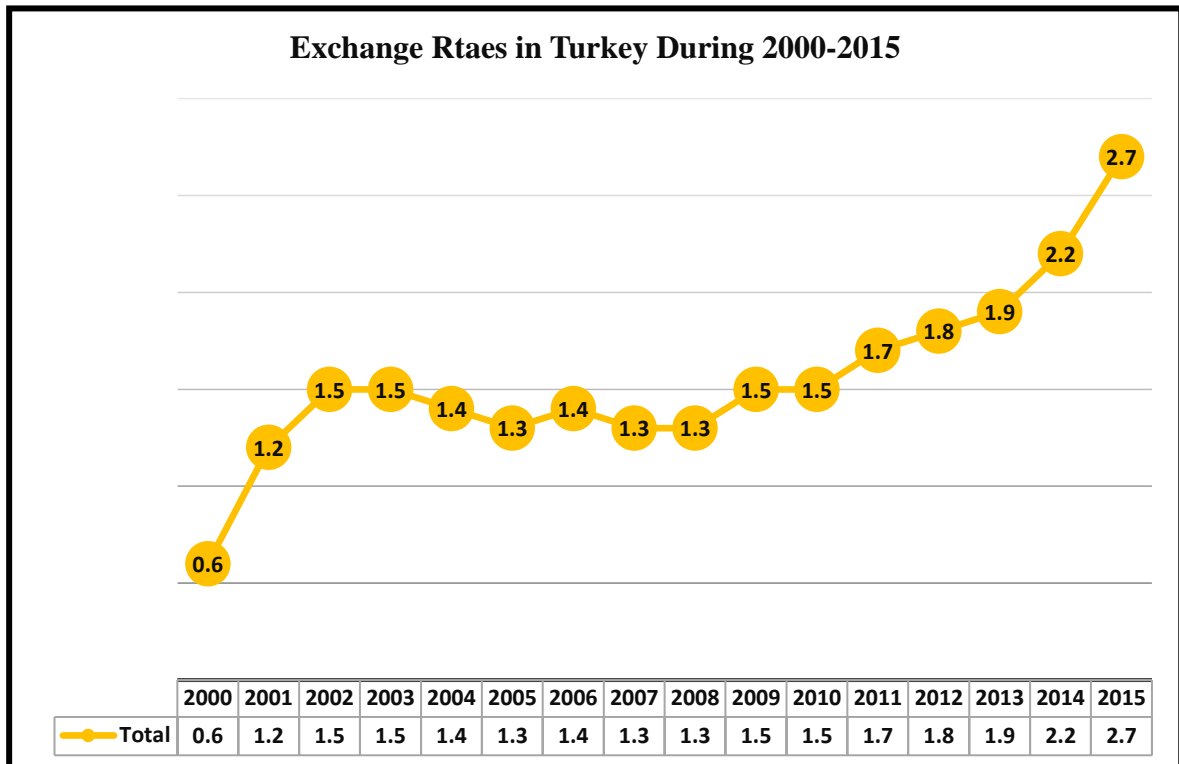


Figure 3.5: Exchange Rates in Turkey During 2000-2015

Source: Central Bank of the Republic of Turkey, (2018).

3.1.1.3. The Role of Fiscal Policy

In the previous years, fiscal policy performed that to be a substance of Turkey's macroeconomic stability. Especially, since the crisis of 2001, Turkey has reached to very remarkable fiscal results, especially for central government. As figure (3.6) below showed Turkey sharply declined its chronic budget deficit from -33% in 2001 to -1% in 2015. However, during the period indicated the lowest decline was in 2001 due to the economic crisis Turkey experienced, while the higher amount reached in 2006 by -0.6%.

Even though, in the late of 2000 Turkey faced rapid financial outflows, since the loss of investor confidence. While, the capital outflow made a massive budget deficit and banking crisis, so, resulting in rapid monetary growth and currency devaluation.

Therefore, Turkey unable to maintain an exchange rate target, the currency was floated. Thus, fiscal policy can significantly affect the future growth rate of the economy by stimulating the growth of the human capital stock. As well as through capitalizing into infrastructure developments. As a result, the Turkish government through implementing fiscal policy kept public finances on a maintainable path.

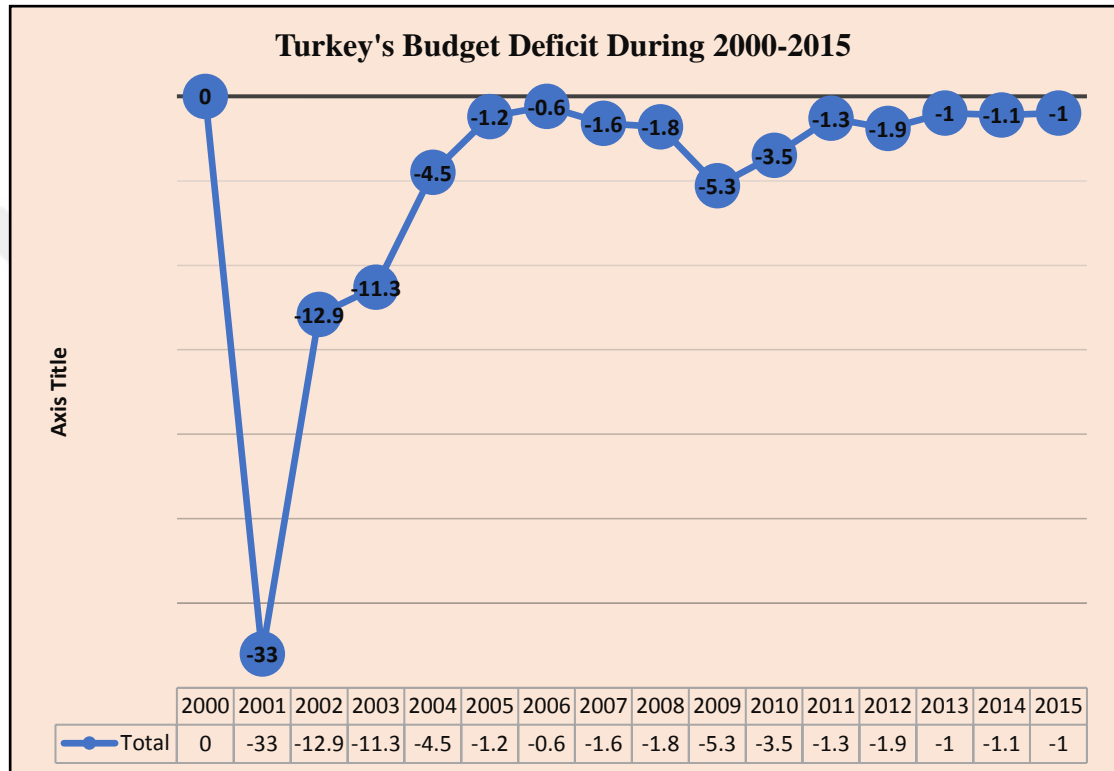


Figure 3.6: Turkey's Budget Deficit During the Period 2000-2015

Source: Central Bank of the Republic of Turkey, (2018)

3.1.2. Brazil's Data Used in Study

For analyzing the role of fiscal and monetary policies in achieving economic stability in Brazil during the period 2000-2015, this study focused on the growth rate of money supply, interest rates, exchange rates, and budget deficit as the economic indicators of the monetary and fiscal policies which they represent independent variables. Further, a consumer price index (CPI) and the unemployment rate indicators of the dependent variable.

The central bank of Brazil during the period 2000-2015 like Turkey took several monetary policy actions to achieve its intentions of achieving the country's economic

stability. At the start of the period indicated the central bank of Brazil had approached an inflation-target for monetary policy. Besides, a free exchange rate regime. However, foreign currencies exchange systems have liberalized. Nevertheless, without permitting full convertibility to the real. While the duty of the preparation and conducting of the monetary policy lies with Brazil's national monetary council (CMN), which is managing monetary and fiscal policies.

Table 3.4: Brazils' Economic Indicators During the Period 2000-2015

Series	Dependent Variables		Independent Variables			
	Consumer Price Index	Unemployment Rate %	The Growth Rate Of Money Supply Million	Interest Rates %	Exchange Rates per US Dollar	Budget Deficit %
2000	52.5	13.9	283.784	15.75	1.8	-3.47
2001	56.1	12.5	321.612	19	2.3	-3.4
2002	60.9	13	397.502	25	2.9	-4.4
2003	69.8	13.7	412.894	16.5	3.1	-5.2
2004	74.4	12.9	493.496	17.75	2.9	-2.9
2005	79.6	11.4	582.463	18	2.4	-3.5
2006	82.9	11.5	661.499	13.25	2.2	-3.6
2007	85.9	10.9	781.28	11.25	1.9	-2.7
2008	90.8	9.4	1.072.986	13.75	1.8	-2
2009	95.2	9.7	1.164.854	8.75	2	-3.2
2010	100	8.5	1.362.388	10.75	1.8	-2.4
2011	106.6	7.8	1.617.479	11	1.7	-2.5
2012	112.4	7.4	1.764.611	7.25	2	-2.3
2013	119.4	7.2	1.956.838	10	2.2	-3
2014	126.9	6.8	2.150.683	11.75	2.4	-6
2015	138.4	8.3	2.285.721	14.25	3.3	-10.2

Source: Banco Central Do Brazil, (2018), and the World Data Atlas, (2018).

3.1.2.1. Brazil's Economic Stability

3.1.2.1.1. Consumer Price Index (CPI)

In this part of the study, we examine Brazil's economic stability within two significant economic factors which is consumer price index (CPI), and the unemployment rate. As results are shown in the table (3.5) below, the annual percentage changes of the Consumer Price Index (CPI) from 2000 to 2015 Brazil's CPI gradually increased without floating or declining, however, in ten years increased to nearly double 52.5 in 2000 to 100 in 2010.

Nevertheless, just like Turkey, (CPI) in Brazil is annually reserved with annually updated weights. The primary source of weights is the household budget. While the consumer price index covers all household monetary consumption expenditure which takes place on the economic territory, as the figure (3.7) below displayed CPI is steadily increased notably in 2010 at the rate 100%, so, reached 138.4% in 2015, due to early 2015, the dollar exchange rate changed between 2.8 and 2.9 in Brazil's Reals.

Table 3.5: Brazil's CPI, and the Unemployment Rate During the Period

Series	Dependent Variables	
	Consumer Price Index	Unemployment Rate %
2000	52.5	13.9
2001	56.1	12.5
2002	60.9	13
2003	69.8	13.7
2004	74.4	12.9
2005	79.6	11.4
2006	82.9	11.5
2007	85.9	10.9
2008	90.8	9.4
2009	95.2	9.7
2010	100	8.5
2011	106.6	7.8
2012	112.4	7.4
2013	119.4	7.2
2014	126.9	6.8
2015	138.4	8.3

Source: Banco Central Do Brazil, (2018), and the World Data Atlas, (2018).

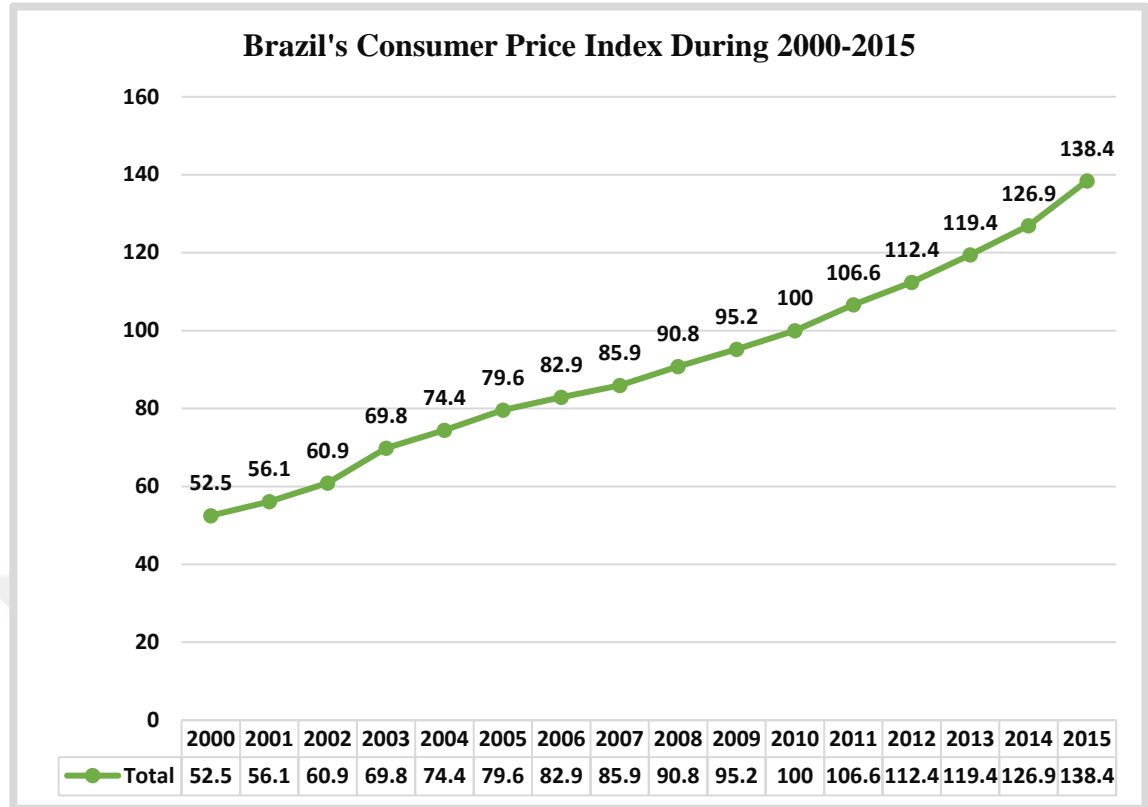


Figure 3.7: Brazil's Consumer Price Index (CPI) During the period 2000-2015
Source: Banco Central Do Brazil, (2018).

3.1.2.1.2. Unemployment Rate

As the figure (3.8) indicated, the unemployment rate in Brazil declined from 13.9% in 2000 to 12.5% in 2001, however, during the period 2000-2015 unemployment rate in Brazil gradually declined with fluting in 2003 were increased to 13.7%, compared to previous year was 12.5 and increased 2009 by 9.7% compared to 2008 was 9.4%.

However, Brazil ended 2014 with an unsatisfactory economic growth rate valued at only 0.2%, which the lowest economic growth rate since 2009. While the unemployment rate in 2014 estimated at 6.8%, over 2014, the unemployment rate stayed at 6.8%, down from 7.2% in 2013 and 7.4% in 2012. Due to Brazil's labor market has floating despite weak growth, and unemployment in major metropolitan areas has fallen to below 5% in early 2015, from around 11.5 % in 2005, before rising again more recently to 8.3% in 2015. One potential reason for decreasing Brazil's labor force contribution could be that the growing salaries of low-income families and improved entrance to education that have permitted Brazilian youths to stay in education for the longest time.



Figure 3.8: Brazil's Economic Stability Indicators (CPI, and Unemployment Rate).
Source: Banco Central Do Brazil, (2018).

3.1.2.2. The Role of Monetary Policy

Previously mentioned that the central bank of Brazil during the period 2000-2015, took several monetary policy actions to achieve the country's economic stability. At the beginning of the period indicated the central bank of Brazil had approached an inflation-target for monetary policy. Besides, increased money supply, as well as adopted floating interest rates and a free exchange rate regime. However, foreign currencies exchange systems have liberalized. However, in this part of the analysis, we are observing Brazilian monetary policy through taking some its indicators such as the growth rate of money supplies million, interest rates, and exchange rates per us dollar, as follows:

Table 3.6: Brazil's Monetary Policy Indicators During the Period 2000-2015

Series	Independent Variables		
	The Growth Rate of Money Supply Million	Interest Rates %	Exchange Rates per US Dollar
2000	283.784	15.75	1.8
2001	321.612	19	2.3
2002	397.502	25	2.9
2003	412.894	16.5	3.1
2004	493.496	17.75	2.9
2005	582.463	18	2.4
2006	661.499	13.25	2.2
2007	781.280	11.25	1.9
2008	1.072.986	13.75	1.8
2009	1.164.854	8.75	2
2010	1.362.388	10.75	1.8
2011	1.617.479	11	1.7
2012	1.764.611	7.25	2
2013	1.956.838	10	2.2
2014	2.150.683	11.75	2.4
2015	2.285.721	14.25	3.3

Source: Banco Central Do Brazil, (2018).

3.1.2.2.1. The Growth Rate of Money Supply

As revealed in the figure (3.9), Brazil's money supply for the period 2000-2015, as results showed that money supplies steadily increased from the 228.784 million in 2000 to 661.499 million in 2006, Moreover even during the global economic crisis of 2008 and 2009, Brazil is the growth rate of money supply increased. However, a sharp growth took place from 2007 to 2015. While the years 2014-15 witnessed an expansion in the money supply, which recorded an increase to 2150.683 million, and 2285.721 million respectively, compared to the previous years were less than 2000 million.

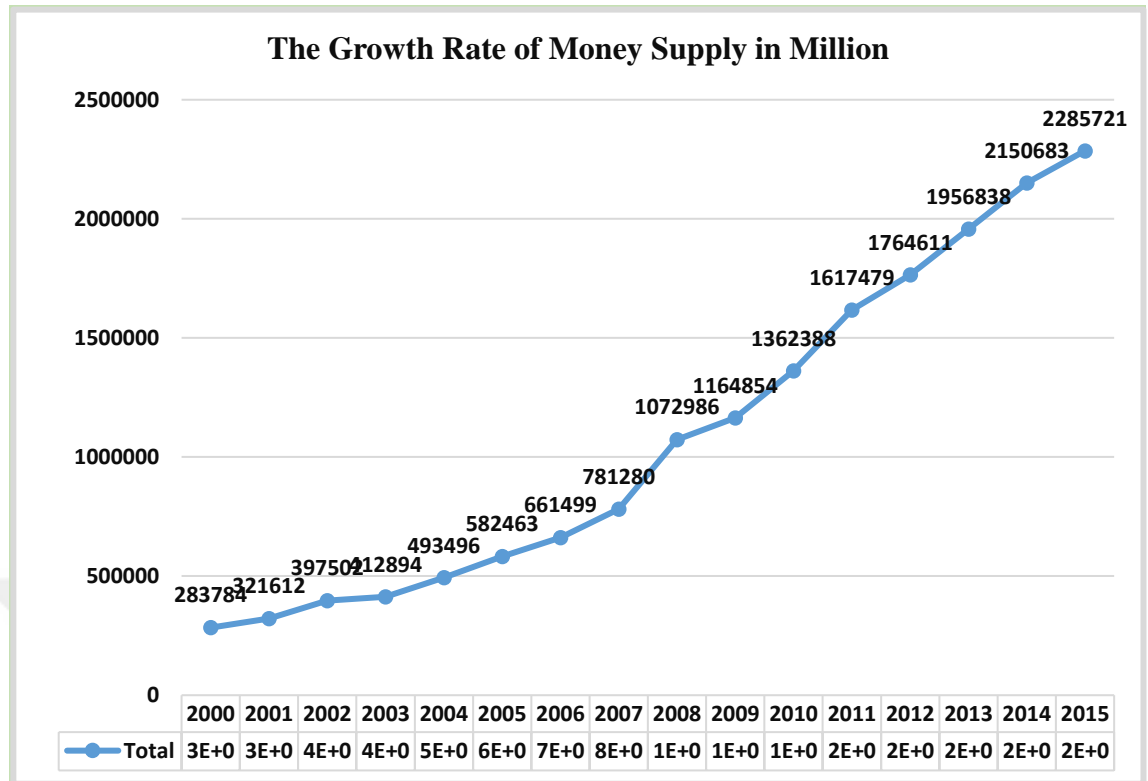


Figure 3.9: The Growth Rate of Money Supply in Brazil During 2000-2015
Source: Banco Central Do Brazil, (2018).

3.1.2.2.2. The Role of Interest Rates

As summarized in the figure (3.10), interest rates in Brazil during the period 2000-2015. That interest rate charges by sharply increasing from 15.75% in 2000 to 25% in 2002.

While since 2011, monetary policy has evident by repeated interest rate trend reversals. After repeated drops, it arrived at 7.25% at the end of 2012, the lowest level since 1986, since March 2013, Brazil's Central Bank (BCB) began to raise the interest rate continuously, reaching 14.25% in 2015. As previously mentioned that at the beginning of 2000 The central bank of Brazil adopted the programme aims to disinflation, consequently, the increased interest rate to 25% in 2002, which was the highest rate.

Also, Brazilian monetary policy was greatly accommodative, within 2009 and 2012 interest rates record the lowest rate at the 8.75% and 7.25% respectively. However, the fiscal and monetary policies incentive could not deal with what was to be a permanent downturn regarding trade.



Figure 3.10: The Interest Rates in Brazil During 2000-2015

Source: Banco Central Do Brazil, (2018).

3.1.2.2.3. Exchange Rates

As a figure (3.11) showed, it expressed in Brazil's Reals per dollar real exchange rate from 2000 to 2015. So, the floating exchange rate regime in the country actively took place mainly during the period indicated. While in the same period interest rates were higher and more unstable, especially from 2000-2003. However, during the period 2000 to 2003 exchange rates were naturally more volatile, so increased by 2% percent compared to the past three years. Thus, ones again as a result of the floating exchange rate regime the percentages declining again from 3.1% in 2003 to 1.8% in 2008.

Further, after a rise began in 2009 by 0.2% compared to the previous year, accordingly, the exchange rate steadily increased from 1.7% in 2011 to 2.0% in 2012 and reached to 3.3% in 2015 that was the highest rate during the period. However, Brazil was showing to fluctuating. Therefore, the Brazilian Real lost more than half of its value against the U.S. dollar between 2011 and the end of 2015, forcing interest rates back up to 14.25 percent. The economy came to a halt, while inflation rose rapidly.

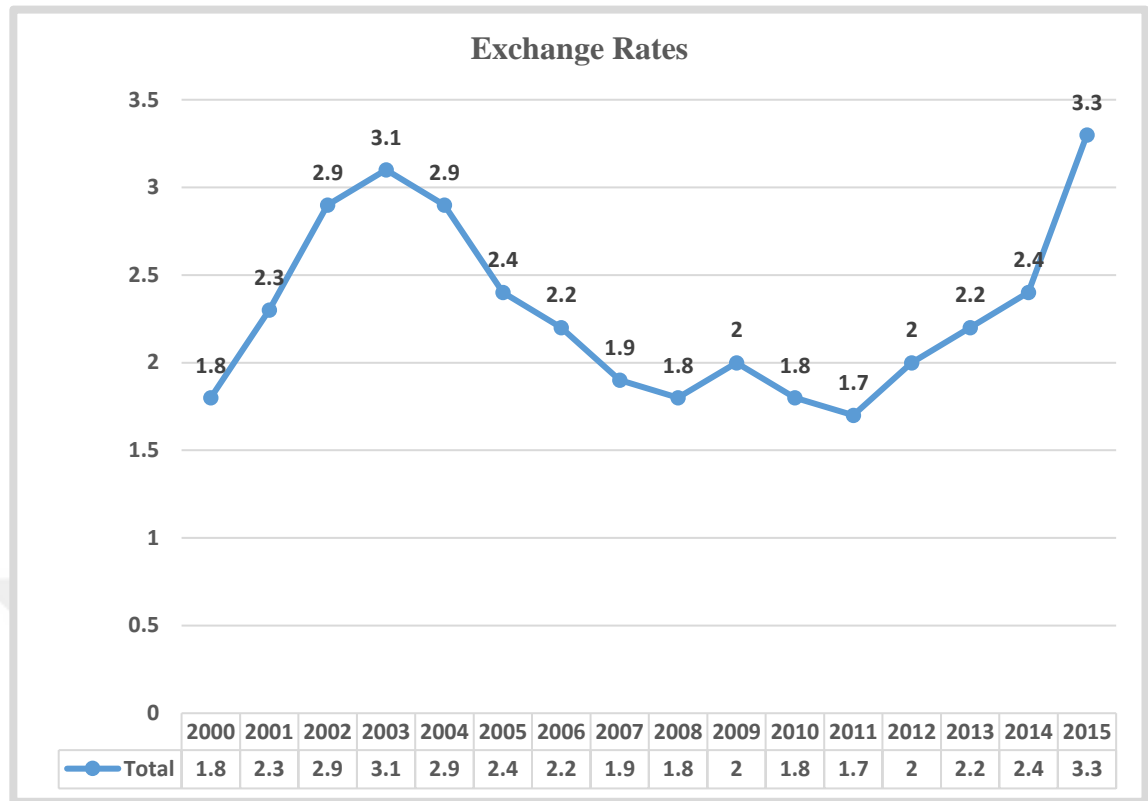


Figure 3.11: The Exchange Rates in Brazil During the Period 2000-2015
Source: Banco Central Do Brazil, (2018).

3.1.2.3. The Role of Fiscal Policy

As revealed in the figure (3.12) below during the period 2000-2015 Brazil managed declining its public budget deficit. However, during the period indicated, the lowest decline was in 2015 by -10.2 due to Brazilian currency (Real) lost more than half of its value against the U.S. dollar particularly between 2011 and the end of 2015. That forcing interest rates back up to 14.25 percent, while the country's economy came to a halt, and inflation rose rapidly, although the higher amount in declining reached in 2008 by -2%.

Even though, during 2000-2010, the Brazilian government's public debt management strategy has reasonably successful. Thus, gross debt reduced from 62% of GDP in 2002 to 54% in 2011. In the same context, Brazilian central government managed to keep its public budget deficit at lower level mainly from 2004 to 2013, but with floating especially in 2005-06, were deficit riches to -3.5% -3.6% respectively.

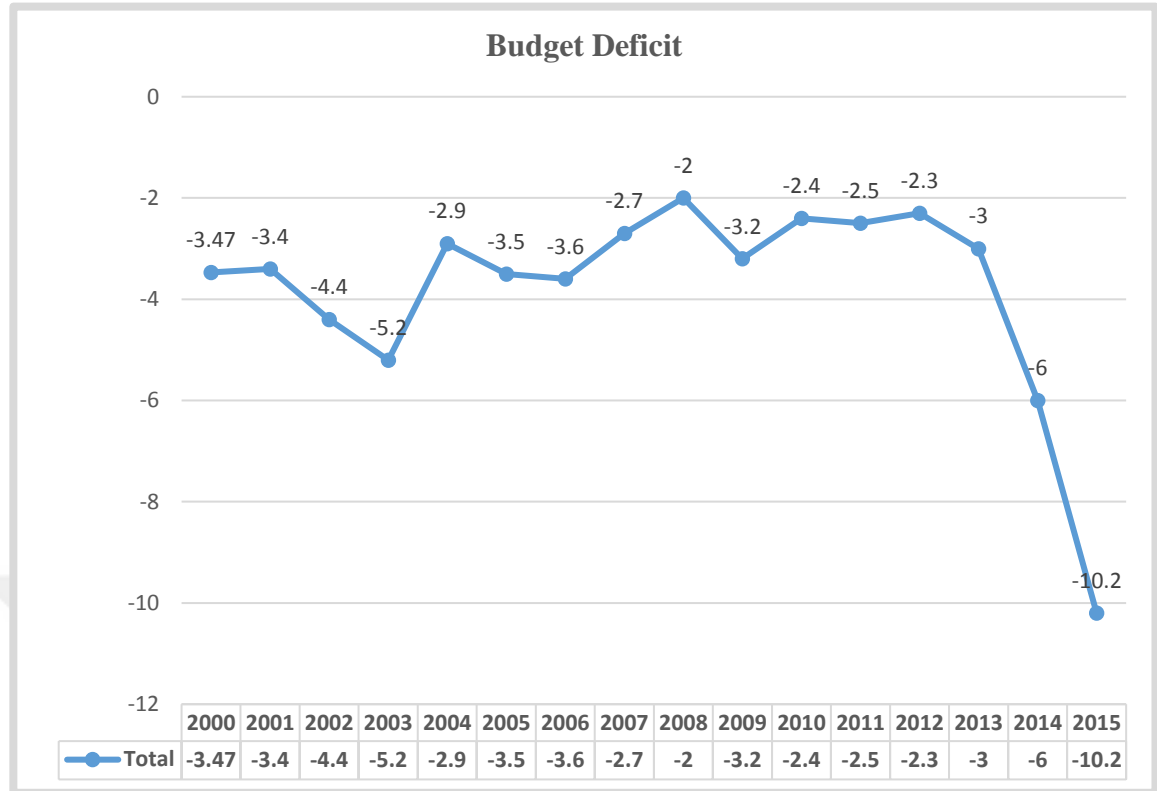


Figure 3.12: Brazil's Budget Deficit During the Period 2000-2015

Source: Banco Central Do Brazil, (2018), and the World Data Atlas, (2018).

3.2. COMPARATIVE ANALYSIS BETWEEN TURKEY AND BRAZIL'S ECONOMIC STABILITY

As the results revealed in the table (3.7) below, Turkey's annual percentage changes of the CPI at the beginning of the period declined. The fluctuating notably took place between 2004 to 2015. However, from 2000 to 2015 Brazil's CPI gradually increased without floating or declining, but, in ten years increased to nearly double 52.5% in 2000 to 100% in 2010. Hence, the above results revealed that there are no much differences between Turkey and Brazil's CPI as economic stability over 2000-2015.

The unemployment rate in Turkey increased from 6% in 2000 to 7.8% in 2001. However, unemployment in major metropolitan areas fell to 10.3% in 2015, from around 13.1% and 11.1% in 2009-10 respectively. In this regard, the unemployment rate in Brazil declined from 13.9% in 2000 to 12.5% in 2001, however, during the period 2000-2015 unemployment rate in Brazil gradually declined with fluting in 2003 were increased to 13.7%, compared to previous year was 12.5 and increased 2009 by 9.7% compared to 2008 was 9.4%. However, Brazil ended 2014 with an unsatisfactory economic growth

rate valued at only 0.2%, which the lowest economic growth rate since 2009. Turkey's economy recovered dynamically just after the global crisis.

Table 3.7: Turkey and Brazil's Economic Stability Data During the Period 2000-2015

Time Series	Economic Stability Factors			
	Turkey		Brazil	
	Consumer Price Index%	Unemployment Rate %	Consumer Price Index	Unemployment Rate %
2000	19.3	6.0	52.5	13.9
2001	29.8	7.8	56.1	12.5
2002	43.2	9.8	60.9	13
2003	54.1	9.9	69.8	13.7
2004	59.8	9.7	74.4	12.9
2005	65.9	9.5	79.6	11.4
2006	72.2	9.0	82.9	11.5
2007	78.5	9.2	85.9	10.9
2008	86.7	10.0	90.8	9.4
2009	92.1	13.1	95.2	9.7
2010	100.0	11.1	100	8.5
2011	106.5	9.1	106.6	7.8
2012	115.9	8.4	112.4	7.4
2013	124.6	9.0	119.4	7.2
2014	135.7	9.9	126.9	6.8
2015	146.1	10.3	138.4	8.3

Source: Central Bank of the Republic of Turkey, (2018), and Banco Central Do Brazil, (2018).

3.2.1. The Role of Monetary Policy

The central bank of Turkey and Brazil during the period 2000-2015, took various actions on monetary policy and reached its objectives of achieving its economic stability, in the overall level of prices and maintaining the reliability of the banking system, constant with the purposes of the bank and the means to achieve these purposes, in accordance with the provisions of the law.

However, monetary policy affects the economic stability in general and inflation in particular by changing either a monetary comprehensive or an interest rate targeting. By employing some potential actions. So, the traditional actions of monetary policy comprise the fluctuations in money supply, interest rates, exchange rates, and changes in asset prices, which is Turkey effectively implement they as shown in the table (3.8).

While at the beginning of the period indicated the central bank of Brazil had approached an inflation-target for monetary policy. Besides, increased money supply, as well as adopted floating interest rates and a free exchange rate regime. However, foreign currencies exchange systems have liberalized.

Table 3.8: Turkey and Brazil's Monetary Policy Indicators During the Period 2000-2015

Series	Monetary Policy					
	Turkey			Brazil		
	The Growth Rate Of Money Supply	Interest Rates %	Exchange Rates	The Growth Rate Of Money Supply Million	Interest Rates %	Exchange Rates
2000	31.912	100	0.6	283.784	15.75	1.8
2001	47.241	59	1.2	321.612	19	2.3
2002	61.879	44	1.5	397.502	25	2.9
2003	82.712	26	1.5	412.894	16.5	3.1
2004	108.539	18	1.4	493.496	17.75	2.9
2005	238.801	13.5	1.3	582.463	18	2.4
2006	297.734	17.5	1.4	661.499	13.25	2.2
2007	344.376	15.75	1.3	781.280	11.25	1.9
2008	436.38	15	1.3	1.072.986	13.75	1.8
2009	493.06	6.5	1.5	1.164.854	8.75	2
2010	587.261	6.5	1.5	1.362.388	10.75	1.8
2011	674.409	5.75	1.7	1.617.479	11	1.7
2012	743.043	5.5	1.8	1.764.611	7.25	2
2013	908.01	4.5	1.9	1.956.838	10	2.2
2014	1, 015.896	8.25	2.2	2.150.683	11.75	2.4
2015	1, 189.494	7.5	2.7	2.285.721	14.25	3.3

Source: Central Bank of the Republic of Turkey, (2018), and Banco Central Do Brazil, (2018).

3.2.2. The Role of Fiscal Policy

The fiscal policy performed that to be a substance of Turkey's macroeconomic stability. Especially, since the crisis of 2001, Turkey has reached to very remarkable fiscal results, especially for central government. As the table (3.9) below displayed Turkey sharply declined its chronic budget deficit. Thus, fiscal policy can significantly affect the future growth rate of the economy by stimulating the growth of the human capital stock. As well as through capitalizing into infrastructure developments. As a result, the Turkish

government through implementing fiscal policy kept public finances on a maintainable path.

However, during the same period Brazil managed to decline its public budget deficit, the lowest decline was in 2015 by -10.2 due to Brazilian currency (Real) lost more than half of its value against the U.S. dollar particularly between 2011 and the end of 2015. That forcing interest rates back up to 14.25 percent, while the country's economy came to a halt, and inflation rose rapidly, although the higher amount in declining reached in 2008 by -2%.

Table 3.9: Turkey and Brazil's Budget Deficit Over the Period 2000-2015

Time Series	Fiscal Policy	
	Turkey	Brazil
	Budget Deficit %	Budget Deficit %
2000	-	-3.47
2001	-33	-3.4
2002	-12.9	-4.4
2003	-11.3	-5.2
2004	-4.5	-2.9
2005	-1.2	-3.5
2006	-0.6	-3.6
2007	-1.6	-2.7
2008	-1.8	-2
2009	-5.3	-3.2
2010	-3.5	-2.4
2011	-1.3	-2.5
2012	-1.9	-2.3
2013	-1	-3
2014	-1.1	-6
2015	-1	-10.2

Source: Central Bank of the Republic of Turkey, (2018), and Banco Central Do Brazil, (2018).

CONCLUSIONS

This thesis study analyzed the role of fiscal and monetary policies in the economic stability of Turkey and Brazil and produce a context basis for further scientific studies in examining the impact and relationship between the macroeconomic policies and economic stability not only in Turkey and Brazil, however it can use in general to define the macroeconomic policies and economic stability relationships and factors influencing instruments of and monetary policies.

The study concludes that Turkey's annual percentage changes of the CPI at the beginning of the period 2000-2015 declined. The fluctuating notably took place between 2004 to 2015. However, from 2000 to 2015 Brazil's CPI gradually increased without floating or declining, but, in ten years increased to nearly double from 52.5% in 2000 to 100% in 2010. Hence, the above results revealed that there are no much differences between Turkey and Brazil's CPI as economic stability over 2000-2015.

While the study found that the unemployment rate in Turkey increased from 6% in 2000 to 7.8% in 2001, However, unemployment in major metropolitan areas fell to 10.3% in 2015, from around 13.1% and 11.1% in 2009-10 respectively. In this regard, the unemployment rate in Brazil declined from 13.9% in 2000 to 12.5% in 2001, yet, during the period 2000-2015 unemployment rate in Brazil steadily declined with floating in 2003 were increased to 13.7%, compared to the previous year was 12.5 and increased in 2009 by 9.7% compared to 2008 was 9.4%. However, Brazil ended 2014 with an unsatisfactory economic growth rate valued at only 0.2%, which the lowest economic growth rate since 2009. Turkey's economy recovered dynamically just after the global crisis.

The study also found that the central bank of Turkey and Brazil during the period 2000-2015, took various actions on monetary policy and reached its objectives of achieving its economic stability, in the overall level of prices and maintaining the reliability of the banking system, constant with the purposes of the bank and the means to achieve these purposes, in accordance with the provisions of the law.

However, monetary policy affects the economic stability in general and inflation in particular by changing either a monetary comprehensive or an interest rate targeting. By employing some potential actions, so, the traditional actions of monetary policy

comprise the fluctuations in money supply, interest rates, exchange rates, and changes in asset prices, which is Turkey effectively implement them, while at the beginning of the period indicated the central bank of Brazil had approached an inflation-target for monetary policy. Besides, increased money supply, as well as adopted floating interest rates and a free exchange rate regime. However, foreign currencies exchange systems have liberalized.

Further, the study concludes that the fiscal policy performed that to be a substance of Turkey's macroeconomic stability. Especially, since the crisis of 2001, Turkey has reached to very remarkable fiscal results, especially for central government. Turkey sharply declined its chronic budget deficit. Thus, fiscal policy can significantly affect the future growth rate of the economy by stimulating the growth of the human capital stock. As well as through capitalizing into infrastructure developments. As a result, the Turkish government through implementing fiscal policy kept public finances on a maintainable path.

However, during the same period Brazil managed to decline its public budget deficit, the lowest decline was in 2015 by -10.2 due to Brazilian currency (Real) lost more than half of its value against the U.S. dollar particularly between 2011 and the end of 2015. That forcing interest rates back up to 14.25 percent, while the country's economy came to a halt, and inflation rose rapidly, although the higher amount in declining reached in 2008 by -2%.

Consequently, the fiscal and monetary policies impact on achieving economic stability in Turkey and Brazil, However, fiscal and monetary policies can use to achieve long-term economic stability if the increase in the money supply is equal to the growth of net national product without the use of policies based on expansion and contraction.

REFERENCES

- Abdel Aziz , F. H., 1980. *Encyclopedia of Economic Statistical Terms*. s.l.:Dar al-Nahda alArabiya..
- Abdel-Haleim, S. M., 2016. Coordination of Monetary and Fiscal Policies: The Case of Egypt. *International Review of Research in Emerging Markets and the Global Economy (IRREM) An Online International Research Journal (ISSN: 2311-3200)*, 2(4), pp. 933-954.
- Abdul Majid, A. F., 2004. *The Impact of Macroeconomic Policies on Poverty in Selected Developing Countries*, Mosul-Iraq: s.n.
- Agenor, P.-R. & Da Silva, L. A. P., 2011. *Macroeconomic Stability, Financial Stability, and Monetary Policy Rules*, s.l.: Fondation pour les études et recherches sur le developpement international.
- Al-Bayati, T. F. & Al-Shammari, K. T., 2009. *Introduction to Economics-Micro and Macro Analysis*. First Edition ed. Auman(Jordan): Dar Wael Publishing.
- Al-Mhar, K. A., 1981. *Economic Volatility Among Fiscal and Monetary Policy*, Riyadh: Riyadh University.
- Al-Sabaawi, A. K. A., 2008. *The Impact of Monetary Policy on Inflation Rates in Selected Developing Countries for 1980-2003*, Mosul: s.n.
- Al-Sadiq, A. T. & Nabil, A. W. L., 1997. Policies and Exchange Rate Management in Arabic Countries. *Arab Monetary Fund, Institute for Economic Policy*.
- Andres , J. & Domench, R., 2006. *Fiscal Rules and Macroeconomic Stability*, Valencia: University of Valencia..
- Banco Central Do Brazil, 2018. *Fiscal and Monetary Policies Data*, s.l.: Central Bank.
- Barbosa-Filho, N. H., 2008. Inflation Targeting in Brazil: 1999–2006. *International Review of Applied Economics*, 22(2), p. 187–200.
- Başkaya, Y. S., Gülşen, E. & Kara, H., 2012. Inflation Expectations and Central Bank Communication in Turkey. *Central Bank Review*, Volume 12, pp. 1-10.
- Begg, I., 2002. *Running Economic and Monetary Union: The Challenges of Policy Coordination*” in “*Europe: Government and Money*”, s.l.: s.n.
- Begg, I., Hodson, D. & Maher, I., 2002. Economic Policy Coordination in the European Union. *National Institute Economic Review*, 183(1).
- Berument, H., Dibooglu, S., Erlat, H. & Ertugrul, A., 2002. *InflationandDisinflationinTurkey*. s.l.:Ashgate.

- Boughton, J. M., 1982. Stable Targetes. *Staff papers*, 29(4).
- Brkic, L., 1997. *Theory of Economic Growth and Stability: The Case of Croatia*, s.l.: University of Zagreb.
- Caprioli, F., Romanelli, M. & Tommasino, P., 2017. *Discretionary Fiscal Policy in the Euro Area: Past, Present and Future*, s.l.: Printed by the Printing and Publishing Division of the Bank of Italy.
- Central Bank of the Republic of Turkey, 2018. *Fiscal and Monetary Policies Data*, Ankara: Central Bank.
- Cerutti, E., Claessens, S. & Laeven, L., 2016. The Use and Effectiveness of Macroprudential Policies: New Evidence. *Journal of Financial Stability*, Volume 4, pp. 22-243.
- Chowdhury, A. & Sirgar, H., 2004. *Indonesia's Monetary Policy Dilemma: Constraints of Valencia.*, s.l.: s.n.
- Christopher, S. A., 2016. *Fiscal Policy, Monetary Policy and Central Bank*, s.l.: s.n.
- Clements, Benedict, Christopher, F. & Margen, V., 2007. *Correcting Spending, Financing Development*, s.l.: IMF.
- Cohen & Benjamin, 2009. *The Future of Reserve Currencies, Financing Development*. s.l.:IMF.
- Colander, D. C., 2006. *Macroeconomics*. Six Edition ed. U.S.A: McGraw-Hill.
- Dahan, M., 1998. *The Fiscal Effects of Monetary Policy*, s.l.: International Monetary Fund.
- Debelle, G., 1999. *Inflation Targeting and Output Stabilization*, s.l.: s.n.
- DeLong, B. J. & Tyson, L. D., 2013. *Discretionary Fiscal Policy as a Stabilization Policy Tool: What Do We Think Now That We Did Not Think in 2007?*, s.l.: U.C. Berkeley.
- Egle, W., 1938. The Monetary Conditions of Economic Stability. *The American Economic Review*, Sep.28(3).
- Erinc, Y. A., 2007. *Turkey: The Bounce After the Crisis*, s.l.: s.n.
- Fadel, A., 1997. The Current Position of the Kenyans and the Macedonians on the Transformation of the Impact of Monetary Changes on Economic Activity and its Suitability to Developing Economies. *Journal of Law*, 1(3).
- Fadl, H. T. A., 2016. The Impact of Monetary and Fiscal Policy on Stabilizing the Exchange Rate in Sudan. *Al-Shamal Journal of Basic and Applied Sciences*, pp. 77-93.
- Feldstein, M., 2002. *The Role of Discretionary Fiscal Policy in a Low-Interest Rate Environment*, Cambridge: National Bureau of Economic Research 1050 Massachusetts Avenue.


- Fernández, A. J., 2015. The Politics of Central Bank Independence. *Annual Review of Political Science*, Volume 18, pp. 217-237.
- Fischer, S., 2015. *Central Bank Independence*, Washington, D.C.: s.n.
- Garcia, M., Diogo, G. & Patrick, K., 2015. *The Monetary and Fiscal History of Latin America: Brazil*. s.l.:s.n.
- Ghadir, H. G., 2010. *Fiscal and Monetary Policy and its Role in the Syrian Economy*. Damascus: Publications of the Syrian General Book Organization.
- Glahe, F. R., 1985. *Macroeconomics Theory and Policy*. Third Edition ed. Colorado: University of Colorado.
- Global Economic Outlook, 2001. *Public Fiscal Policy and Macroeconomic Stability*, s.l.: IMF..
- Gormez, Y. & Yigit, S., 2009. *The Economic and Financial Stability in Turkey*, s.l.: Central Bank of Turkey.
- Grauwe, P. D. & Gunther, S., 2008. *Exchange Rate Stability, Inflation, and Growth in (South) Eastern and Central Europe*, s.l.: Review of Development Economics.
- Guartini, J. & Astrup, R., 1999. *Macroeconomics -Public and Private Choice*. Translated by Dr. Abdel-Fattah Abdulrahman and Dr. Abdul Azim Mohammed ed. Riyadh(Saudi Arabia): Dar AlMarikh for Publishing.
- Guell, R. C., 2007. *Issues in Economics Today*. New York (USA): McGraw-Hill.
- Guerrazzi, M., 2010. *How to Reduce Unemployment: Notes on Macro-Economic Stability and Dynamics*, s.l.: s.n.
- Hussain, M. A. & Saaed, A. A. J., 2014. The Relationship between Budget Deficits and Macroeconomics Variables in United Arab Emirates: An Empirical Investigation. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*, 5(5), pp. 449-456.
- Jagdish, H., 2009. *Monetary Economics*. Second Edition ed. New York (The USA): Published by Routledge.
- Johnson, M., 2006. Dollarization and Macroeconomic Stability in Latin America. *Oshkosh Scholar*, April. Volume 1.
- Kanaan, A., 1997. The Economics of Money and the Financial and Monetary Policies. In: First Edition ed. Damascus: Dar al-Hassanein Publications.
- Kanaan, A., 2003. *Public Finance and Fiscal Reform in Syria*. Damascus: Dar Al-Redha.
- Kara, H. A., 2012. *Monetary Policy in Turkey after the Global Crisis*, s.l.: Central Bank of the Republic of Turkey .
- Karel, V., 2004. *The Possibilities of Budget Deficit Financing*, s.l.: Ministry of Finance of the Czech Republic.

- Khan, M. S., 1987. Macroeconomic Adjustment in Developing Countries: A Policy Perspective Author. *The World Bank Research Observer*, Jan..2(1).
- Kurodo, H., 2016. *The Battle Against Deflation: The Evolution of Monetary Policy and Japan's Experience*, s.l.: Bank of Japan.
- Labonte, M., 2011. *Inflation: Causes, Costs, and Current Status*, s.l.: Congressional Research Service, 7-5700, RL30344.
- Leopold, v. T., 2003. *Active Monetary Policy, Passive Fiscal Policy and the Value of Public Debt: Some Further Monetarist Arithmetic*, s.l.: s.n.
- Lonela, P. & Codreanu, D., 2010. *Fiscal Policy and Its Role in Ensuring Economic Stability*, Munich: MPRA (Munich Personal RePEc Archive).
- Marszalek, P., 2003. Coordination of Monetary and Fiscal Policy. *The Poznan University of Economics*, 3(2), pp. 34-54.
- McCarty, R. & Bruce, D., 2010. *Corporate Income Tax Systems and State Economic Activity*, Stokely: Stokely Management Center.
- Michael, E., 1988. *Macroeconomics, Theory, and Politics*. Translated into Arabic by (Muhammad Ibrahim Mansour) ed. Riyadh (Saudi Arabia): Dar Al-Marikh for Publishing.
- Mohanty, M. S., 2012. Fiscal Policy, Public Debt and Monetary Policy in EMEs, an Overview. *BIS Papers*, 16–17 February, pp. 1-10.
- Najafi, S. T. & Abdul Majeed, . A. F., 2008. *Macroeconomic Policies and Poverty with Special Reference to the Arab World*. First ed. Beirut: Center for Arab Unity Studies.
- Nasr, A. A.-H. M. & Al-Mahdi, M. A.-T., 2015. The Effectiveness of Monetary Policy in Sudan. *Journal of the University of Bakht al-Ruda Scientific*, pp. 133-146.
- Neyapti, B., 2003. Budget Deficit and Inflation: The Roles of Central Independence and Financial Market Development. *Contemporary Economic Policy*, October, 21(4), pp. 458-475..
- Ocampo, J. A., 2008. *A Broad View of Macroeconomic Stability*, s.l.: The Washington consensus reconsidered.
- Orphanides, A., 2002. *Activist Stabilization Policy and Inflation: The Taylor Rule in the 1970s*, s.l.: Center for Financial Studies..
- Öztürk, I., 2010. *Turkish Economic Transformations between 2002-2008*, Qatar: Al Jazeera Center for Studies, Arab Science Publishers.
- PRE-AccESSION Economic Programme, 2002. *Republic OF Turkey*, Ankara: s.n.
- Romer, D., 2001. *Advanced Macroeconomics*. Second Edition ed. New York(The USA): s.n.
- Saleh, A. S., 2003. *Te Budget Defcirt and Economic Performance*, s.l.: s.n.

- Saxton, J., 2004. *Price Stability and Inflation Targets: A Legislative History*, s.l.: s.n.
- Siegel, B., 1987. *Money, Banking and Economics The Critique of the Critics*. Translated by Taha Abdullah Mansour ed. Riyadh: Dar Al-Marikh Publishing.
- Taylor, J. B., 1995. *Monetary Policy Implications of Greater Fiscal Discipline in "Budget Deficit and Debt: Issues and Options"*, s.l.: Federal Reserve Bank of Kansas City.
- Taylor, J. B., 2000. *Low Inflation, Deflation, and Policies for Future Price Stability*, s.l.: Stanford University.
- Tcherneva, P. R., 2011. *Fiscal Policy Effectiveness: Lessons from the Great Recession*, s.l.: Levy Economics Institute of Bard College.
- Ulvedal, P. B., 2013. *Macroeconomic Stability and Economic Growth in Developing Countries*, Oslo: Print: Representralen, University of Oslo.
- Vuyyuri, S. & Seshaiyah, V. S., 2004. Budget Deficits and other Macroeconomic Variables in India. *Applied Econometrics and International Development*. AEEADE, 4(1), pp. 37-56.
- World Data Atlas, 2018. *Brazil Economic Data*, s.l.: s.n.
- World Data Atlas, 2018. *Turkey Economic Data*, s.l.: Official Records.
- World Economic Outlook, 2001. The Decline of Inflation in Emerging Markets: Can It Be Maintained?. In: *International Monetary Fund, Chapter IV*. s.l.:s.n., pp. 130-131.
- Wray, R. L., 2002. *A Monetary and Fiscal Framework for Economic Stability a Friedmanian Approach to Restoring Growth*, s.l.: s.n.
- Xiaolian, H., 2007. *China's Approach to Reform, Financing Development*, s.l.: IMF.
- Zurbrügg, F., 2012. *Fiscal and Monetary Policy: Interdependence and*. s.l., s.n., pp. 1-24.

APPENDIX

Appendix 1: Curriculum Vitae

CURRICULUM VITAE		
PERSONAL INFORMATION		
Name and Surname	Ali Sabri Taher TAHER	
Date of birth	02/07/1990	
Address	Duhok- Iraq	
Phone (Iraq) (Turkey)	+964 750 4501811 +90 553 9215515	
E-mail	ali.nerway1990@gmail.com	
EDUCATION AND TRAINING		
Degree	Institution	Graduate
Bachelor of Science	Duhok University, College of Administration and Economic, Department of Economic	2014
Master of Science	Siirt University, Faculty of Economic and Administration, Siirt (TURKEY)	2018
PERSONEL SKILS		
Languages	Kurdish Native Language	
	Arabic Perfect/ English Good	