

#### NEAR EAST UNIVERSITY GRADUATE SCHOOL OF SOCIAL SCIENCES BANKING AND FINANCE PROGRAM

# EXPLORING THE NEXUS BETWEEN TOURISM, INFLATION, URBANIZATION, AND FINANCIAL DEVELOPMENT IN TURKEY

NASTEHA ABDIMAIN ADEN

**MASTER THESIS** 

# EXPLORING THE NEXUS BETWEEN TOURISM, INFLATION, URBANIZATION, AND FINANCIAL DEVELOPMENT IN TURKEY

NASTEHA ABDIMAIN ADEN

NEAR EAST UNIVERSITY GRADUATE SCHOOL OF SOCIAL SCIENCES
BANKING AND FINANCE PROGRAM

MASTER THESIS

THESIS SUPERVISOR Assoc. Prof. Dr. Turgut Türsoy

#### **ACCEPTANCE**

We as the jury members certify the Exploring The Nexus Between Tourism, Inflation, Urbanization, And Financial Development In Turkey.' prepared by the Nasteha Abdimain Aden defended on 13/06/2019 has been found satisfactory for the award of degree of Master

#### **JURY MEMBERS**

Assoc. Prof. Dr. Turgut Türsoy (Supervisor)

Near East University

Department of Banking and Finance

Assist. Prof. Dr. NİL GÜNSEL REŞATOĞLU (Head of Jury)

Near East University

Department of Banking and Finance

Assist. Prof. Dr. Behiye ÇAVUŞOĞLU Near East University Department of Economics

Prof.Dr. Mustafa SAĞSAN

Graduate School of Social Sciences
Director

#### **DECLARATION**

I Nasteha Abdimain Aden, hereby declare that this dissertation entitled 'Exploring The Nexus Between Tourism, Inflation, Urbanization, And Financial Development In Turkey' has been prepared myself under the guidance and supervision of 'Assoc. Prof. Dr. Turgut Türsoy' in partial fulfilment of the Near East University, Graduate School of Social Sciences regulations and does not to the best of my knowledge breach and Law of Copyrights and has been tested for plagiarism and a copy of the result can be found in the Thesis.

- o The full extent of my Thesis can be accesible from anywhere.
- o My Thesis can only be accesible from Near East University.
- My Thesis cannot be accesible for two(2) years. If I do not apply for extention at the end of this period, the full extent of my Thesis will be accesible from anywhere.

Date: 22/07/2019

Signature

Name Surname: Nasteha Abdimain Aden

## **DEDICATION**

This study is dedicated to Allah SAW to my parents and my siblings who have been strong and behind the reason of my success and for their endless love, support and encouragement.

#### **ACKNOWLEDGEMENTS**

First and Foremost praise is to Allah, the Almighty, the greatest of all, on whom ultimately we depend for sustenance and guidance. I would like to thank Almighty Allah for giving me an opportunity, determination, and strength to do my research. His continuous grace and mercy were with me throughout my life and even more during the tenure of my research.

I would like to thank my beautiful parents Fadumo Mohamed and Abdimain Aden that raises me and makes me a good person and teaches me how to behave people and respect them. If they were not them, I could not do anything. Their encouragement keeps me to focus and reach my goal. And also thanks to my lovely sibling Liban, Najma, Amal, Abdiqani, Sadaam, Anisa those encourages me every single time and give me advice and always they told me to be more patient and keep doing it my work.

I would like to express my gratitude to my supervisor Turgut Türsoy who helps, for the patient guidance, encouragement and advice he has provided throughout my time as his student. I have been greatly fortunate to have a supervisor who cared so much about my work, and who responds to my inquiries and questions so instantly.

Finally, I would like to thank and appreciate my lovely sister and my best friends Isra Ahmed who always be my side and tells me to do my research and sometimes we discuss my thesis topic, also I would like to thank my other sisters and my dear friends Sadia Ali, Sadia sabrie, Nasra Abdiaziz and zeynep . Your encouragement and understanding were so important to my completing this thesis. Also your friendship makes my life an interesting journey.

#### ABSTRACT

# EXPLORING THE NEXUS BETWEEN TOURISM, INFLATION, URBANIZATION AND FINANCIAL DEVELOPMENT IN TURKEY.

Turkey is a country in the process of growth and it's considered an emerging economy in global perspectives. Tourism has an enormous impact on inflation, financial development, and urbanization. In fact, tourism is a critical part in Turkey economy creates jobs and also brings commerce. Thus, there are macroeconomic indicators that increase the financial crisis in Turkey example gross domestic population, interest rate, unemployment rate, exchange rate, and inflation rate. Tourism can promote competition and produces business inside of the country. Time series data were employed in the study for a period of 23 years. Organized Eview 9 was used as the statistical software to analyze the time series data utilizing the period of the study from 1995 to 2017, in which Tourism is measured by inflation, financial development, and urbanization to know the relationships between the variables. The findings of the study suggest that there are positive between tourism and financial development, while a negative with inflation and urbanization. The ordinary least square test was used to analyze in this study. The outcome revealed that there was longrun co integration between tourism and, inflation, urbanization and financial development. The result also showed that an increase in tourism tends to cause a decline in inflation rate and urbanization in Turkey. In our model we found that there is a causal relationship between tourism and financial development or we can say that there is bidirectional relationship between them as (Hatemi and Ng, 1993) examine and found that there is a causal relationship between tourism and financial development, On the other hand tourism, inflation and urbanization affect negatively and it shows that they don't influence each other a positive way.

**Keywords:** Tourism, Inflation, Urbanization, Financial development, Turkey.

## ÖZ

# TÜRKİYE'DE TURİZM, ENFLASYON, KENTSELLEŞME VE FİNANSAL GELİŞİM ARASINDAKİ İLİŞKİNİN AÇIKLANMASI.

Türkiye, büyüme sürecinde olan bir ülke ve küresel perspektiflerde gelişmekte olan bir ekonomi olarak kabul edilmektedir. Turizmin, enflasyon, finansal gelişme ve kentleşme üzerinde büyük etkisi var. Aslında, turizm Türkiye ekonomisinin kritik bir parçası olmakta ve önemli bir iş yaratıyor ve aynı zamanda ticaret geliştiriyor. Dolayısıyla, Türkiye'deki finansal krizi artıran makroekonomik göstergeler vardır; örneğin, gayri safi yurtiçi nüfus, faiz oranı, işsizlik oranı, döviz kuru ve enflasyon oranı. Turizm, rekabeti teşvik edebilir ve ülke içinde iş üretebilir. Bu tezde zaman serisi verileri kullanılarak 23 yıllık bir süre için analiz yapılmıştır. Değişkenler arasındaki ilişkilerin bilinmesi için 1995'ten 2017'ye kadar olan araştırmanın periyodunu kullanarak, 1995'in 2017 yılındaki çalışmanın kullanıldığı zaman serisi verilerini analiz etmek için istatistiksel yazılım olarak Eview 9 kullanılmıştır. Çalışmanın bulguları, turizm ve finansal gelişme arasında pozitif, enflasyon ve kentleşme ile negatif olduğunu göstermektedir. Bu çalışmada, analiz için normal en küçük kare testi kullanılmıştır. Sonuçta, turizm ile enflasyon, kentleşme ve finansal gelişme arasında uzun vadeli ortak bir entegrasyon olduğu ortaya çıkmıştır. Sonuçta, turizmde bir artışın Türkiye'de enflasyonun ve kentleşmenin azalmasına neden olacağı göstermektedir. Modelimizde turizmle finansal gelişme arasında nedensel bir ilişki olduğunu gördük ya da aralarında çift yönlü bir ilişki olduğunu söyleyebiliriz (Hatemi ve Ng. 1993), turizmle finansal gelişme arasında nedensel bir ilişki olduğunu ve diğer taraftan turizm, enflasyon ve kentleşme olumsuz yönde etkilenmekte gözlenmiştir.

**Anahtar Kelimeler**:Turizm, Enflasyon, Kentselleşme, Finansal Gelişim, Türkiye.

# **TABLE OF CONTENTS**

ACCEPTANCE	
DECLARATION	
DEDICATION	
AKNOWLEDGMENTS	Ш
ABSTRACT	IV
Öz	V
TABLE OF CONTENTS	VI
LIST OF TABLES	IX
LIST OF FIGURES	X
ABBREVIATION	ΧI
CHAPTER 1	1
INTRODUCTION	1
1.2 Economic Overview	3
1.3 Aim of the Study	10
1.4 Statement of Problem	10
1.5 Hypothesis	12
1.6 Significance of the Study	13
1.7 Structure of the Study	13
CHAPTER 2	15
	13
TURKEY FINANANCIAL CRISIS IN RELATIVE WITH MACROECONOMICS	.15
2.1 Financial Crisis	15
2.2 Macroeconomic Situations in Turkey between 1996-2018	16
2.2.1: inflation rate	16

2.2.2: GDP annual growth rate1	7
2.2.3 Interest rate (Discount rate)	8
2.2.4 Unemployment level 1	9
2.2.5 Exchange Rate	9
2.3 Comparing Turkey and Nigeria Inflation Rate 2	0
CHAPTER 3 23	3
LITRETURE REVIEW 23	3
3.1 Empirical Literature	3
3.2 Inflation	6
3.3 Inflation and Economic Growth 2	7
3.4 Impact of Terrorism on Tourism in Turkey 29	9
3.5 Tourism and Economic Growth	
3.6 Urbanization 3	0
3.7 Urbanization and Economic Growth 3	1
3.8 Financial Development and Economic Growth 3	2
3.9 Balance of Payment Theory 3	5
3.10 Purchasing Power Parity Theory 3	6
3.11 Fisher Effect and International Fisher Effect 3	7
CHAPTER 4 38	8
METHODOLOGY 38	8
4.1 Introduction 3	8
4.2 Data Collection: 3	8
4.3 Model Specification 39	9
4.4 Estimation Procedure 4	0
4.5 Econometric Model 4	1
4.6 OLS Model 42	2
4.7 Heteroskedasticity Arch Test	3
4.8 Normality Test 4-	4
4.9 Unit Root	4
4.10 Covariance Analysis: Ordinary	5

4.11 Serial Correlation: LM Test	. 45
4.12 Econometric Software	45
CHAPTER 5	46
EMPRICAL ANALYSIS AND FINDINGS	46
5.1 Descriptive	. 46
5.2 Unit Root Test	. 47
5.3 Test of Multicollinearity	48
5.4 Ordinary Least Square	. 49
5.5 Correcting the Model	51
5.6 OLS (Inflation is Dependent)	52
5.7 Normality Test	53
5.8 Breusch-Godfrey Serial Correlation LM test	
5.9 Diagnostic Test	. 54
CHAPTER 6	. 56
SUMMARY, CONCLUSION, AND POLICY	
RECOMMENDATION	. 52
6.1 Introduction	. 56
6.2 Summary and Conclusion	56
6.3 Policy Recommendation	58
6.4 Limitation and Future Direction	61
REFERENCES	62
APPENDICES	67
PLAGIARISM REPORT	70
ETHICS COMMITEE APPROVAL	70

### **LIST OF TABLES**

TABLE 4.1: Econometric Model	38
Table 5.1: Descriptive	44
Table 5.2.: Unit Root (ADF Method)	45
Table 5.2.1: Unit Root (PP Method)	45
Table 5.3: Multicollinearity Test	46
Table 5.4: Ordinary Least Square	47
Table 5.5: Model correction	49
Table 5.6: OLS Inflation	50
Table 5.7: Normality Test	51
Table 5.8: Breusch-Godfrey Serial Correlation LM test	52
Table 5.9: Diagnostic Test	53

### **LIST OF FIGURES**

Figure 1.1:	Tourism pattern 1995-2017	4
Figure 1.2:	Urbanization pattern from 1995-2017	6
Figure 1.3:	Inflation pattern from 1995-2017	7
Figure 1.4:	financial development pattern from 1995-2017	9
Figure 2.1:	Inflation pattern from 1995-2017	15
Figure 2.2:	GDP pattern from 1995-2017	16
Figure 2.3:	Interest Rate pattern from 1995-2017	17
Figure 2.4:	Unemployment rate pattern from 1995-2017	18
Figure 2.5:	Exchange Rate pattern from 1995-2017	18
Figure 2.6:	Inflation Rate in Turkey and Nigeria	20
Figure 2.7:	Residual Actual Fitted	54

#### **ABBREVIATIONS**

**TUIK:** Turkish Statistical Institute

IMKB: Istanbul Stock Exchange

**TUBITAK:** The Scientific and Technology Research Council

**UN:** United Nation

**NATO:** North Atlantic Treaty Organization

**OECD:** Organization for economic Cooperation Development

**OSCE:** Objective Structured Clinical Examination

**OIC:** Officer in Charge

**G-20** : Group of 20

ARDL: Autoregressive Distributed Lag

**GDP:** Gross Domestic Population

**OLS:** Ordinary Least Square

ADF: Augmented Dickey Fuller

PP: Phillips Peron

#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1 Background of the Study

An endless argument over the relationship between tourism, inflation, urbanization and financial development of a given country has been a subject of debate among scholars on different economies ranging from under developing and developed. Tourism is an action of ancient and across the board or widespread (Dennison Nash, 1981). It was established Greek and Roman and also it motivates people and increase the curiosity about the countries they want to visit and inspire to visit more countries that they never . saw before and this helps them to differentiate the culture, Religion, Architecture, Museum, and arts. when the country relies on tourism that are coming from abroad in order to visit the authentic places will change many ways to the country, because when the tourist come to the country then people in the country will demand more and more and the price of goods and service will increase, after that inflation occurs in the country so tourism and inflation affect each other negatively.

Similarly, urbanization is the same as the inflation because of the tourism assume a significant role in the growth of urbanization and it brings commerce and people develop a new market and transportation has increased day by day. The second thing is Religion additionally assumes a significant role in the growth of urbanization.

This happens because many people attract their religion or other religions and this makes them visit there if it is Muslims who once a year visit hajj or Christians, Jewish, and others, although tourism affects financial development positively because tourism brings the country revenue and benefits so that financial sectors will get some benefits from the tourism.

(Hanck and Bayer, 2013) combined test demonstrates that economic growth, financial development, and tourism are co integrated and their investigation, they have got a long-run connection between the tourism and economic growth in Granger-causation. (Mullins 1991, 1992) gives critical bits of knowledge into the connection between urbanization and tourism. Following his definition, the tourism urbanization is alluded to as a procedure by which urban communities and towns are constructed or recovered solely for relaxation and joy.

Along these lines, urban development is firmly attached to tourism-related industries. There is a long-term connection between tourism and inflation and one of the main impacts of financial development is tourism while also tourism has got a long-term relationship with inflation and urbanization although it affects negatively in Turkey.

Turkey is a country in the process of growth, where people generally have a high income and this shows us their economic growth is high. Tourism and financial development have a certain influence on the growth of the economy. In fact, tourism is a critical part in Turkey economy adding to work creation and expense income .it has a major part in reviving and manageable local economies. The Turkish Statistical Institute (TUIK) declared that the nation's GDP rise 7.4% out of 2017, according to the previous four years it was the highest rate in Turkey. The 7.4% rate made Turkey the second fastest developing economy in the Organization for Economic Cooperation, also there is depreciation of the Turkish lira and GDP per capita goes down to 10.597 from 10.883 in 2016. Mehmet Simsek the deputy prime minister admits government ensures empowering loan expansion were the principal promoter of development, combined with tax breaks and incentive.

The economies development was driven generally by domestic consumption which realized twofold digit expansion or inflation 11.4 % in consumer price at the end of 2017. (Narayan, 2004) examined that tourism positively affects national economic output and also in Fiji economy they evaluate the long-term impact of the inflation in tourism consumption. In our study we will figure out how tourism also affects inflation in Turkey and this study is the only study that explores the connection between tourism, inflation, urbanization and financial development in Turkey. Comparably to the export, inbound tourism can encourage economic development from various perspectives. For example, first, the tourism fundamentally adds to foreign exchange stocks which help in bringing new advancements for the creation process (McKinnon, 1964)

#### 1.2 Economic Overview

Turkey is a nation which is located between two continents Europe and Asia. Turkey is bordered by eight countries Bulgaria, Greece, Giorgio, Armenia, Nakhchivan, Iran, Iraq and Syria. Turkey has been the home of numerous civilization and culture for a very long time including hitters, Phrygian, Lydian's, Persians, Greeks, Romans, Seljuk, and footstools. The Republic of Turkey was built up in 1923 under the initiative of Mustafa Kemal Ataturk. Following the fall of the Ottoman Empire after World War 1. Their official language is Turkish, and the capital city is Ankara while the most populated city is Istanbul. Islam is the dominant religion in Turkey. Turkey has turned out to be progressively incorporated with the west through participation in an association such as UN, NATO, OECD, OSCE, OIC, G-20.In 2018 the population was 82 million and the current president is Recep Tayyip Erdogan.

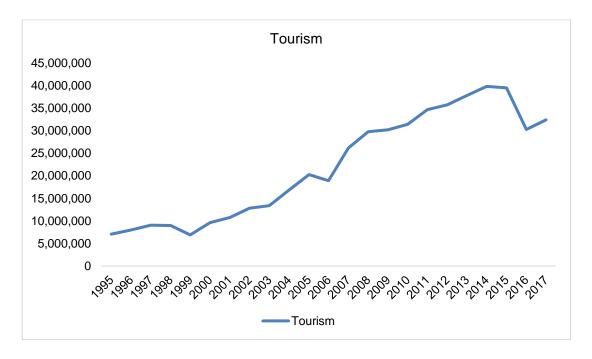
Turkey is additionally characterized by financial experts and political researchers as one of the world's recently industrialized nations. Turkey has the world's seventeenth biggest nominal GDP and thirteenth biggest GDP by PPP.

The country becomes the world's best producer of farming items, materials; engine vehicles, ships, and other transportation gear; construction materials; electronics and home apparatuses.

In 1913 till 1915 when the Ottoman empire ruled Turkey there was no industrialization, huge economic debt and transportation was terrible but after 1923 till 1929 their independence war, protectionism and liberalism in the country. One of the main important that we can know if the country economy is growing is GDP per capita and one of the reasons that people travel in Turkey is well known in the world. There is a variety of alternative and service that Turkey tourism offers such as mountaineering, spelunking tourism, hunting tourism and flying ballooning. Also, the temple of Artemis and the mausoleum at Halicarnassus are in Turkey and it is two of the seven wonders in the world. The prophet Abraham is the thought to have been born in Sanliurfa in southern Turkey this can lead that many Muslim people can visit there and accepted Virgin Mary in Selcuk (Ephesus) Turkey While many tourists come to see archeological monuments and building in Turkey.

International tourism number of arrivals is one of the measurement types to know that people coming to the country. The principal reason for tourism in Turkey is to encounter the authentic place in numerous urban communities and their way of life. Initially, tourism incomes can be utilized to put resources into capital merchandise. Secondly, tourism can promote the contest and stake in a new framework. Thirdly, it adds to other monetary divisions by means of its immediate, backhanded and initiated impacts. Fourthly, it produces business and causes positive economies of the ratio. The number of tourist visitors went up 38.1 percent from a year sooner to 16.663 million. Tourism Revenues in Turkey found the middle value of 1234.15 USD Million from 1990 until 2017, achieving a record-breaking high of 4947 USD Million in August of 2014 and a record low of 79 USD Million in February of 1990 (Alper Aslan, 2016). When the country's economy, political and social is better than the population in rural areas will move to the urban area in order to get some jobs, better educations and also better lifestyle standard.

Below the table, it shows us the number of tourists coming to Turkey and it drastically increases from 1996 till 2015 and after that year it starts to decline. In 1995 the number of tourist was 7M and it increased 2005 and 2017 which become 20M, 32M respectively.



**Figure 1.1**: Tourism Pattern 1995-2017 (Computed by Researcher using data from World Bank)

Urban population growth is a measurement of urbanization in the country. Between 1927 and 1950, great level of Turkish population stayed in rural areas after 1950 urbanizations have progressed toward becoming accelerated. In between those years, the number of the populace in Turkey expanded 13 million to 31 million. (Dr. Cevat geray) .In 1965 urban populations achieved 9 million. Another sign of the urbanization procedure would be the expansion in the measure of people who migrated within the country. The increment in a contest in the urban regions prompts raise in imaginative monetary exercises of natives subsequently; more products and services are made accessible at the tourist at focused costs.

As i mentioned before there are some positive and negative effects of urbanization towards tourist one of them is the creation of work opportunities, mechanical and infrastructural progress, enhanced transportation and improves ways of life. The negative issues of urbanization are housing problem where the population increase which called Overpopulation, water problems, and unemployment.

Those issues lead to affect the tourists that are coming in Turkey. The pace of urbanization in numerous developing nations in the vicinity of 1950 and 1970 was amazing and was a pattern that was regularly joined powerful social and economic changes. Movement from rural areas to urban territories as the power behind fast urbanization was affected by a positive worldwide improvement.

Below the figure is urban population growth where started in 1995 at 2.45 and it was fluctuating the urban population in Turkey and it decreased in 2017 at 2.22.

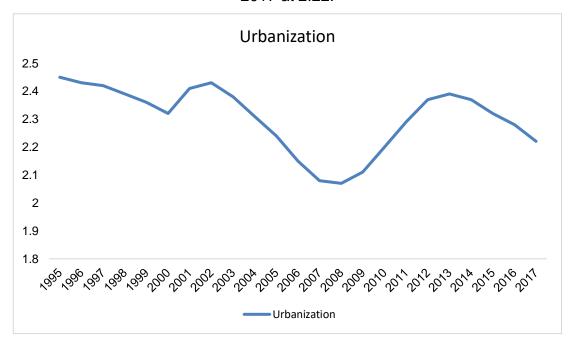
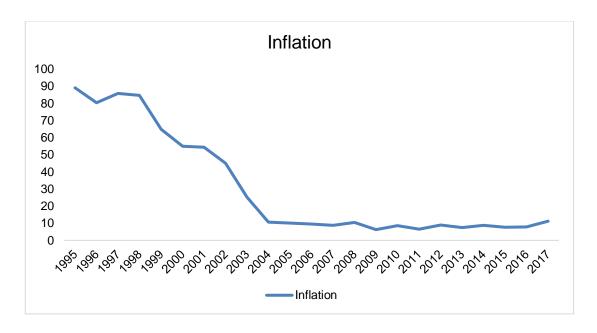


Figure 1.2: Urbanization Pattern from 1995-2017 (Computed by Researcher using data from World Bank)

The average consumer price index (CPI) is a measure of a country's average level of prices based on the cost of a typical measure of consumer goods and services in a given period. The rate of inflation is the percent change in the average CPI (WEO 2018). During the inflation focusing on the period from 2006 to 2016, yearly consumer inflation in Turkey stayed high with a normal rate of 8.2 percent. While the period after 2011 was set apart by a more adaptable administration incorporating monetary soundness objective into the inflation intend on the structure. A maintained high development rate of income and low inflation are the two principal objectives of the dominant part of macroeconomic approaches. Price balance is a crucial aspect in deciding the development rate of an economy.

(Hakan Kara et al, 2017) High inflation or expansion influences the economy definitely, yet there is some proof that direct expansion likewise abandons the development. Both expansion and financial development impact the measure of credit proportioning in monetary markets. Financial development decreases the balance inflation rate and advances the growth of the economy for nations with moderately low introductory inflation rates.

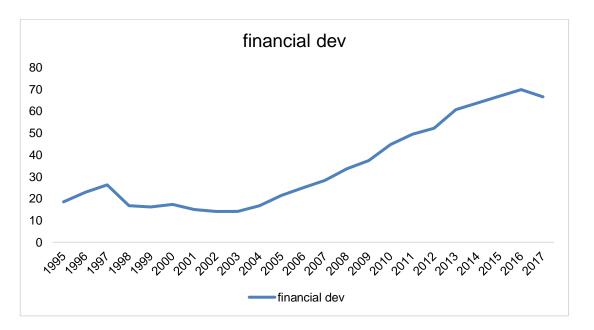
In 1995 the consumer price in Turkey was 89 and after that year it decreased year by year which become in 2017 11.1.



**Figure 1.3**: Inflation pattern from 1995-2017 Source: Computed by Researcher using data from World Bank

Domestic credit to private sectors is a measure of a countries financial development and it indicates financial resources provided to the private sectors by financial corporation such as loans. Financial development decreases poverty and inequality by widening access to back to poor people and defenseless gatherings and they additionally show a bigger part in financial development especially in a rising economy. When original inflation rates are relative low financial development increase inflation and advance development. We can see there that inflation and financial development are related to each other. Financial development diminishes monetary development for the experienced relatively high inflation rate. Inflation is negatively affecting the financial market. An extension strategy in which government increment of spending will raise the inflation rate and diminish financial development for those nations whose underlying inflation rate are low and for nations relative high initial inflation rate approach decrease inflation and advance economic progress. One of the cause's economic growths in Turkey is financial development. Turkey has fundamentally enhanced the working of its market economy.

There are two essential monetary markets in Turkey which are the capital market and the cash market or currency market. In the Capital market, all institutions can register and influence the first sale of shares on the Istanbul Stock Exchange (IMKB), although the currency market offers different types of credit opening operations. There are five types of banks in the Turkish currency offer: banks claimed by the state, private banks, foreign banks, and improved banks and adventurous. The Central Bank announced the rapid implementation of the development between 2002-2008. The total resource estimate of 13 increased from 130 billion US dollars to 465 billion US dollars, while GDP dropped from 57% to 77%. During this period, the financial institution of the sector got much more. The value of the invested portion increased from the US \$ 16 billion to the US \$ 54 billion and its free value from the US \$ 3 billion to the US \$ 40 billion. Capital adequacy ratio is part of the Bank's risk financing. It was 18 percent in December 2008 and achieved 20.6 percent at the end of 2009. The capital adequacy ratio of the Section has ended as far as possible and the rate of a decline of 0.6 percent focuses in the main quarter of 2010. Below the figure the financial development in Turkey was increasing year by year and it started 18 in 1995 and increase 66 in 2017.



**Figure 1.4**: Financial Development Pattern from 1995-2017 (Computed by Researcher using data from World Bank)

#### 1.3 Aim of the Study

The broad aim our study is to examine and distinguish the relationship between tourism, inflation, urbanization and financial development in Turkey .also, see how they affect each other whether they affect positively way or negative way. After that, we will figure out which factors impact negative towards the tourism and see that if they go up or goes down .also by looking data between the years of 1995 and 2017 which I gathered the data in world bank we will be estimating our data if it is a long-term relationship or short-term relationship. What role do they play on tourism in Turkey through the following objectives?

- ➤ To investigate whether tourism has a vital influence on urbanization, inflation rate and financial development in Turkey.
- Explore how economic growth influences inflation, urbanization, and financial development.
- ➤ To check whether if the tourism, urbanization rate, inflation rate, financial development indicates a long-run connection in Turkey.

#### 1.4 Statement of Problem

In financial sectors, the currency crises of any country become issues to discuss and it is one of the main problems of the economy, also this can affect every side of the country if it is inflation rate, tourism, financial development, and urbanization. There are numerous reasons that influence inflation increase in Turkey and these lead issues to the people in Turkey. The first reason is the Turkish lira, and it depreciates against the dollar and other currencies and it is one of the major causes that raise the inflation. When we look back last three years Turkish lira goes up and it reached four against dollar in 2017 and this is a huge increase. Other reasons that cause inflation increment is oil price, food, and energy. The main reason that people want to travel Turkey is historical places and coastline resort along its Aegean and the Mediterranean Sea coast. Turkey has additionally turned into a well-known goal for culture, spa, and healthcare. In 2014 Turkey appeals to many tourists all over the world, however, it fell from 42 million to 36 million in 2015 and 2016 it became 25 million.

After 2016 they began to improve and recover in 2017 the number of tourists was 32 million. The reason behind the decline of tourism in Turkey was increasing political violence and political tension with Russia and terrorist attacks in the 1990s, the PKK attempts to harm the Turkish tourism industry by shelling hotels were additionally revealed in this period.

On the Other hand, sometimes financial development can influence to change macroeconomic shocks, education, gender equality and increase poverty because if the financial development of the country is not good it will affect the country and also the society and it can increase poverty as I mentioned before and if the financial development of a country is good it share risks associates and that risk sharing can enhance saving rates and advance innovation. (Luintel and khan, 1999), (Abu-bader and Abu-Qarn, 2008) investigated that finance and growth increase simultaneously also other like (Schumpeter, 1911), (king and Levine, 1993) examine that finance advances growth. The remaining thing is urbanization and it has also got some problems such as high population and this happens when many of the immigrant's moves urban areas also, lack of infrastructure, shortage of jobs or we can say unemployment rate will be high, inadequate of housing, pollution, poverty, and crime. Our time series data consists of annual tourism, inflation, urbanization and financial development variables over the periods from 1995 to 2017.this study is designed to be a time series of data.

This study is based on Turkey, and I choose time series for 23 years and data would be obtained on tourism, inflation, urbanization and financial development in Turkey, after which we will estimate if there is a connection between Turkey tourism, inflation, urbanization, and financial development. Tourism is measured the international tourism number of arrivals while inflation is measured by consumer price (annual), also urbanization is measured by urban population growth (annual %). Finally, financial development is measured by domestic credit to private Sector (annual %) and we can find all these data from the World Bank database.

12

Evaluating this data was organized Eviews9 in order to know the relationship

between tourism, inflation, urbanization, and financial development and our

estimation we use OLS test in order to know the association between those

variables. In theory, financial investigators recommend that there is a long run

connection between those factors under consideration.

1.5 Hypothesis

Ho: the null hypothesis

H1: an alternative hypothesis

Based on our study we will look if the variables have got any relationship

between each other the tourism as the dependent variable and the

independent variables would be inflation, urbanization and financial

development. Determinants of tourism would be inflation, urbanization and

financial development.

Y: Tourism

X1: Inflation.

X2: Urbanization

X3: Financial development.

Therefore, this study tests the following null hypothesis,

H01: there is no relationship between tourism and inflation.

H02: there is no relationship between tourism and urbanization.

H03: there is no relationship between tourism and financial development.

H04: there is no long-run relationship between tourism, and other independent

variables in Turkey.

#### 1.6 Significance of the Study

The findings of this study will show us the connection between tourism, urbanization, inflation, and financial development and also the impacts, because when one these indicators increase the other one may decrease or increase and by applying OLS model we will see how they affect each other and also we will look if there is long-term relationship in our model or not.

The vital of this topic is to see the causal relationship between those variables and how they correlate each other. E.g. tourism before 2016 it was quite good but that year there were military attacks occur in Turkey and this results most European and other tourists didn't come turkey because of the security. We all know that security is so important for every country. If there is no peace there is no one who is going to visit there, while the tourist increases the country's economic and made the country developed. This study would tend the offer thoughtful investigation in the dynamics of tourism and most significantly the most important macroeconomic indicators to the fluctuations of the real inflation rate, interest rate, unemployment rate and exchange rate in Turkey.

#### 1.7 Structure of the Study

The first chapter talks about the background of the study either if it is tourism, urbanization, inflation, and financial development; also, it shows us the aim of the study, statement of the problem, the significance of the study, research questions, also a financial crisis in Turkey and structure of the study. The second chapter also talks about the crisis in Turkey and some macroeconomic indicators in Turkey.

The third chapter I explained many studies that have empirically investigated the nexus between urbanization, inflation, tourism, and financial development, also I talked about how economic growth affects those four variables and terrorism is one of the bad influences happen on the tourist that are coming in Turkey.

The four chapters I mentioned about methodology and model estimation that used this study and it is time series data for 23 years annually and I gathered from World Bank data.

The fifths chapter focuses on the model that used this study Ordinary Least Square model and chapter five analyses the outcome of the model and forecast the model. The sixth chapter is all about the summary, recommendation, and conclusion of the study.

#### **CHAPTER 2**

# TURKEY FINANANCIAL CRISIS IN RELATIVE WITH MACROECONOMICS

#### 2.1 Financial Crisis

Turkey currency (lira) depreciates against the dollar on Monday 13 August 2018 this year. The lira has lost about 40 % of its value against us dollar and also the stock market goes down 17%. Lira was under severe as interference by the central bank .it fell to 7.2. The lira against the dollar also the same thing Euro fells low against the dollar, however in the evening lira returns and stayed weak at 6.9 to the Dollar (CBRT). As president Erdogan pursued the national bank's remarks with a case us was attempting to stab Turkey in the back. Erdogan said that the country was under a financial "attack" yet would defeat the attack on its economy and he urges that Turkey stayed strong and will handle any situation comes to the country.

This economic war between the United State and Turkey causes' Turkish currency to devalue and this happens when president trump announces that he doubles the tariff on US imports of Turkish aluminum and steel. Turkey is the third largest country that exports aluminum and steel to the United State of America. The deputy speaker of parliament Mustafa Sentop said that "there is no fight between Turkey and US; it is war by us on Turkey and other countries such as China, Russia, and even the European Union. Turkey has a shortage or deficit in its international trade.

It imports more than it sends out in order to put it another way, it spends more than it gains. That deficiency must be financed, either by borrowing or the investment of foreign.

First, it has an abnormal state of liability due for paying back sooner rather than later - credits that must be repaid and the cash borrowed again. To utilize the dialect of the financial markets, the liability must be refinanced. Fitch predicted that Turkey's aggregate financing needs this year will be nearly \$230bn.

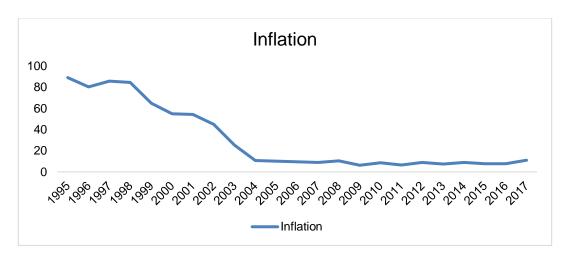
Second, numerous Turkish companies have borrowed in foreign currency. Those debts turn out to be more costly to repay if the amount of the national currency decreases - which it has. The weakness of Turkish currency brings issues of the inflation rate, and the other thing is when the lira becomes weak it makes imports more expensive.

Also if we look at the short-term external debt in this year was US 118.2 billion and it shows us an increase of 1.6% contrasting the previous year (CBRT).

#### 2.2 Macroeconomic Situations in Turkey between 1996-2018

When we are investigating the macroeconomic situation in a country, we must examine The GDP, Interest rate, Inflation rate, foreign trade, and Exchange rate, also this part I will analyze all those variables aspects as a graphically in between 1995 till 2017.

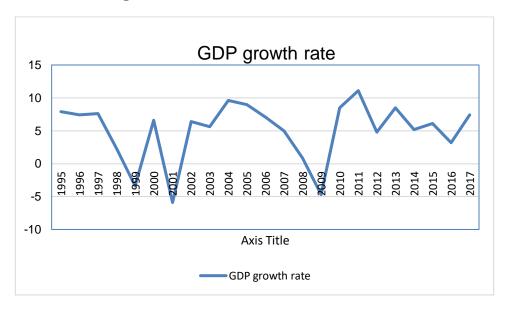
#### 2.2.1: inflation rate



**Figure 2.1**: Inflation pattern from 1995-2017 (Computed by Researcher using data from World Bank)

The Inflation rate in Turkey starts in 1995 88% but after 2000 it began to decline to 54 and 2009 and 2008 it became 9 and 8 and it proceeds like that until it became 7 in 2017, so this inflation graph was drastically decreased from 1995 till 2017.

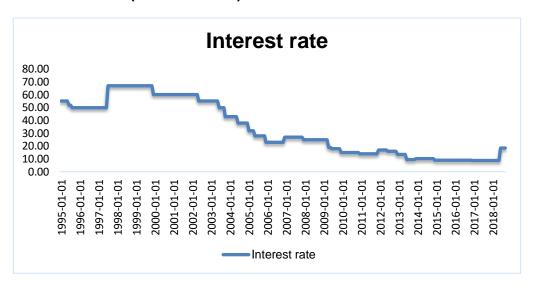
#### 2.2.2: GDP annual growth rate



**Figure 2.2**: GDP Pattern from 1995-2017 (Computed by Researcher using data from World Bank)

As you can see that in the graph there is a huge difference in years. The annual growth rate starts 7 in 1995 but in 1999 it became -3, after that in the year 2001 it became -5 while the following years was normal and it was positive till 2008 .in 2009 it became again -4 and start to increase year by year until 2017 and it is 7.4 the same in the year of 1995.

#### 2.2.3 Interest rate (Discount rate)



**Figure 2.3**: Interest Rate pattern from 1995-2017 (Organization for Economic Co-operation and Development)

In Figure 2.3 the interest rate in Turkey in the year of 1995 was 55% and it declines the second year and in 1997 it began to increase at the rate of 67% and remains same till 1999 while in 2000 it becomes 60% and after the year of 2000 the interest rate was decreasing year by year till it becomes 8.75% in 2018 although in the middle of 2018 it goes up at 18% due to financial crisis in Turkey that happens in the summer. This shows us that the interest rate in Turkey is low, and this can increase the inflation rate. Government and central banks use the high-interest rate so as to diminish the inflation rate of the country.

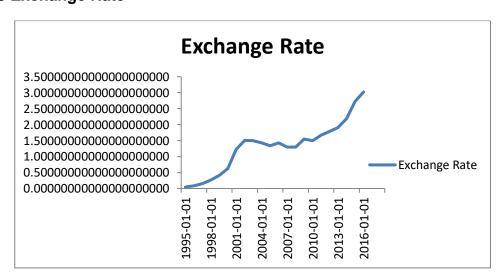
#### unemployment level 3500000.000000000000 3000000.000000000000 2500000.0000000000000 2000000.0000000000000 1500000.000000000000 1000000.0000000000000 unemployment level 500000.000000000000 0.00000000000 1997-09-01 2003-01-01 2005-09-01 2008-05-01 2011-01-01 2013-09-01 2016-05-01

#### 2.2.4 Unemployment level

**Figure 2.4**: Unemployment rate pattern from 1995-2017 (Organization for Economic Co-operation and Development)

As you can see the above figure is the unemployment level in Turkey .in 1995 the level was 452,084 and it goes up and reaches 1 million in 2009 and it continues like that until it becomes 3 million in 2015 but it changes in 2018 and becomes 2 million.

#### 2.2.5 Exchange Rate



**Figure 2.5**: Exchange Rate Pattern from 1995-2017 (Organization for Economic Co-operation and Development)

The last figure it is the rate of exchange in Turkey currency against the dollar .in 1995 is starting 0.04 cent and it goes up and become 1 in 2001 and in 2014 it reaches 2lira against dollar also keeps increased the following years in 2016 it become 3lira and 2017 it becomes 4lira and this year lira collapsed become 5lira to 6lira till it hit 7lira against dollar in 13 August fortunately, it starts to go down the following month and become 5lira against dollar. Increasing the exchange rate will help to increase the inflation because if the price of goods and services increases then there will be expansion in the nation.

#### 2.3 Comparing Turkey and Nigeria Inflation Rate

To measure a country's average product price levels and services in duration of time we use consumer price index (CPI) and this part we will be comparing the consumer price level of Turkey and Nigeria. when the inflation rate is less than 0% there is deflation means the price of goods and service decreases in the country, but when it is between 0% -2.5 % the price is stable. Also when it between 2.5%-5% the inflation is moderate and 5%-8% the inflation is serious and above 8%-12% it is self-compounding inflation, but when it is between 12% -20% there is higher inflation and above 20% it is explosive inflation.

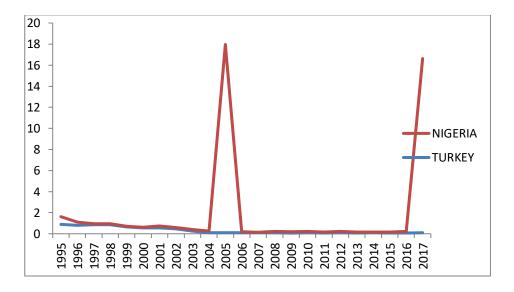


Figure 2.6: Inflation Rate in Turkey and Nigeria (Computed by Researcher using data from World Bank)

As you see the graph above both of the country the inflation rate is too high in Turkey is between 8%-12% and it is self-compounding inflation while Nigeria has hyperinflation because the rate is between 12%-20%. In the 1970s there was oil boom era in Nigeria which causes by imbalance of macroeconomics and control of fiscal, after increasing the inflation rate and money supply in Nigeria the banks start to inspire by developing extra credit to productive sectors of the economy and this helps the government policy in order to push down The inflation rate to 11.8% in 1979 after the couple years 1984 the inflation rate in Nigeria goes up due to depreciation of naira and also increasing the money supply. The year between 1988 to 1989 the inflation was increased and that caused by the fiscal increasing which provides credit from the Central Bank of Nigeria (CBN). Following the year in 1990 the inflation rate was decreased because of the rising agricultural output and in the same year Nigeria faced severe inflation which comes from huge monetary development and fiscal increase.

in the year 1995 the inflation rate in Nigeria became 79.9%(Abdullah and Bawu, 2012) from that time government start to measure and establish the exchange rate more stable, efficiency monetary policy and fiscal control, the outcome of that three things bring to decrease the inflation rate from 1995 to 6.6% till in 1999 and the inflation rate started to increase the year between 2000 and 2005 which was 6.9 %, 17.8% respectively and this was associated by government account deficit and the year 2007 the inflation rate decrease with 5.4% due to achieve of monetary and fiscal policy. In 2008 the inflation was 11.6% and in 2013 it was 7% this causes by agricultural and macroeconomic policy.

Similarly, Turkey inflation rate is also high and close to the Nigerian inflation rate. In 1994 there was a financial crisis in Turkey and the Turkish lira fell 6% and this helps inflation rate to increase three digits and Turkish lira depreciated more than half against the dollar. The borrowing made by the public sectors and some errors of financing deficit results that lira depreciated against the dollar (World Bank).

The next years 1998 the Russian financial crisis and the earthquake 1999 influences the economy of Turkey and the government start the program of disinflation and they made an agreement with (IMF). There was a crisis in 2001, and one of the causes is fiscal deficit become that year worse, the second thing is increasing the foreign exchange debt and this happens when Turkish prime minister Bulent Ecevit and president Ahmed Necdet had a conflict at that time and the president blames the prime minister corruption. There were also an increase in unemployment, inflation and the public debt increases 38% to 74 of GDP (CBRT).

## **CHAPTER 3**

# LITRETURE REVIEW

## 3.1 Empirical Literature

There are many studies in the literature that have empirically investigated the nexus between urbanization, inflation, tourism, and financial development. Although Urbanization has a complex effect covering the social, political and monetary circles that create the demand for the basic items in the urban territories that upsurges inflation. Furthermore, this would also induce production in the economy and can add to the GDP.

Inflation can be characterized as a supported, fast raise the costs and price, as measured by some wide file, (for example, CPI) over months or years, and in a roundabout way of diminishing the purchasing of the customer. Three sorts of inflation: (1) Cost-push inflation is because of the wage builds that reason business to raise costs to cover higher work costs, which prompts interest for still higher wages, (2) Demand-pull inflation comes about because of expanding customer request financed by less demanding accessibility of credit; (3) Monetary inflation caused by the expansionary in money supply (because of printing more cash by a legislature to cover its deficiencies). Consumer inflation in Turkey stayed high with a normal rate of 8.2 percent and one of the increasing inflations is financial development and also advances economic growth. (Haslag and Koo, 1999) and (Boyd et al, 2001), utilizing cross-sectional and panel worldwide information from the 1960s to mid-1990s, report that direct inflation negatively affects financial development.

15 percent for each year in (Boyd et al, 2001) — higher inflation shows just littler minor negative impacts on financial development). Besides, (Dehesa et al, 2007) utilize a panel of 120 nations in the local area of 1997 and 2004 to report that lower inflation expands the measure of credit in their specimen also (Zoli, 2007), and Andrianaivo and (Yartey, 2009) report that in the panel of developing European nations between 1995 and 2006 and African nations between 1990 and 2006, inflation presents damaging impacts on financial development.

A tourist is a person or individual from other nation enter to another country. Different advancement motivating forces have been informed particularly with increasing the individual and private interest in this industry. Tourism is a critical part in Turkey economy adding to work creation and fare income. It has a major part in reviving and manageable local economies. (Narayan, 2004) examined that tourism positively affects national economic output and also evaluated the long-run effect of the inflation in tourism consumption on Fiji's economy. This investigation utilized the process of equilibrium model to estimate the long-run impact of tourism. Overpopulation and water problems are the causes of urbanization that might affect the tourist that are coming to Turkey.

There are examination uses as of late created causality test by (Hatemi, 2012) for examining the causal connections between tourism and financial development. Financial development began to increase drastically, which caused a quick increase in urbanization (World Bank 2016). Developing an urban population and enhancing financial development may prompt a rise in vitality utilization. (Tang and Tan, 2015a); (Ivanovo and Webster, 2013a), (Webster and Ivanovo, 2014) they have been argued that economic growth and tourism can have bidirectional and unidirectional impacts.Between 1927 and 1950, great level of Turkish population stayed in rural areas after 1950 urbanizations have progressed toward becoming accelerated.

Urbanization has made wonderful accomplishments and has assumed an imperative part in pushing the improvement of tourism industry another sign of the Urbanization procedure would be the expansion in the measure of people who migrated within the country. After 1960 the urban population in Turkey was 32% to 74% in 2017 and it is a huge number of increasing people moving to an urban area. Economic growth is one factor that affects urban growth in Turkey.

Hence, the increasing course of urbanization and the related rise in price are a concurrent phenomenon, which is vital for improvement. In any case, urbanization isn't the underlying driver of inflation. Urbanization and inflation; in this way, this segment will survey the writing that investigated the connection between urbanization and inflation.

(Goldstone, 1984) built up a basic model that examined the effect of urban systems on the money supply. This investigation found that the velocity of money dissemination is a superior measure of changes in price level than changes in total populace development rate in the urban territories. (Wei-lin, 2012) found that urbanization in China builds livelihood and housing prices. (Cohen, 2006) analyzed the acceleration of the urbanization procedure in developing nations, especially in African nations. These examination traits the expansion in urbanization to innovative and political change. This examination utilized an anticipated increase in the urban population as a measure of urbanization. Finally, we found that there is a relationship between urbanization and tourism which brings when a population is over then the tourist get some difficult to find the historical places and also some problems for water.

Urbanization has an impact of inflation and this mentioned some scientists like (Wei-lin, 2012) found that urbanization in China builds livelihood and housing prices. However, inflation may affect tourist that are coming in Turkey because the price goes up they cannot buy what they need or what they want to buy because the price is high.

Inflation is negatively correlated with the execution of the financial market, and one of the causes of economic growth is financial development in Turkey. Overpopulation and water problems are the causes of urbanization that might affect the tourist that are coming to Turkey.

#### 3.2 Inflation

The observational investigations on the Turkish economy don't concur on whether or on the other hand, not inflation is mean returning. Numerous investigations have demonstrated that inflation has powerful perseverance in Turkey. (Baum et al, 1999) discovered powerful proof for a unit root in Turkey. For both buyers and producer inflation after the investigation of 27 nations and (Tutar, 2001) showed that builder price inflation has a unit root process. Consumer expansion or inflation in Turkey is more determined than producer inflation examined by (Altinok et al, 2009).

(Oguz, 2010) showed that Turkish inflation persistence went down in the vicinity of 1995 and 2009 in both consumer inflation and its subgroups. (Levin and Piger, 2004) Demonstrated that inflation persistence models that don't consider basic break caused by changes in monetary strategy. (Cechette and Debelle,2006) used a similar strategy to consider structural breaks utilized as a part of the Quandt-Andrews test and their outcomes proposed that shocks to inflation are not persistent.

(Ghosh et al, 2016) remarked upon inflation focusing on is proper for an open market that lack of other important safety (for example, a formal peg). (Habibulah et al, 2011) with Granger causality proved that the presence of long-run connection amongst inflation and deficit .it presumed that inadequacies add to inflation in developing nations preferred in 13 Asian countries. In Asian nations, (Jalil, and Bibi, 2014) utilizing the autoregressive contributed lag and discovered positive loan association with inflation for Pakistan from 1972 to 2012.

(Nouri and Samimi, 2011) initiated the positive and vital effect of inflation and debt from 1990 to 2008 in Iran. (Catao and Terrones,2005), additionally found long run powerful, positive connection deficiencies and inflation more than 107 nations from 1960 to 2001 specific in high –inflation and association with progressive panel strategies in developing countries.

(Tan, 2006) examined the long run and short run connection amongst inflation, deficit and economic growth in Malaysia from 1966 to 2003. And they discovered shortage short-run inflationary impact on the economy.

(Basseto and Butter, 2009) likewise found no connection between surplus and inflation in 52 countries Malaysia from 1970 to 2008. On the other hand, (Khieu, 2014) discovered shortage made little difference to inflation in Vietnam from 1995 to 2012 with the basic vector Autoregression.

(Sek et al, 2012) also demonstrate a huge relationship between exchange rate and inflation in 1960 -2010 in Asian nations. (Lin and Chu, 2013), found the effect of exchange rate administration on inflation is more powerful in higher inflation scenes than in brings down inflation from 1960 to 2006 of every 91 nations.

#### 3.3 Inflation and Economic Growth

One of the most faced off regarding and tend to issue in the development process of an economy is the connection between growth and inflation which are hugely effected on certain macroeconomic. Nowadays an economy that accomplishes no or deficient development is constantly connected with vital issues like poverty, joblessness and low interest. Inflation prompts a considerable measure of negative impacts talked about many analysts. The connection between inflation and economic development has not been examined in some countries. In many countries, if they are developed or developing that only target that economic policy is price stability and they realize that the accomplishment powerful and suitable economic growth is price stability.

There are a lot of studies that examine the inflation does not have any impact on economic growth (wai; 1959), (Dorrance; 1966); (Sidrouska, 1967) and other said that inflation has a positive effect on economic growth (Malik and Chowdhury, 2001); (Repach, 2003); (Benhabib and Spiegal, 2009) while the other investigates the inflation has a negative impact on economic growth (Fisher, 1983); (Barro; 1995); (Valdovinos, 2002).

(Tung and Thanh, 2015) They explored the presence of threshold impact in the connection between growth and inflation. In their examination on Vietnam as progress economy covering in between the year of 1986 and 2013. They realized that the inflation rate is more than 7 % while threshold, affected negatively to economic development.

(Akgul and Ozdemir, 2012) did an examination on Turkey from 2005 till 2009 and they examined the nonlinear connection between economic growth, development, and inflation, later on, they observed the inflation limit to be 1.26 for the whole analysis. It appears that when inflation above the limit it affected the economic growth and when the inflation beneath threshold has a positive impact.

(Mubarik, 2005) Managed the connection between economic growth and inflation for the Pakistan economy from 1973 to 2000 periods. They observed that the inflation rate of more than 9 % affected economic growth. (Gylfason and Herbertson, 2001) Did research on 170 countries nations from 1960 to 1992 and discovered that an expansion or inflation rate reached 10% to 20 % and influence economic growth.

(Hasanov, 2011) Did an investigation on Azerbaijan as charge economy from the year of 2000 till 2009 and it decided the inflation as 13% and it was recognized that the inflation rate under the rate had a positive impact on economic growth and when the inflation rate over the limit affected the economic growth.

## 3.4 Impact of Terrorism on Tourism in Turkey.

The terrorist attack is one of the most affected by the tourist in Turkey. Consequently, this may affect the overall economy as the tourism industry creates important economic benefits such as income tax on foreign exchange and employment opportunities for workers. There is some literature on the influences of terrorism on tourism. (Enders and Sandler, 1991) provide empirical evidence of a vital link between tourism and terrorism in Spain.

(Enders et al,1992) also found that the circumstance of terrorism had a negative influence on the revenue generated from tourism in Europe. Then again, (Kutan and Draco,2003) agreed on the effects of terrorism on the tourist who arrived in the Mediterranean, declaring that the industry was, in fact, sensitive to terrorism and that (Vindon and Szegin,2008) terrorist attacks in Turkey came from various groups such as the Workers' Party Kurdistan and the Soviet Union. Specifically, they attack the Turkish government and have killed some 35,000 people since 1980.

After these years, the country faced terrorist attacks on tourist areas in Istanbul, Izmir, and Ankara, Marmaris, Antalya, and Kusadasi. Nations which have a rich cultural, historical, natural appealing have a chance to utilize the tourism industry to produce employment and output of the country. In reality, tourism is an industry that adds and generates economic growth.

#### 3.5 Tourism and Economic Growth

Even though there are numerous theories that indicate the importance of tourism and economic growth, additionally there are questionable arguments. (Hazari and Ng, 1993) recommend that tourism can diminish economic welfare and negatively influence on economic growth. Nowak, (Sahi, and Sgno, 2004) argue that under specific condition "tourist boom," can prompt a decline in manufacturing output and welfare. There is much empirical proof that approves the positive connection between the two-factors. The hypotheses that tourism enhances economic growth are confirmed for four Caribbean nations (modest, 1995) for Mauritius (Durbarry, 2004) for Fiji (Narayan, 2004).

Furthermore, there are another empirical that comes Taiwan (Kim Chen and Jang) and Spain (Balaquer et al 2002) the outcomes of empirical examination approves that there is the long-term connection amongst the economic growth and tourism receipt and tourism influence positively way to economic growth.

(Ongon and Demiroz ,2005) they propose bidirectional causality amongst economic growth or development and international tourism in Turkey, they also use time series data from 1980 and 2004 and they also use Granger causality test to see the relationship, while (Hatemi and Gunduz,2005) they figure out that tourism and economic growth in between 1963 to 2002 unidirectional causality.(Erbaykal and Kizilgol, 2008); (Acaravi and Ozturk, 2009) these investigations became fail, and it confirms a positive connection or causality for economic growth and tourism, however (Ocal and Yildirim, 2004); (Bahar 2006); (Isik and Akan, 2006) their examination certifies a positive connection amongst tourism and growth.

#### 3.6 Urbanization

In the last decades, the urban population is growing fast and 1.8 billion people who were living before the rural move to urban areas and when we look at the percentage by yeas is 3%.in China urbanization has been an essential element and it is significant to change the economy. (Zhou, 1998) found that logarithm curve connection amongst the GDP per capita and the urbanization ratio. (Henderson et al 2009) rural and urban parts were entirely isolated in China and the division caused rural-urban work mobility tough and income inequality.

Li et al (2012) matching amongst population urbanization and land urbanization by evaluating local disequilibrium they indicate that the significance of studying that relationship they have and how disease interprets the process of land urbanization. (De sherbinin et al, 2007); (Zhu, 2005) urbanization changes the populace dissemination, production mode, ecological environment, and lifestyle.

(Demirguc-Kunt and Levine, 2001) and (Levine, 1997; 2005) content that current study recommends that nations with better working banks and financial market encounter over rates of economic development or growth and also (Atack et al ,2014) in nineteenth-century role banks played important in urban development, for the most part through the bank support of entrepreneurship trade and investment in transport. (Konijnendijk, 2003) Found that the massive parts of the world have turned out to be profoundly urbanized, and most of the universe populate now. Lives in urban communities and towns, and also the figure out that the countries that are developed 80 90 % people live in towns whereas developing countries only 20% lives in cities (Botkin and Beveridge; 1997), (konijenendijk et al 2003). (Kahl, 2006) measures that in developing countries rural-urban migration presently represents 40%-60% of yearly city development. If the population growth rate become high along with urban advancement prompts misuse of nature and brings a healthy ecology and cause many problems like increasing the air temperature, psychological stress and noise level will also go up.

#### 3.7 Urbanization and Economic Growth

When the city of the country becomes more urban then, it uses to before it will affect the economy if it is good or not, later on, we can see how the economic growth increases or decreases. When people move from rural to urban areas and the relationship between urbanization and economic growth are more complex but some theories are incomplete or deficient when tested in a developing country.

There is much literature on urbanization to economic growth (Hansen, 1990) stated the economic growth is helpful when there is a high degree of urban concentration. (Zhou and Wang) In their study they examine a causal connection between urbanization, economic growth, and energy consumption in China from 1980 till 2012 and they had got bidirectional Granger,

while in Saudi Arabia (Belloumi and Alshehry) examine the connection amongst real GDP per capita, industrialization, urbanization and economic growth from period 1971 till 2012 and found that unidirectional Granger causality.

## 3.8 Financial Development and Economic Growth

There are many theories and empirical that examines the relationship between financial development and economic growth. First one is (Suleiman Abu – Bader, Aamer, 2007) they investigate the causal connection amongst economic growth and the financial development in E Equpt from 1960 to 2001 and they apply Granger causality by using cointegration and vector error correction and the outcomes were financial development and economic growth are mutually causal .the relationship between those two factors has been generally treated in the theoretical and empirical literature.

(Lain and khan, 1999) they estimate the model based multivariate long-run connection amongst economic growth and financial development they found that there is a bidirectional relation between economic growth and monetary development. (Tsionas and cristopoulos, 2004) they evaluate the long-run connection amongst economic development and financial development by using multivariate they found unidirectional causality between financial development and economic growth. (Goldsmith,1969) found that there is a positive connection between economic growth and financial development.

(Valev and Rioja, 2004); (Deidda and Fattouh 2002); (odedokan, 1996) they found a non-linear connection between economic growth and financial development. Also, same us King

And (Levine, 1993) found that there a nonlinear impact of financial development on economic growth by using the threshold regression model.

(Pradhan et al, 2016) they estimate if there is long-run equilibrium connection amongst financial development innovation and economic growth.

(Yung and Myung) they investigate if the causal connection between economic growth and financial development for Korea from period 1971 till 2002 and they that financial development command causes of economic growth and the empirical result give that finance causes the growth of the country.

(Laureti et al, 2013) They examine the economic growth in the (MENA) middle east and north Africa from period 1959-2007 and they approve the hypothesis of conditional convergence while (Kar et al, 2011) examined empirically the direction of causality amongst economic growth and financial development in MENA countries and they use panel granger in their examination from 1980 to 2007 they figure out that the direction of causality between financial development and economic growth is no clear consensus.

(James B Ang 2007) Evaluates the relationship between financial development and economic growth for Malaysia, and the outcomes pointed the financial cause to increase output growth. (Cechette and Karroubi.2012) discovered that there was u shaped effect in financial development. (George Adu et al,2013) the examination was the long-run impact of financial development in Ghana and they found that if financial development is good or bad for growth rely on the indicator they use as a proxy for financial development.

Also (Kargbo and Adamu ,2009) investigates the connection amongst economic growth and financial development in Sierra Leone from 1970 till 2008 and the findings they got was financial development an important positive growth while there are other studies (Quartey and Prah,2003) shows a prove that supports of demand –following hypothesis, but there is no clue that supports either demand-following or supplies leading hypothesis when private credit to GDP, Domestic credit to GDP ratio and private credit to domestic ratio are used as proxy for financial development. In South Africa, (Odhiambo, 2009) investigates the connection between financial development, interest rate and economic growth and he figure out demand –following the path and the writer achieves that the causal connection amongst financial depth and economic growth exhibit a demand following the path.

While (Demetriates and Hussein, 1996) investigate many causality examinations amongst financial development and economic growth for almost 16 developing countries and the findings was bi-directionality and some of the reverse causation and some analysis made also by Kugler and (Neusser, 1998) also, (Chee-Keong and Chan, 2011) in their analysis they use regression of finance growth connection and there is a positive short and long run connection and causality amongst economic growth and financial development. (Korhan K Gokmenoglu et al, 2015) they examine in their studies the connection between financial development, international trade and economic growth by using Granger causality test and they figure out all variable are non-stationary and also there is a long run relationship between financial development, international trade, and economic growth.

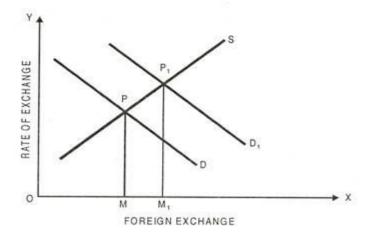
(Zhang et al, 2012) they gather their studies on connection amongst economic growth and financial development and demonstrate that most indicators of financial development have positive connection on economic growth while also (Kahraoglu and Jenkin, 2008) examine the long-run connection amongst international, financial development and economic growth for Cyprus and the outcomes show that those three variables are co-integrated. When we look at financial development in poverty reduction there are many studies talks about it one of them is (Perez-Moreno,2012) who shows financial development can diminish the poverty and current study by (Donou Adonsou and Sylwester,2016) they prove that financial sector development can decrease or reduce poverty by using a plethora of poverty.

# 3.9 Balance of Payment Theory

The balance of payment is bookkeeping assertion or statement that outlines all economic activity between the home country and other countries. The balance of payment theory also indicates as supply and demand theory of exchange rate and it manages the exchange rate of the currency in one country to another country. This theory expresses the power of supply and demand, according to the theory a shortage or deficit in the balance of payment brings that the currency of the country depreciate while a surplus in the balance of payment courage the currency of the home country and makes strong and appreciates at the price of the country according to the foreign currency. These activities include import, export, transfer payment, debt, and short and long-term investment. In other words of the same balance, payment is known as international payment. There are three forms of balance payment

- A) Current account: this one reports the export and import of goods, service, and income.
- B) Capital account: in the capital account, it more focusing on debt forgiveness and they transfer the financial aid into the immigrant.
- C) Financial account: this one shows lending and investment transaction in the public and private sectors.

Most of the country the current account and financial account is more vital than the capital account. Also, there are two types that we measure the balance of payment, the first one is the net liquidity balance and the other one is official reserve transaction balance.



## 3.10 Purchasing Power Parity Theory

When we want to compare two countries in their currency, it is so important to change values, like national income and there are two ways to know that is using a market exchange or purchasing power parity. The purchasing power of currency indicates the amount of money expected to buy a given unit of goods and service and is controlled by the general typical cost for basic items and the inflation rate in the various nationalities. Purchasing power parity implies the purchasing power of two currencies by considering the cost of living and inflation contrast. (Gustav Cassel, 1918) investigate his theory that in useful markets, similar goods have only one price.

$$P/P^F = E$$

P: stands for domestic price index.

Pf: is the foreign price index.

E: stands also spot exchange rate.

Purchasing power parity theory explains to us that price differential between two countries is not sustainable because the company that doing trade in between those two countries can earn a profit by buying the cheap goods in one country and sells the high price in another country.

#### 3.11 Fisher Effect and International Fisher Effect

Fisher impact is a theory that examines the connection between the real interest rate, nominal interest rate, and inflation rate and this theory investigate the economist Irving Fisher. When the real interest rate goes down as inflation increase unless the nominal interest rate goes up. While international fisher's impact is more concerned with anticipating the connection between exchange rate and interest rate movement, this debate is all about if the country nominal interest rate goes up lead depreciation to the country currency because increasing nominal interest will increase the inflation too. Fisher effect only can appear in the long run, not the short run.

## **CHAPTER 4**

## **METHODOLOGY**

#### 4.1 Introduction

In this chapter it explains the models that we are going to use in our estimation process by using the OLS model and we are going to analyze the relationship between Tourism, inflation, urbanization and financial development in Turkey our study is annual time series data and it is secondary data that basically gathered from the World Bank and the data range the year between 1995 to 2017, after that we will evaluate in the OLS model other tests like Descriptive, unit root, multicollinearity, regression, normality test, Breusch-Godfrey serial correlation Im test, and Heteroskedasticity.

#### 4.2 Data Collection:

This study is based on Turkey and I choose time series data for 23 years annually data were accessible on urbanization, inflation, tourism and financial development in Turkey, after that I would estimate if there is a positive relationship between Tourism, inflation, financial development and urbanization with regards to Turkey. In this paper, it is yearly time series data were utilized for the period 1995 to 2017.urbanization is measured by urban population growth rate (%) while inflation is measured by consumer price annual (%) and we can find the data of inflation and urbanization in World Bank data. Tourism is also measured by international tourism number of arrivals in Turkey. Most of the researcher's measure of financial development on domestic credit to the private sector (%).

Data analysis of this data was organized Eview9 in order to know the relationship between inflation, tourism, urbanization, and financial development also see the correlation between those variables.

# 4.3 Model Specification

In our model, it is a multivariate regression model where tourism is the cause or we can say that Y which is dependent variable and inflation, urbanization and financial development are explanatory variables.

**Econometric Model** 

y = b0 + bx1 + b2x2 + b3x3+u

Specification of Model

TORs = b0 + b1INFR + b2URB + b3FND + u

Where:

TORS= Tourism at time t.

INFR = Inflation Rate at time t.

URB = urbanization at time t.

FND = Financial Development at time t.

For this purpose, the above model transform to:

TORs = b0 + b1INFR + b2URB + b3FND + u

 $\beta$ 0 = Beta the constant term

 $\beta$ 123 = Are the variables to be projected

 $\mu$  = Denotes the error term

The whole variables are changed into the regular logarithm to eradicate Heteroskedasticity in the time arrangement or series data.

#### 4.4 Estimation Procedure

Ordinary Least Square (OLS) technique is utilized to assess the connections in the fitting equations. The choice of this strategy (OLS) it was because of the reality it has been tested on an assortment of econometric connections that respect critical answers and answers for a lot of issues confronting the world. Also, the OLS statistical strategy is most fitting for taking care of observational issues and it has turned out to be standard to the point that its evaluations are displayed as a point of reference regardless of other estimation method result. Hence, OLS lies on its attractive quality and for the efficiency, unbiased and consistency of the OLS technique for estimation made this sort of concentrate especially. This signifies OLS error term has equal and minimum variance (Gujarat, 2004).

# **4.5 Econometric Model**

**TABLE 4.1**: Econometric Model

Years	Υ	X1	X2	Х3
1995	7,083,000	89.1	2.45	18.486
1996	7,966,000	80.347	2.43	22.828
1997	9,040,000	85.733	2.42	26.3
1998	8,960,000	84.641	2.39	16.783
1999	6,893,000	64.862	2.36	16.226
2000	9,586,000	54.915	2.32	17.335
2001	10,783,000	54.4	2.41	15.025
2002	12,790,000	44.964	2.43	14.162
2003	13,341,000	25.296	2.38	14.135
2004	16,826,000	10.584	2.31	16.739
2005	20,273,000	10.138	2.24	21.43
2006	18,916,000	9.567	2.15	24.928
2007	26,122,000	8.756	2.08	28.247
2008	29,792,000	10.444	2.07	33.644
2009	30,187,000	6.251	2.11	37.346
2010	31,364,000	8.566	2.2	44.654
2011	34,654,000	6.472	2.29	49.424
2012	35,698,000	8.892	2.37	52.228
2013	37,795,000	7.493	2.39	60.709
2014	39,811,000	8.855	2.37	63.791
2015	39,478,000	7.671	2.32	66.827
2016	30,289,000	7.775	2.28	69.852
2017	32,400,000	11.14	2.22	66.55

42

Y: Tourism (international tourism number of arrival)

X1: Inflation (consumer price annual %)

X2: Urbanization (urban population growth annual)

X3: Financial development domestic credit to private sector (GDP %)

#### 4.6 OLS Model

Ordinary least square is the most widely recognized estimation strategy for linear models—and that is true for a valid justification. Since the model fulfills the OLS presumptions for linear regression, you can be obvious and realizing that you're getting the most ideal or best evaluations. Regression is an amazing investigation that can break down different factors at the same time to answer complex research questions. Although if you don't fulfill the OLS theory, you probably won't have the capacity to trust in the outcomes. The least square technique was utilized to test the connection between the dependent and independent factors. It was the most broadly utilized system for creating assessments of the model parameters.

The Gauss-Markov theorem broadly expresses that OLS is BLUE. BLUE is an abbreviation for the following:

a) B: Best

b) L: Linear

c) U: Unbiased

d) E: Estimator

OLS Regression (univariate) model

YT = b0 + b1Xt + ut

OLS Regression (multivariate) model

YT: b0+b1x1+b2x2+b3x3+ut

TORSt:  $\beta 0 + \beta 1$ INFt +  $\beta 2$ URBt +  $\beta 3$ FNDt +  $\epsilon t$ .

 $y = x\beta$ , in this part we will find  $\beta$  that analysis best investigation of x and y

$$(y - x\beta)'(y - x\beta)$$
$$\partial/\partial\beta = -2x'(y - x\beta)$$

This equal zero and now we can solve B

$$X'(y - x\beta) = 0$$

$$\rightarrow$$
 x'y - x'x $\beta$  = 0

$$\rightarrow$$
 x'y = x'x $\beta$ 

$$\rightarrow$$
 [x'x]\*-1 x'y =  $\beta$ 

Now we found Ordinary Least Square estimate of a linear regression model:

$$\beta^{\hat{}} = [x'x] - 1 x'y$$

## 4.7 Heteroskedasticity Arch Test

Autoregressive Conditional Heteroskedasticity (ARCH) test models are utilized to show financial time series with time-changing instability, for example, stock price and it is also a method for demonstrating this component, determining condition for the mean and variance. The arch impact is more about a relationship inside the heteroskedasticity, frequently named sequential connection of the heteroskedasticity .it regularly not proven when there is a bundle in the variance or volatility in a special variable. The impact of the arch is calculating the hazard or risk of an asset, given the following model.

$$Y_{t} = \beta_{0} + \beta_{1}X_{t} + u_{t}$$
$$u_{t} \sim N(0, \alpha_{0} + \alpha_{1}u_{t-1}^{2})$$

This proposes the error term is typically disseminated with zero mean and variance relying upon the squared error term lagged one time period. The arch process presented in Engle (1982) permits the restrictive variance to change after some time as a capacity of past error leaving the variance steady.

In Weiss (1984) ARMA models with ARCH errors are observed to be effective in demonstrating thirteen diverse U.S. macroeconomic time arrangements.

A wide scope of proposed ARCH procedures is covered in the analysis, for example, (Bollerslev et al, 1992), (Higgins, 1993), (Bollerslev et al, 1994), (Li et al, 2001) and (Gouriéroux, 1997)

## 4.8 Normality Test

There are many theories that investigate the normality either to know easily that the variable is normally distributed. If the variable did not work or not normally distributed then, it would be more critical in order to look at the histogram. Shapiro Wilk test is more powerful in many activities. It is the proportion of two evaluates the variance of normal dissemination dependent on an arbitrary example of n observation. This test advanced by Shapiro and Wilk (1965) for sample size up 20 and there are other tests like Anderson-darling test (Anderson and Darling, 1954) is a famous test and powerful same as the Shapiro Wilk test. (martinez-iglewics test, 1981) in this test it all about the median and strong evaluation of a diffusion. While Kolmogorov –Smirnov test is for normality it depends on the greatest contrast between the discover distribution and anticipated cumulative-normal. There is also D'Agostino skewness test on this test it depends on coefficient b2 and D'Agostino omnibus test combines the other two tests the D'Agostino skewness and D'Agostino kurtosis test.

#### 4.9 Unit Root

The Unit root is a stochastic pattern in time arrangement or series also unit root is called the unit process. If the period of time arrangement has got the unit root, it demonstrates an efficient example that is unstable. This test is for stationary in the period arrangement and unit root are one of the reasons for non-stationary. (Hamilton, 1994), (Fuller, 1996), (Hatanaka, 1995) specialized perfect for the treatment of non-stationary time series. Furthermore, there is other research paper that took a survey of problem-related with the unit root (Phillips and Xiao, 1998).

45

The Unit root can be tested many types, the first one is (Augmented Dickey

and Fuller 1979, Fuller 1976) and the main aim is to test the hypothesis and

the other one is Phillips Perron (PP).

 $yt = \phi yt - 1 + ut$ 

Opposite to one-sided alternative  $\varphi$  <1. So then we do have

H0: series includes a unit root

vs. H1: series is stationary.

4.10 Covariance Analysis: Ordinary

This test measures of association between the dependent and independent

variables, here the TORS would be tested to see if there is a correlation

between the TORS (dependent variable) and Inflation rate, urbanization,

financial development (independent variables) through 5% level of

significance.

4.11 Serial Correlation: LM Test

In serial correlation mainly it concerns with the error term from the various time

are correlated and they state that error term happens in time series and it is

sequentially connected or correlated. Mostly the connections of error term

related to a given period proceed into the future. This part I will take the

Breusch-godfrey serial correlation Im test

4.12 Econometric Software

We shall use Eview 9 software in my study in order to know the relationship

between the variables (dependent and independent) and evaluate our model

if it is good to fit or good model. The data that we are using is from the World

Bank data for tourism, inflation, urbanization and financial development in

Turkey.

## **CHAPTER 5**

# **EMPRICAL ANALYSIS AND FINDINGS**

# **5.1 Descriptive statistics**

Table 5.1: Descriptive

	F	INFLATION	TOURISM	URB
Mean	34.68039	30.73313	22175957	2.303913
Median	26.30000	10.44400	20273000	2.320000
Maximum	69.85200	89.10000	39811000	2.450000
Minimum	14.13500	6.251000	6893000.	2.070000
Observations	23	23	23	23

On the average of financial development to private credit to GDP has N 34.68 and the average inflation rate of consumer price was N 30.73, while Tourism is N 22M and finally urbanization was N 23M. When we look the maximum of Tourism arrivals that coming into Turkey was 39M and the minimum was 6M, moreover in the period of study financial development has a maximum reach 69,85 and minimum was 14,13, inflation has reached a maximum of 89.10 and minimum of 6.25 while the urbanization has risen up of 2.45 and goes down 2.07.

#### 5.2 Unit Root Test

Table 5.2.1.: Unit Root (ADF Method)

ADF Method	Prob	Cross-section	Obs
Inflation	0.0005	4	23
Tourism	0.0002	4	23
Urbanization	0.0122	4	23
Financial	0.0001	4	23
development			

Table 5.2.2: Unit Root (PP Method)

ADF Method	Prob	Cross-section	Obs
Inflation	0.0000	4	23
Tourism	0.0000	4	23
Urbanization	0.0122	4	23
Financial	0.0000	4	23
development			

From the table above it is unit root test in our model and we have chosen the second difference we used two models but the main one is ADF fisher (augmented dickey fuller) in this model it shows that our probability is 0.0000 and it is less than 5% level of significance, so we reject our null hypothesis and accept the alternative hypothesis and it does not have a unit root and the probability of financial development, inflation, tourism, and urbanization is less than 5% level of significance.

On the other hand PP fisher tests also shows that p-value is 0.0000 and it is less than 5% level of significance and the probability of all the variables are less than 5% and it indicates that there is no unit root in the model and we reject the null of the hypothesis. we conclude that based on the above evidence inflation, financial development, Tourism, and urbanization are stationary if the observed p-value is less than the chosen alpha value which in this study at 5% level of significance.

# **5.3 Test of Multicollinearity**

Gujarati, (2004) examine that when the correlation coefficient is greater than 0.8 that two or more variables are said to multicollinearity. In the correlation table it is used to test the multicollinearity among variables. Thus; generally, the correlation coefficient between 0.1 and 0.29 indicates a small association, coefficient between 0.30 and 0.49 indicates medium association and coefficient of 0.50 and above indicates a large relationship.

Table 5.3: Multicollinearity Test

Correlation				
Probability	TOURIS	INFLATIO	URBANIZATI	FINANCIAL_D
	M	N	ON	EV
TOURISM	1.00000			
	0			
INFLATION	-	1.000000		
	0.83608			
	1			
	0.0000			
URBANIZATIO	-	0.633782	1.000000	
N	0.42395			
	2			
	0.0438	0.0012		
FINANCIAL_D	0.88443	-0.595423	-0.184297	1.000000
EV	4			
	0.0000	0.0027	0.3999	

From the table above, it shows that there is no multicollinearity since order correlation coefficient of the variables is less than 0.8. Thus, there is statistical relationship or connection between the dependent variable tourism and

independent variables inflation, urbanization, and financial development while the inflation and urbanization are negatively correlated to tourism in Turkey.

# **5.4 Ordinary Least Square**

Table 5.4: Ordinary Least Square

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С		18071758	1.072170	0.2971
	19375989			
LOG(INFLATION)	-177857.0	38427.07	-4.628429	0.0002
LOG(URBANIZATION)	-1823307	8340064	-0.218620	0.8293
LOG(FINANCIAL_DEV)	359477.2	47018.43	7.645454	0.0000
R-squared	0.930771	Mean	22175957	
		dependent		
		var		
Adjusted R-squared	0.919840	S.D.	11857517	
		dependent		
S.E. of regression	3357170	Akaike info	33.04787	
		criterion		
Sum squared resid	2.14E+14	Schwarz	33.24534	
		criterion		
Log likelihood	-376.0505	Hannan-	33.09753	
		Quinn		
		criteria.		
F-statistic	85.15009	Durbin-	1.116683	
		Watson		
		stat		
Prob(F-statistic)	0.000000			

The result of a log form ordinary least square in the above table shown that there is a long-run in the model which indicates inflation is inversely (negative) and significant related to the tourism the coefficient of inflation is -177857 mean that 1% increase inflation will result 177.8% decrease in tourism also urbanization negative and insignificant affects the tourism and it is -182 which means 1% increase in urbanization will affect tourism, while financial development positively and significantly effect on tourism because 1% increase in financial development increases 359% increase in tourism.R-squared is 93.07% would imply a very good fit for our model. The t-statistic only inflation and urbanization have got negative, while the other variables are positive. When we look at the Durbin-Watson it is less than two and it shows us that it is positively correlated, however the result of f-statistic is 85 and the Prob is 0.000 which is less than 5% level of significance indicating that over all regression is statistically significant at 5% level of significance.

TRSt:  $\beta$ 0 +  $\beta$ 1INFt +  $\beta$ 2URBt +  $\beta$ 3FNDt +  $\epsilon$ t.

TRSt: (-177857.0 INFt) + (- 1823307URBt) + (359477.2FNDt) + \text{\text{\text{e}}t}.

# **5.5 Correcting the Model**

Table 5.5: Model Correction

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFLATION	-201896.0	31324.53	-6.445298	0.0000
	7045756	1066745	6.604911	0.0000
URBANIZATION				
FINANCIAL_DEV	349447.3	46250.37	7.55557	0.0000
R-squared	0.926582	Mean	22175957	
		dependent		
		var		
Adjusted R-	0.919240	S.D.	11857517	
squared		dependent		
S.E. of	3369698	Akaike info	33.01965	
regression		criterion		
Sum squared	2.27E+14	Schwarz	33.16776	
resid		criterion		
Log likelihood	-376.7260	Hannan-	33.16776	
		Quinn		
		criteria		

In this table 5.5 I correct the model by eliminating the constant and made it the data significant as you see there the probability of inflation, urbanization and financial development. Only Inflation has a negative impact on tourism - 201896.0 and this tells us if the tourism increases inflation also decrease at that amount.

Normally when the R-square is high it is good with the model and made the model good fit and this table R-square is 92.26% and it is a little bit high. Durbin Watson is 1.076440, if it is less than 2 there is a positive correlation.

# **5.6 OLS (Inflation is Dependent)**

Table 5.6: OLS Inflation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	28.88348	4.599765	6.279340	0.0000
LOG(TOURISM)	-1.703355	0.226900	-7.507067	0.0000
LOG(URBANIZATION)	2.632007	1.586282	1.659230	0.1135
FINANCIAL_DEV	0.010628	0.006180	1.719613	0.1018
R-squared	0.931936	Mean	2.919715	
		dependent		
		var		
Adjusted R-squared	0.921189	S.D.	1.014609	
		dependent		
S.E. of regression	0.284833	Akaike info	0.482946	
		criterion		
Sum squared resid	1.541471	Schwarz	0.680423	
		criterion		
Log likelihood	-1.553877	Hannan-	0.532611	
		Quinn		
		criteria.		
Prob(F-statistic)	0.0000	Durbin	1.784494	
		Watson		

In this table 5.6 I made inflation as a dependent variable and see that only two variables are statistically insignificant. As you can see there is only tourism is statistically significant at 5 % level of significance, while urbanization and financial development are statistically insignificant.

If we see the relationship between inflation towards others just tourism affects negatively -1.703355, while urbanization and financial development affect positive way 2.632007, 0.010628 respectively R-square is a little bit lower

according to the table 1 but it is not too bad because it is still too high.

# 5.7 Normality Test

It is one of the tests that estimates if the data are normally distributed and it is included the model of ordinary least square that I am using on it .in order to check the normality test we will look the probability and jarque-Bera if they exceed level 5 % then we will accept and if they don't exceed we will reject the null hypothesis.

H0: the data normally distributed.

H1: the data are not normally distributed.

Acquired normality test shows us that the null hypothesis of data is normal and accepts 5 % level of significance, since the probability 0.132880 is greater than 5% and correlate jarque-Bera of 4.036623.

**Table 5.7:** Normality Test

Jarque-Bera	Prob
4.036623	0.132880

Source: computed by eviews9

## 5.8 Breusch-Godfrey Serial Correlation LM test

In Breusch-Godfrey serial correlation LM test was directed to found if the developed model experiences the issues of serial correlation. The hypothesis would be like this.

H0: there is no serial correlation.

H1: there is a serial correlation.

The outcome we found the Breusch-Godfrey test shows us that the model does not experience the issue of serial correlation because the null hypothesis is accepted at 5% level of significance and this occurs

because the probability f is greater than 5% level of significance and if the probability is greater than 5% there would be homoscedasticity in the model.

Table 5.8: Breusch-Godfrey Serial Correlation LM test

F-statistic	2.16187	Prob. F(2,17)	0.1457
Obs*R-squared	4.663643	Prob. Chi-Square(2)	0.0971

Source: computed by Eviews

## 5.9 Diagnostic Test

In the diagnostic test, we estimated the heteroskedasticity test by using the ARCH test in order to see if the model has got a heteroskedasticity and our hypothesis would be like this;

H0: there is no heteroskedasticity.

H1: there is heteroskedasticity.

By applying the arch test we accept our null hypothesis and reject the alternative. If we look at the probability, it is bigger than 5% level of significance and this shows us that there is homoscedasticity in our model. Finally I can say that my model is a good fit.

Heteroskedasticity test

 Table 5.9: Diagnostic Test

Test	F statistic	Prob f
Arch	1.30708	0.2641

Source: computed by Eviews

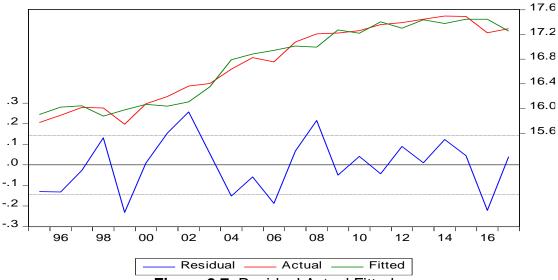


Figure 2.7: Residual Actual Fitted

Source: Eviews 9

In this graph it shows us how Residual, Actual and Fitted is. The residual regression it seems that it has got a high period of positive value to pursue by a high period of negative values implementing a powerful residual proof of serial correlation.

## **CHAPTER 6**

# SUMMARY, CONCLUSION, AND POLICY RECOMMENDATION

#### 6.1 Introduction

Having predicted the connection between tourism, inflation, urbanization and financial development in Turkey, in this section, it gives the conclusion of the investigation and analysis that has been gathered in my study and policy recommendation.

#### 6.2 Summary and Conclusion

The study investigates the connection between tourism, inflation, urbanization and financial development in Turkey from the period of 1995 till 2017, with 23 observations which is pretty enough to develop the analysis. Based on this background, we develop in our literature review to support my argument. We analyzed the literature by starting the dependent variable which is tourism and other independent such as inflation, financial development, and urbanization. In the literature review, we also examine those variables towards the economic growth in each of them.

Furthermore, to determine that variables in our time series data we use ordinary least square by taking tourism as dependent and what we found is that inflation and urbanization have a negative impact on tourism, while financial development and the constant have a positive relationship with tourism and also the probability is statistically significant except the

urbanization and the constant, then correcting model I eliminate the constant and the variables became statistically significant in 5% level of significance.

While I also estimate inflation and made dependent variable only tourism has got a negative impact on inflation and also tourism is statistically significant and another variable is statistically insignificant. In co integration test, we found that there are at least two co integration equations and this means that there is a long-run relationship between the variables. Also I examine the normality test, and it shows that the null hypothesis of data is normal and accepts 5% level of significance since the probability is greater than 5%, also I found the Breusch-godfrey test that there is no serial correlation in the model and accepts the null hypothesis.

In heteroskedasticity test, we accept the null hypothesis which is there is no heteroskedasticity and reject the alternative because the probability value is bigger than 5% and it shows us there is homoscedasticity in our model and it is good for our model.

On the other hand, the units root estimation I chose the level and intercept than the model has unit root that means it is non stationary because the t-statistics were lower than all level of significance and the probability is bigger than 5% on this case we accept the null hypothesis and reject the alternative hypothesis, while in the first difference in augmented Dickey-Fuller test in the model is stationary because the t-statistics is greater than 1%, 5%, and 10% and this time we reject the null hypothesis and accept the alternative, according to this two estimation I would recommend to take the second one which is the first difference which series is stationary.

The Tourism in Turkey was increasing year by year as I mentioned before from 1990 till 2017 and this led the tourism revenue also increase and this is good for the country they estimated the Tourism revenue value of 1234.15 million from 1990 until 2014 and they achieved 4947 million august of 2014, while inflation was decreasing from 1990 till 2017 and it seems when inflation decreases the tourism increases and this made they can affect negative way.

Then again, the financial development was increasing from 1990 till 2017 same as tourism and they affect each other positive way. Finally, urbanization also increased from 1990 to 2017 and in 1927 and 1950 there was a great level of Turkish population stayed ruled areas after.

## 6.3 Policy Recommendation

This study analyses the relationship between Tourism, inflation, financial development, and urbanization. Those variables have got benefit to the country and can increase the economic growth in Turkey and make changes toward the financial, although Tourism has a negative impact on inflation and urbanization. The governments of Turkey should monitor and examine the economic stability in the country, gather some researches on economic issues, also figure out the revenue improving and create a recommendation to advance investment made by the private and public segments. The high economic growth drives to goes down the unemployment rate in 2017, while the unemployment rate dramatically increases from 11 % to 12.5% in May (World Bank).

In August 2018 the government authority made regulatory improvement went for divining liquidity and keeping away from market theory. The inflation occurs in August led that the price to increase till now the price is the same and there is no big change and the government decided to make some changes for the prices of food if it is vegetable and fruits. The government starts to sell the vegetable to the people with a low price this starts in February; also, this action may decrease the price of people who sell the food in the market, and the inflation may decrease. Food inflation in turkey reaches 36% percent according to the previous year. The poverty also decreased from 36.5% in 2003 but in 2017 the percentage becomes 9.3% and this poverty reduction happens because of the economic growth of the country was so good in those years. Previous years it was a time where economic stress rises in turkey that was involved macroeconomic imbalance, foreign exchange rate and political tension with the US and this macroeconomic imbalance influences the

emerging market and the macroeconomic imbalance includes higher inflation, policy weakness and also high deficit.

The Central Bank of Turkey has to concentrate on different policy measures to maintain the steadiness and command of the tourism, inflation, urbanization, financial development, and foreign exchange market through the following:

□The government should improve the infrastructure outlook of the country	to
corporate with other tourist attractive countries.	

	Maintain	and	control	the ir	nflation	rate i	n the	country	and	regulate	the	policy
in	order to	decre	ease it.									

$\BoxTc$	ourism	will	bring	about	emp	lo۱	<b>vment</b>	entre	preneur	ship.
						,	,			

☐ The influence of foreign currency increases the value of the lira through efficient and effective tourism development.

☐ Monetary policy should measure and control the money supply in order to raise the value of the Turkish lira.

☐ Implement the connection between the debt and the financial system.

The study shows that inflation and urbanization are affecting tourism negatively. And this made an issue about the growth of the economy in the country and the foreign currency. Inflation increases because of the financial crisis in Turkey which happened in 1994, 2001, 2009, and 2018 which most of the years was currency crisis and debt problems (CBRT). The Turkish government increases the interest rate because if we look the interest rate it was decreased year by year, although when they increase it did not change a lot but it is crucial to monitor the interest rate in the country. The government should try to formulate monetary policies so as to maintain the strength of the Turkish in terms of controlling not only price levels but also money supply in curbing the effect of inflation.

In conclusion, the tourist that are coming in Turkey affects the positive and negative way to the country if it is the increasing financial development or influencing the inflation and this happens because of the demand of the people goes up and this lead that price of the goods and services increase. The outcome revealed that there is long-run co integration between tourism and, inflation, urbanization and financial development. The result also showed that an increase in tourism tends to cause a decline in inflation rate and urbanization in Turkey. Financial development began to increase drastically, which caused a quick increase in urbanization.

Developing an urban population and enhancing financial development may prompt a rise in vitality utilization. (Hanck and Bayer, 2013) combined test that shows Tourism, financial development, and economic growth are co integrated and have a long-run relationship. The best policy to manage and keep the financial crisis of the country is to monitor the inflation rate, interest rate, urban population growth, exchange rate regime. Although some of the countries fail the exchange rate regime due to external shock. In our model we found that there is a causal relationship between tourism and financial development or we can say that there is bidirectional relationship between them as (Hatemi and Ng, 1993) examine and found that there is a causal relationship between tourism and financial development, On the other hand tourism, inflation and urbanization affect negatively and it shows that they don't influence each other a positive way.

#### 6.4 Limitation and Future Direction

Further studies should be gathered to look at the overall Turkish financial asset to improve its domestic outlook to appeal foreign investments and boost the value of the lira. Moreover when the tourist increases the price of the goods and services was also increasing. Therefore, directions in the future should be geared towards looking at the consumer price index and other macroeconomic variables. The use of time series that we estimate or evaluate in our data is annual data, for the future studies; annual data can be useful and maintain more precise outcomes than the quarterly data. If we take our data quarterly the model would be significant according to the probability value but there would be heteroskedasticity in our model and it is not good also there would a serial correlation in the model that is why I prefer the annual data in our model. However, the limitations of the study are basically on the literature that conjointly explores more about tourism, inflation, urbanization, financial development, and economic growth broader perspective on the capacity of the study.

#### REFERENCES

- Alper Aslan (2016) Does tourism cause growth? Evidence from Turkey, Current Issues in Tourism, 19:12, 1176-1184, DOI: 10.1080/13683500.2015.1015970.
- Arunatilake et al, (2001) the economic cost of the war in Sri Lanka, World Development, 29, 1483–500.
- Atkins, F. J. and Serletis, A. (2003) Bounds tests of the Gibson paradox and the Fisher effect: evidence from low frequency international data, The Manchester School, 71, 673–9
- Alexander, A. A., Andow, A. H., & Danpome, M. G. (2015). Analysis of the main determinants of inflation in Nigeria. *Research Journal of Finance and Accounting*, 6(2), 144-156.
- Bender, K. A., Neumann, R. M., & Skåtun, J. D. (2006). Unemployment and other measures of labor market inefficiency: a comparison of UK and US labor markets 1931–96. *Economic Inquiry*, *44*(4), 629-643.
- Chang, T., Fang, W., & Wen, L. F. (2001). Energy consumption, employment, output, and temporal causality: evidence from Taiwan based on cointegration and error-correction modelling techniques. *Applied Economics*, 33(8), 1045-1056.
- Demir, C. (2004). A profile of Turkish tourism. *International Journal of Contemporary Hospitality Management*, *16*(5), 325-328.
- Drakos, K., & Kutan, A. M. (2003). Regional effects of terrorism on tourism in three Mediterranean countries. *Journal of Conflict Resolution*, *47*(5), 621-641.
- Enders, W., & Sandler, T. (1991). Causality between transnational terrorism and tourism: The case of Spain. *Studies in Conflict & Terrorism*, *14*(1), 49-58.

- Enders, W., Sandler, T., & Parise, G. F. (1992). An econometric analysis of the impact of terrorism on tourism. *Kyklos*, *45*(4), 531-554.
- Engle, R. F., & Yoo, B. S. (1987). Forecasting and testing in co-integrated systems. *Journal of econometrics*, *35*(1), 143-159.
- Feridun, M. (2008). Currency crises in emerging markets: the case of post-liberalization Turkey. *The Developing Economies*, *46*(4), 386-427.
- Feridun, M., & Sezgin, S. (2008). Regional underdevelopment and terrorism: the case of south eastern Turkey. *Defence and Peace Economics*, 19(3), 225-233.
- Feridun, M., & Shahbaz, M. (2010). Fighting terrorism: are military measures effective? Empirical evidence from Turkey. *Defence and Peace Economics*, *21*(2), 193-205.
- Fleischer, A., & Buccola, S. (2002). War, terror, and the tourism market in Israel. *Applied Economics*, *34*(11), 1335-1343.
- Goldstone, J. A. (1984). Urbanization and inflation: lessons from the English price revolution of the sixteenth and seventeenth centuries. *American Journal of Sociology*, *89*(5), 1122-1160..
- Groenewold, N., & Tang, S. H. K. (2007). Killing the goose that lays the golden egg: institutional change and economic growth in Hong Kong. *Economic Inquiry*, *45*(4), 787-799.
- Gunduz\*, L., & Hatemi-J, A. (2005). Is the tourism-led growth hypothesis valid for Turkey?. *Applied Economics Letters*, *12*(8), 499-504.
- Kara, A. H., Ogunc, F., & Sarikaya, C. (2017). Inflation dynamics in Turkey: A historical accounting (No. 1703). Research and Monetary Policy Department, Central Bank of the Republic of Turkey.
- Halicioglu, F. (2007). Residential electricity demand dynamics in Turkey. *Energy economics*, *29*(2), 199-210.

- Ivanov, S., & Webster, C. (2007). Measuring the impact of tourism on economic growth. *Tourism Economics*, *13*(3), 379-388.
- Kaplan, M., & Celik, T. (2008). The impact of tourism on economic performance: The case of Turkey. *The International Journal of Applied Economics and Finance*, 2(1), 13-18.
- Kumar, R. R. (2014). Exploring the role of technology, tourism and financial development: an empirical study of Vietnam. *Quality & Quantity*, 48(5), 2881-2898..
- Nas, T. (2008). Tracing the Economic Transformation of Turkey from the 1920s to EU Accession. BRILL.
- Van Der Ploeg, J. D. (2010). The food crisis, industrialized farming and the imperial regime. *Journal of Agrarian Change*, *10*(1), 98-106.
- Shahbaz, M., Kumar, R. R., Ivanov, S., & Loganathan, N. (2015). Nexus between Tourism demand and output per capita with relative importance of trade and financial development: A study of Malaysia.
- Morley, B. (2006). Causality between economic growth and immigration: An ARDL bounds testing approach. *Economics Letters*, *90*(1), 72-76.
- Naidu, S. (2017). Exploring the dynamic effects of urbanization and real effective exchange rate on tourism output of Singapore. *Tourism Analysis*, 22(2), 185-200.
- Narayan, P. K. (2004). Fiji's tourism demand: the ARDL approach to cointegration. *Tourism Economics*, *10*(2), 193-206.
- Narayan, P. K., & Smyth, R. (2004). The relationship between the real exchange rate and balance of payments: empirical evidence for China from cointegration and causality testing. *Applied Economics Letters*, *11*(5), 287-291..

- Narayan, P. K., & Smyth, R. (2005). Electricity consumption, employment and real income in Australia evidence from multivariate Granger causality tests. *Energy policy*, *33*(9), 1109-1116.
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of applied econometrics*, *16*(3), 289-326.
- Sbia, R., Shahbaz, M., & Ozturk, I. (2017). Economic growth, financial development, urbanisation and electricity consumption nexus in UAE. *Economic research-Ekonomska istraživanja*, 30(1), 527-549.
- Rodoplu, U., Arnold, J., & Ersoy, G. (2003). Terrorism in Turkey. *Prehospital* and Disaster Medicine, 18(2), 152-160.
- Ohlan, R. (2017). The relationship between tourism, financial development and economic growth in India. *Future Business Journal*, *3*(1), 9-22.
- Concepcion, S., Digal, L., Guiam, R., De La Rosa, R., & Stankovitch, M. (2003, December). Breaking the links between economics and conflict in Mindanao. In *Waging Peace'Conference, Manila*..
- Burak, S. A., Dogan, E., & Gazioglu, C. (2004). Impact of urbanization and tourism on coastal environment. *Ocean & Coastal Management*, *47*(9-10), 515-527..
- Naidu, S., Chand, A., & Pandaram, A. (2017). Exploring the nexus between urbanisation, inflation and tourism output: empirical evidences from the Fiji Islands. Asia Pacific Journal of Tourism Research, 22(10), 1021-1037..
- Arslan, Y., & Ceritoğlu, E. (2013). Quality growth versus inflation in Turkey. *Emerging Markets Finance and Trade*, *49*(2), 31-43.
- Yaya, M. E. (2008). Turkish tourism industry, terrorism, and warfare. *Available at SSRN 1083793*.

## http://www.worldbank.org/en/publication/gfdr/data/financial-structuredatabase

https://data.worldbank.org.

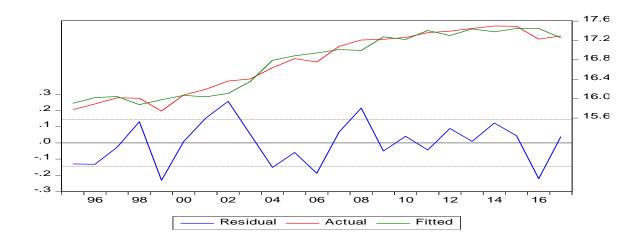
https://www.tcmb.gov.tr/

## **APPENDICES**

Method	Statistic	Prob.**
ADF - Fisher Chi-square	60.8290	0.0000
ADF - Choi Z-stat	-6.48683	0.0000

Method	Statistic	Prob.**
PP - Fisher Chi-square	105.471	0.0000
PP - Choi Z-stat	-8.77928	0.0000

<sup>\*\*</sup> Probabilities for Fisher tests are computed using an



#### **OLS MODEL**

Dependent Variable: LOG(TOURISM)

Method: Least Squares
Date: 04/01/19 Time: 22:25

Sample: 1995 2017 Included observations: 23

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C LOG(INFLATION) LOG(URBANIZATION) LOG(FINANCIAL_DEV		0.056522 0.810948	27.20621 -7.934262 0.664914 4.591472	0.0000 0.0000 0.5141 0.0002
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic	0.953999 0.946735 0.143836 0.393085 14.16047 131.3435	Mean depen S.D. depend Akaike info d Schwarz crite Hannan-Quir Durbin-Wats	ent var riterion erion nn criter.	16.74679 0.623227 -0.883519 -0.686042 -0.833854 1.832650

Dependent Variable: TOURISM

Method: Least Squares

Date: 01/18/19 Time: 19:12

Sample: 1995 2017

Included observations: 23

Variable	Coefficien t	Std. Error	t-Statistic	Prob.
INFLATION	-201896.0	1066745.	-6.445298	0.0000
URBANIZATION	7045756.		6.604911	0.0000
FINANCIAL_DEV	349447.3		7.555557	0.0000
R-squared	0.926582		pendent var	22175957
Adjusted R-squared	0.919240		endent var	11857517

# Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.770017	Prob. F(2,15)	0.4805
Obs*R-squared	2.048408	Prob. Chi-Square	(2)0.3591

## Heteroskedasticity Test: ARCH

F-statistic	0.236923	Prob. F(2,17) 0.7916
Obs*R-squared	0.542349	Prob. Chi-Square(2)0.7625

#### **PLAGIARISM REPORT**

# EXPLORING THE NEXUS BETWEEN TOURISM, INFLATION, URBANIZATION AND FINANCIAL DEVELOPMENT IN TURKEY.

#### **ORIGINALITY REPORT**

	Similarity by sources	
SIMILARITY INDEX		
	Internet Source:	16%
000/	Publications:	14%
<b>20</b> %	Student Paper:	14%

#### PRIMARY SOURCES

4% match (publications)

Mete Feridun. "Impact of terrorism on tourism in Turkey: empirical evidence from Turkey", Applied Economics, 10/14/2010

1% match (Internet from 13-May-2019)

https://www.tandfonline.com/doi/full/10.1080/10941665.2017.1360923

1% match (student papers from 04-Dec-2018)

Submitted to University of Venda on 2018-12-04

1% match (Internet from 09-Mar-2016)

http://red.nrb.org.np/publications/working\_papers/NRB\_Working\_Paper--NRB-WP-22-June\_2014;Impact\_of\_Bank\_Credit\_on\_Economic\_Growth\_in\_Nepal--Neelam\_Timsina.pdf

< 1% match (Internet from 24-Mar-2015)

http://archive.lib.cmu.ac.th/full/T/2554/econ21054va\_app.pdf

< 1% match (Internet from 10-Mar-2016)

http://nrb.org.np/international\_conference/2015/pdf/NRB\_Intl\_Conference\_2015\_Vol\_II.pdf

< 1% match (Internet from 04-Nov-2017)

https://mpra.ub.uni-muenchen.de/67226/1/MPRA\_paper\_67226.pdf

< 1% match (Internet from 28-Feb-2017)

https://www.pef.czu.cz/dl/48118

#### **ETHICS COMMITEE APPROVAL**



### BELIMSEL ARAŞTIRMALAR ETİK KURULU

05.07.2019

Sayın Nasteha Abdimain Aden

Bilimsel Araştırmalar Etik Kurulu'na yapmış olduğunuz "Exploring the Nexus between Tourism, Inflation, Urbanization and financial development in Turkey" başlıklı proje önerisi, sadece ikincil kaynak kullanıldığı için Etik Kuruluruna girmesine gerek yoktur. Bu yazı ile birlikte sadece ikincil kaynak kullanmak şartıyla araştırmaya başlayabilirsiniz.

Doçent Doktor Direnç Kanol

Bilimsel Araştırmalar Etik Kurulu Raportörü

Dirent Kanol

**Not:** Eğer bir kuruma resmi bir kabul yazısı sunmak istiyorsanız, Yakın Doğu Üniversitesi Bilimsel Araştırmalar Etik Kurulu'na bu yazı ile başvurup, kurulun başkanının imzasını taşıyan resmi bir yazı temin edebilirsiniz.