

Economic Reasons Behind the Decline of the Ottoman Empire

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Preface

This thesis is written by Erkut Duranoglu and Guzide Okutucu, two M.Sc. students at Norwegian School of Economics and Business Administration (NHH), under the supervision of Associate Professor Stig Tenold. The aim of answering the question of "How did the Ottoman Empire economically decline?" is to show, the domestic and international reasons of decline in terms of economic aspects. Although the authors considered comparing Ottoman economic history with today's modern Turkish economic history, it is not included in this study since there was a time limitation for preparation.

Eleven main economic factors that influenced the decline of the empire are analyzed in the "Analysis" part. While some of these factors had global effects, some of them were specific to the Ottoman Empire.

In the first part of the thesis; the part titled with "Research Design", the aim of the paper is discussed in details with important questions to be answered throughout the paper.

After the research design part, "Theoretical Background" of the paper is prepared in order to follow the paper in the light of the relevant theories of economics.

Before the analysis part of the thesis, in the "Introduction" part, the reader can find a brief history of the Ottoman Empire starting from the 13th century up to 17th century including a brief explanation of the empire's longevity and the developments in the decline period of the empire.

Limitations that the authors came across during the writing process and further research suggestions are mentioned in the "Limitations and Implications for Further Research" part.

At the end of the paper, the reader can find the "Conclusion" part where authors discuss and weigh the various points that they described.

Abstract

This study addresses the economic reasons of the decline and fall of the Ottoman Empire. On the contrary to the previous researches, by undertaking both global and domestic developments, the paper examines the decline of the empire from an economical point of perspective. Although international developments such as industrialization in European countries, pressure on the Ottomans in terms of integrating with the world economy, global economic factors like depressions and wars, as well as domestic factors such as weaknesses of the central government in rural areas, traditional style of governing and structure of economic institutions along with demographic characteristics of the empire had great influence on the decline, the main reason is found to be the inability of the empire to adapt itself to the both internal and external changes and not being resilient which resulted in significant economical trauma.

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1. Glossary

Ayan: The term ayan was used in the Ottoman Empire to refer to a variety of elites, particularly landed notables in either cities or the countryside.

Beylik: were small Turkish emirates governed by Beys, roughly translated as "Lord", which were founded across Anatolia at the end of the 11th century in a first period, and more extensively during the decline of the Seljuk Sultanate of Rûm during the second half of the 13th century.

Duyun-i Umumiye: (Office of Public Debt) Established in 1881 that oversaw tax collection and debt payments of the Ottoman Empire.

Enderun: was a free-boarding school for the Christian *Millet* (captive people) of the Ottoman Empire, forced conscription and conversion to Islam. Enderun was fairly successful in this forceful transculturation of students, which produced many Ottoman statesmen. Enderun School functioned strictly for bureaucratic purposes, and ideally the graduates were permanently devoted to government service and had no interest in forming relations with lower social groups.

Esham: was equivalent to a long-term loan, making it possible for the Ottomans to stave off foreign indebtedness until the 19th century.

Itizam: was a form of tax farm that appeared in the 17th century in Ottoman Egypt. Itizams were sold off by the government to wealthy notables, who would then reap up to five times the amount they had paid by taxing the peasants and extracting agricultural production

Inebahti: The five-hour battle which was fought at the northern edge of the Gulf of Patras, off western Greece, where the Ottoman forces sailing westwards from their naval station in Lepanto met the Holy League forces, which had come from Messina, on the morning of Sunday, 7 October 1571. The battle gave the Holy League temporary control over the Mediterranean, protected Rome from invasion, and prevented the Ottomans from advancing into Europe. This was the last major naval battle to be fought solely between rowing vessels.

Islahat: It means 'reform' in Ottoman language.

Kaime: was a handwritten document issued in 1840 in denominations of 500 *kurus* (approximately 4.5 British pounds).

Kurus: is a Turkish currency subunit, which equals to 40 *para* in Ottoman history. Since 2005, one new Turkish lira is equal to 100 kuruş.

Malikane system: It is a system in which the revenue source began to be farmed out on a lifetime basis in return for a large initial payment to be followed by annual payments

Millet: is an Ottoman Turkish term for a confessional community in the Ottoman Empire

Miri mubayaa: is a policy imposing a kind of tariff to facilitate the supply of goods and services for the Ottomans at a price usually lower than the market levels.

Narh lists: are the lists including the prices of goods and services, which were determined by the government

Nizam-i Cedid: (new order) was a series of reforms carried out by the Ottoman Empire sultan Selim III during the late 18th century in a drive to catch up militarily and politically with the western powers.

Para: is an old monetary unit, which equals to 1/40 of *kurus*.

Riba: means usury and is generally forbidden in Islamic economic jurisprudence.

Sened-i Ittifak: (The Alliance Treaty) was an agreement with ayans including some constitutional attributions.

Shi'ism: is the second largest denomination of Islam, after Sunni Islam

Sipahi: was the name of several Ottoman cavalry corps.

Sunni: is the largest denomination of Islam following Prophet Muhammad's practices

Tanzimat: It means reorganization of the Ottoman Empire, which was a period of reformation that began in 1839 and ended with the First Constitutional Era in 1876.

Timar: is a land granted by the Ottoman Sultans between the 14th and 16th centuries. The revenues produced on this land acted as compensation for military service.

Turkmen: are Turkic people located primarily in the Central Asian states of Turkmenistan, Afghanistan, northern Iraq and northeastern Iran.

Ulema: It refers to the educated class of Muslim legal scholars engaged in the several fields of Islamic studies

Yeniceri: (janissary) Comprised infantry units that formed the Ottoman sultan's household troops and bodyguards.

2. Research Design

2.1 Research Aim and Objectives

The Ottoman Empire stood at a crossroads of intercontinental trade, stretching from the Balkans and the Black Sea region through the present day Middle East and most of the North African coast for six centuries up to World War I (WWI). In the research project, authors are aiming to examine the story behind the decline of history's one of the biggest and long standing empire from an economical point of view. This paper does not attempt to provide a comprehensive history of the Ottoman economy. Rather than attempting to be comprehensive, authors choose to be selective. In this volume, authors will concentrate on the period starting from the 17th century up until the early 20th century. The focus will be Ottoman's economic institutions, the long-term performance of the Ottoman economy and the reasons for economical decline in this particular period, especially during the 18th and 19th centuries. Although many historians argue that the Ottoman state and society showed considerable ability to reorganize and adapt to changing circumstances through selective institutional change along with the reforms of the 19th century, it is aimed to understand the effects of turbulent environment formed by both global and domestic factors.

There are two main research questions in order to achieve this objective to a satisfying degree. These are;

1. What are the effects of global developments such as industrialization, globalization, capitalism etc. on Ottoman Empire's economic decline?
2. How did the domestic factors such as traditional style of governing, structure of economic institutions and demographic characteristics of the empire etc. influence the course of its economic decline?

There are numerous aspects to be touched upon in order to answer these two main questions in an effort to understand the reasons behind economical decline. It is aimed to explain the effects of Industrial Revolution on Ottoman economy and the situation of Ottoman industry during the revolution and understand the influence of industrialization and international trade on Ottoman economic growth. Along with the developments of globalization and capitalism, it is aimed to comprehend the effects

of these developments on Ottoman Empire in terms of foreign direct investments, international trade agreements, and foreign trade policies etc. Authors also aim to analyze how Ottomans responded to the developing European military and political power in the 19th century and explore if the efforts of reforms were enough to adapt to changing circumstances. Apart from these, the effects and results of long depression and after that World War I are going to be analyzed.

Regarding domestic factors, authors aim to explore the principles of Ottoman economic system that the empire relied upon and effects of these principles on Ottoman economy. In that respect, it is important to understand the characteristics of Ottoman economic and fiscal institutions and the effects of these institutions on Ottoman economy. Since debts and debasements played an important role on Ottoman economic history, genuine ways of generating income and their effects are going to be discussed. Authors also try to explain the situation of prices, inflation and wages in the Ottoman Empire. The reasons of price movements and its results are going to be discussed. Last but of course not the least, the effects of demographic factors in terms of human capital, ethnicity, religion etc. of Ottoman Empire on its economy are going to be explored.

Throughout the paper answers to these questions will be sought in order to achieve the set objective. By doing so, the authors hope that this study will shed light on the Ottoman history and its reasons for decline from an economical point of perspective. Among many studies approaching to the same issue from political and social perspectives, this study is important due to its relevance to economical observations of the empire.

3. Introduction

3.1 Brief History of Ottoman Empire

During its foundation in the late 13th century, Ottomans were a small Sultanate (*beylik*) who dedicated itself to the holy war against Christianity. This unimportant small Sultanate was getting closer to the borders of Byzantine Empire and annexed those lands to its lands. In 1517, Ottomans became the most powerful country among Islamic countries by conquering Arabic lands. Everlasting military achievements in the area extended from the Middle Europe till Indian Sea, gave the Ottoman Empire a powerful place during the royalty of the Suleiman I (1520-1566) (Inalcik, 2006, p.9).

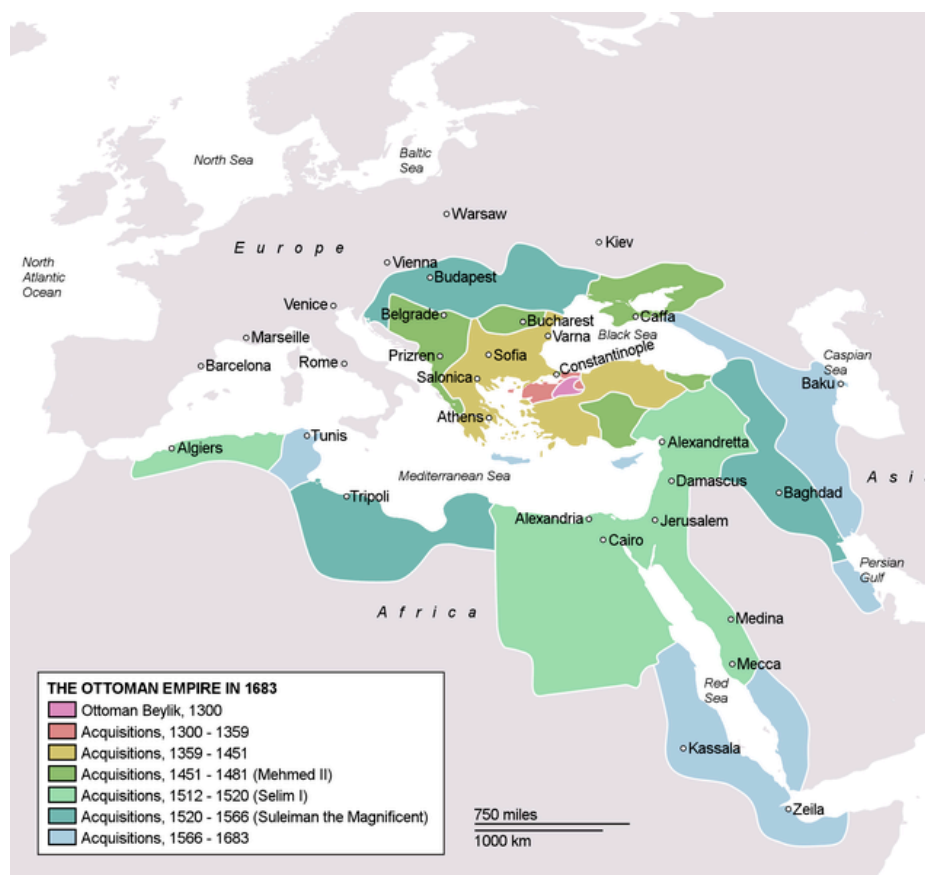


Figure 1: Ottoman territories acquired between 1300 and 1683

Source: http://en.wikipedia.org/wiki/Ottoman_Empire

From the Balkans and the Black Sea to the Syria, Mesopotamia over Anatolia including Basra Gulf, Egypt and North Africa; Ottoman Empire was holding the most important international trade routes and crossroads. During the period between 17th

and 18th centuries, the population was over 30 million including many different ethnic origins. It is naturally expected of this fact to attract attention of many historians. However, long wars during the 17th century, turned the balance against Ottoman but in favor of Europe. In the 18th century, the empire became dependent to the Europe in terms of economics and politics (Inalcik, 2006, p.9).

Unfortunately, for many years economic historians were neglecting the structure of this huge empire's land policies, factories, economic policies and the daily life of its society. Thus longevity and durability of this empire remained for most of the people as a paranormal fact or like mystery.

It would be proper if we consider this giant empire lived for six hundred years as a bureaucratic agricultural empire. All of its economical institutions and policies formed according to the priorities of the central bureaucracy.

Unlike others, the Ottoman Empire was a so desirable piece of property that it remarkably remained independent until 1900. Holding the whip hand of the large part of Asia and Europe was the most interesting development in the history. In the 13th century, Ottomans were ruling only one of the *Turkmen beyliks* that surrounded the Byzantine Empire during its period of decline. In two centuries, Ottomans established an empire including not only Southeastern Europe and Byzantines lands in Anatolia but also, Hungary and Arabian lands (Shaw, 2004, p.17). The empire stood on important trade routes, and it was the site of the most important Christian religious shrines. Besides, it was a great potential as a producer of agricultural products and raw materials for the markets of any colonizer. Therefore, we should first ask, "how did the Ottomans survive so long?" (McCarthy, 2001, p. 6) before answering the question, "how did the Ottomans become economically backward? "

3.2 Secrets of Longevity

Not only in the 19th century but also before *Tanzimat* (first reform act, which will be mentioned in the later chapters), central government was searching for solutions to both internal and external threats with its flexible, pragmatic and negotiating traditions. The government was able to pull uprising regions into their own coalitions. For example, Karen Barkey pointed out that during the civil disorder of rebellions in the 17th century, Ottomans achieved to restore order by acting flexible and utilizing its negotiating abilities (1994).

Flexibility and pragmatism means that in the modifications of the institutions and the policies applied; Ottomans were able to conduct without being dependent to the strict rules, customs and traditions, religion, old behavioral patterns and hostilities. In the Anatolia and the Balkans where Muslims and Christians, Turkish and Greek languages live together; their adaptation ability and gathering different talents from many different sources were the crucial factor behind Ottoman's success and longevity (Pamuk, 2009, p.3).

Ottomans embraced firearms more effectively and earlier than its neighbors. Ottomans were untroubled to learn from other nations and borrowing their institutions while conquering and expanding the empire. They managed to take local elites' support by negotiating in the places where the empire cannot establish full sovereignty. In another words, contrary to expectations, Ottomans followed flexible and pragmatic behavioral patterns rather than following religious rules (Heath, 2003 & Kafadar, 1995).

It may well be argued that flexible, pragmatic and negotiator Ottomans achieved to move their empire into modern era while many other European and Asian states collapsed. Pamuk do not argue that Ottomans performed necessary institutional changes on the way of capitalism before the 19th century however thanks to Ottoman society and bureaucracy, which carried out some changes led to improvements starting before *Tanzimat*, Ottoman Empire existed for longer in the history. It is important to note that although some of the institutions in the empire altered, traditional genuine Ottoman organizations such as government ownership on land, trade guilds, averted private capital accumulation remained the same until the 19th century (2009, p.3).

3.3 The Decline

In the last days of Suleyman I, international conditions became inconvenient for Ottomans. Conquest of Cyprus in 1570-1571 was the last military achievement of Ottomans. Between 1578 and 1606, the empire battled with Iranians in the East and Middle Europe, and especially with Austro-Hungarians in the West. Those exhausting wars caused Ottomans to become weaker. They lost their sovereignty in Mediterranean Sea after Lepanto (*Inebahti*) war. Moreover, Ottomans also lost their

control over North Africa. Therefore, naval forces in Tripoli, Tunisia and Algeria were no more acting under the rule of sultan and these places became the nest of pirates who were acting in favor of their own priorities. Starting from the beginning of 17th century, the central government was losing control over distant states. In the Black Sea region, the empire couldn't oppose to Kazakhs. They concentrated their pressure on coasts; and burned down Sinop in 1614 and Yenikoy in 1625. There was no security in the Black Sea region, which was the Ottomans' one of the most important economic vessels, and Ottomans' volume of trade and number of harbors started to decline (Inalcik, 2006, p.46-47).

Another factor that influenced the Ottoman Empire's economy was the motivation of looking for new routes to transport silk from Iran to Europe. Anatolia was the passing route for Iranian silk and European wools. British fabrics were sent to Middle Asia by passing through Anatolia until the end of the 16th century. The Ottoman Empire obtained considerable amount of income from custom duties of this trade. However, when Shah Abbas (king of Iran) challenged Ottomans in 1603, he restricted sales of silk to Ottomans, and in order to prevent the scarcity of gold and silver provided from this trade, he started to sell silk directly to Europe through the Indian Sea. By this restriction, Ottomans lost its status in silk trade, which was one of its major income sources. In addition to the transition of Indian trade to Atlantic Ocean in which Britain and Holland were dominant, trade route in Europe and Middle Asia began to be controlled by Russia. Thus, the control of the Ottoman Empire became limited with Balkans and Arabian regions in the beginning of the 17th century (ibid.).

On the contrary, professor Halil Inalcik (2006) claims that the reasons for the decline of the Ottoman Empire were mainly domestic factors (p.51). Until 1580s, Ottomans were seen as harmonic and stable within their own system and ideals. Maintaining the ratio between gold and silver in coins was an important indicator of economic and social stability and Ottomans achieved that for seventy years. Producer class knew how much tax they would pay and officers protected poor local people. Central government was powerful. Every member of every social class was recorded in books. The empire was self-sufficient in terms of its basic needs. The main imports were luxury goods like Iranian silk, European wools and Russian fur. However, in thirty years, this glorious structure would be shaken from its foundation. Managers

who had future concerns started to oppose to authority of the sultan. They didn't take law into consideration and stole from the national treasury. Harshness, profiteering, bribe and other corruptions were spread with the increase in domestic chaos (ibid.). Increase in population from the beginning of the 16th century and dissolution of *timar* system (which will be explained in the later chapters) at the end of this century, ignorance attitude to the developments in Europe brought with the Industrial Revolution and rebellions in many minority regions with humanism activities in Europe were other factors that affected the empire on the course of its decline.

4. Theoretical Background

4.1 Literature Review

The basic line of reasoning was supported by secondary data and the findings were analyzed through various relevant theories and frameworks from mainly literature of economics.

The theoretical line of reasoning is built on understanding the factors, their interactions affecting economic growth and explaining the reasons behind why the nature of the development process in some nations are slow and in some are fast and what may cause an economical decline. In order to do so, authors used several different growth theories with the support of institutional economic and international trade theories. The origins of the literature on economic growth took root from Arabia in 1377. The relationship between an increase in population and economic growth was first analyzed by the Arabian economic thinker, Ibn Khaldun.

After that, the modern concept of economic growth developed in Western Europe by David Hume and Adam Smith. This model of growth remained the predominant model of Classical Growth until 1817. David Ricardo modified this theory by adding diminishing returns to land and the effects of machinery in 1817. During the period between 1867-1894, Karl Marx modified the Classical Theory once again. He envisioned the future of capitalism in his work, however his frightening vision did not carry over into neoclassical theory. In the General Theory of J.M Keynes in 1936, the theory of demand-determined equilibrium was developed. However, Keynes did not extend his theory into a theory of economic growth. The first to come up with an extension was Sir Roy F. Harrod with Evsey Domar who introduced the "Harrod-Domar" Model of growth in 1939 and 1946 independently. This model is used to explain an economy's growth rate in terms of level of saving and productivity of capital. Robert M. Solow (1956), Trevor Swan (1956) and, a bit later, James E. Meade (1961) criticized this theory and they claimed that the capital-output ratio of the Harrod-Domar model should not be regarded as exogenous.

In fact, they proposed a growth model where the capital-output ratio was precisely the adjusting variable that would lead a system back to its steady-state growth path.

The resulting model has become famously known as the "Solow-Swan" or simply the "Neoclassical" growth model. Unlike the classical growth theory, neoclassical model states that advance in technology induces economic growth since it triggers saving and investment, which leads an increase in capital per hour of labor. In neoclassical growth models, the long-run rate of growth is exogenously determined by either a savings rate (the Harrod–Domar model) or a rate of technical progress (Solow model). However, the savings rate and rate of technological progress remained unexplained in this model. Endogenous growth theory, also called new growth theory, was developed by Paul Romer in 1980 as a response to criticism of the neoclassical growth model in order to overcome this shortcoming.

Apart from growth theories, the institutional economics is an attempt to incorporate a theory of institutions into economics. Strong institutions are persistently linked to economic growth according to various authors. The school of institutional economics includes famous economists such as Thorstein Veblen, Wesley Mitchell, and John R. Commons. With the development of theories, institutionalism integrated into mainstream neoclassical economics, under the title of 'new institutional economics'. Arora and Vamvakidis (2005) find that market-driven policies work better in large economies than small ones; resource-poor countries than resource-rich ones; and de-industrialized advanced economies than remote unindustrialized ones. Finally, Auty (2005) contributed about market- driven policies where market reform was incremental and endogenous.

When it comes to international trade theory, it is accepted by various economists that trade is an important stimulator of economic growth and several different models have been offered to understand and analyze patterns of trade and effects of international trade such as Ricardian model or Heckscher-Ohlin model. Authors preferred to mention about Ricardian model mostly throughout the analysis of this study.

4.2 Theories

The term "economic growth" didn't exist in early human societies, living based on hunting and gathering. According to the economist Parkin, economic growth began when societies evolved with three key institutions, markets, property rights and

monetary exchange that created incentives (2003, p.551). Then people began to specialize in producing some goods or services and trade each other. It is already known that real GDP increases when the quantity of labor and capital increases and technology advances. But the question is that, is it also true for economic growth? (Parkin, 2003, p.557). In development process, every nation struggle to achieve economic development since it is an important element, and there are some factors or their interactions that may affect economic growth. In this part of this paper, three different growth and economic theories will be examined, which may partially highlight the reasons behind why the nature of the development process in some nations are slow and in some are fast (Todaro, 1997, p.69).

4.2.1 Classical Growth Theory

Classical growth theory states that when the real GDP per person rises above the subsistence level, which is a minimum wage rate that one can survive, a population explosion will occur thus real GDP per person is supposed to turn back to the subsistence level again (Parkin, 2003, p.557).

Explosion in population induces by advances in technology. Since advances in technology lead investments in new capital, labor become more productive. As labor become more productive, new start up businesses want to hire those productive labors. Therefore, rise in demand for labor leads to a rise in wages. At this stage, economic growth has occurred and everyone has benefited from it. However, according to the economists supporting the classical growth theory, this new situation is not persistent because, increase in real GDP as well as increase in real wage rate cause explosion in population (Parkin, 2003, p.557-558). More money in pockets leads to have more children. Nonetheless, this dismal effect of population growth on economic growth should be explained and viewed in another aspect. Neoclassical growth theory studied in the next part will try to give that aspect.

4.2.2 Neoclassical Growth Theory

Neoclassical model is also known as exogenous or Solow-Swan model (1956), which is an extension model of Harrod-Domar (1946). While Harrod-Domar model explains economic growth rate in terms of the level of saving and productivity of capital, neo-classical model adds two new terms, labor and technology. Unlike the

classical growth theory, neoclassical model states that advance in technology induces economic growth since it triggers saving and investment, which lead to an increase in capital per hour of labor. One of the economic influences on population growth is related with the opportunity cost of women's time (Parkin, 2003, p.559). As the wage rate and the career opportunities of women increase, the opportunity cost of having a child increases as well. Thus, having no child or fewer children becomes more preferable by the women. The second economic influence on population growth is related with the death rate. Since the developments in technology increases gradually, improvements in health care for instance lead to extend lives. As it is explained above, the two opposing factors almost cancel out each other, which means, the rate of population growth and the rate of economic growth are independent from each other (Parkin, 2003, p.559).

Technological progress is an essential factor explaining the long-term growth in Solow's model. It explains how people today are more productive than they were a hundred years ago. Technological changes throughout the years made huge contribution to increasing productivity (Parkin, 2003, p.552). Beside technology, the quantity and the quality of labor (through population growth and education) and increase in capital are the other essential factors according to the model (**figure 1**).

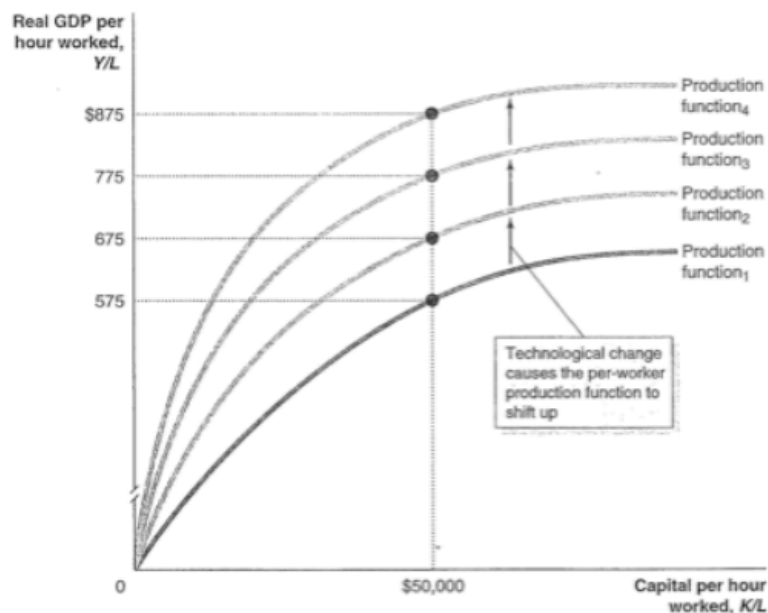


Figure 1: Technological Change versus Hour Worked

Source: Hubbard & O'Brian, 2008, p.681

The model can be explained in detail by separating economies into two; open and closed economies. In closed economies (having no external activities), if the saving

rate is low, the economic growth process is slower than when the saving rate is high in the short-run. In open economies (having foreign trade and investments), income convergence level is high since there is a capital flow from rich countries to poor countries where capital labor ratios are lower thus returns on investments are higher (Todaro, 1997, p.89). Although, the neoclassical model claims that the countries with lower starting level of real per capita gross domestic product (GDP) have higher growth rate, if these less developed countries inhibit foreign trade and investments then it may slow down the economic development process (Barro, 1997, p. 1).

As it has just studied through, in the neoclassical theory, technological change has a great influence on economic growth. The theory assumes that technological change occurs by chance and argues that, “When we get lucky, we have rapid technological change, and when bad luck strikes, the pace of technological advance slows” (Parkin, 2003, p.559). Therefore, the problem with this theory is poor explanation of how and why technological progress occurs. Besides, failure to take the effects of institutions, government, entrepreneurship and geography into account is the other missing points in the theory. To overcome these limitations of the neoclassical model, new growth theory was developed.

4.2.3 Endogenous Growth Theory

Endogenous growth theory, also called “New Growth Theory”, was developed by Paul Romer in 1980 to provide a better explanation to the sources of economic growth by providing a theory of technical progress. According to Romer, the key determinant of economic growth is accumulation of knowledge (Hubbard & O’Brian, 2008, p.684). The economist Parkin agrees and adds that, it is a source of both increased productivity and technological advance (2003, p.552). Knowledge is a capital, which does not diminish as physical capital. On the contrary, by making labors and machines more productive, it brings increasing return (ibid).

Technology still plays an important role in endogenous growth theory model as it plays in neoclassical growth theory model. However, the explanation of technological change differs in terms of outcomes. New growth theory model explains technological change as an endogenous outcome of public and private investments in human capital and knowledge-intensive industries (Todaro, 1997,

p.93). Therefore, endogenous model encourages foreign investments in knowledge-intensive industries, which help economic development.

In order to sell more than others, firms have to produce distinctive products, thus people need knowledge capital. Because it will lead to an increase in profits and profit urges competition. Competition encourages people to seek new technologies, and it is not determined by chance like neoclassical model claims. It depends on people's ability to innovate. Besides, the new growth model considers economy as a perpetual motion. Insatiable nature of mankind drives people to innovate, create new products and technologies. Advance technology leads more leisure time and higher standards of living. Furthermore, new businesses born and old ones die, which implies new and better jobs for people (Parkin, 2003, p.562).

4.2.4 Institutional Economic Theory

Recently, the economists are emphasizing the importance of institutions and institutional changes in economic growth. The theory called "the new institutional economics", which is based on the 500 years economic performance of Western Europe and the USA claims that the most important factor of economic growth and development is the framework consisting institutions directing to productive activities. By the same token, it is argued that the state has an important role to establish that legal framework. However, the economists accepted that institutional change might not be always parallel to the economic development. In the last 500 years history of societies, it is observed that institutional changes might not always be in the same direction with the capitalism and economic growth and states could be interventionist and obstructive to economic development rather than being supportive. In another words, political struggles and institutional changes do not yield results in the favor of capitalism and economic prosperity all the time, on the contrary it is exceptional if the institutional change is in favor of economic growth according to economists (Pamuk, 2009, p.2).

There are various types of explanations for the state, which may be depicted by different theories. By using a simple neoclassical theory, North (1981) described the state with the following characteristics based on the idea of a contract between the ruler (king or sultan) and his constituents:

1. The ruler trades protection and justice for revenue. The basic service that the state provides consists in the development and enforcement of a written or unwritten constitution. The constitution specifies the structure of property rights in order to maximize the rent accruing to the ruler. To achieve this, it is necessary to provide a set of public goods and services “designed to lower the costs of specifying, negotiating and enforcing contracts, which underlie economic exchange”.

2. According to North (1981), property rights are designed to permit the maximization of state’s monopoly rents. In order to collect taxes, the ruler needs tax collectors (i.e., agents). This may cause principal-agent problems and the rents of the ruler will be diminished to some extent by his tax collectors, for example, the public bureaucracy.

3. The ruler is constrained in his activities to some extent with respect to;

a. The costs of emigration to another state with more favorable living conditions.

b. The costs required overthrowing the current ruler and installing a rival who promises better living conditions.

North developed his neoclassical model of the state in order to explain two important aspects of economic history:

1. “The widespread tendency of states to produce inefficient property rights...” and

2. “The inherent instability of all states, which leads to economic change and ultimately to economic decline” (North, 1981, p. 23).

In the work of Margaret Levi, she argues that rulers are predatory because they try to extract as much revenue as they can from the population. They maximize their personal objectives, which require them to maximize state revenue. North (1981) also notes that the property-rights structure, which maximizes the social product, may not maximize the ruler’s long-term monopoly rents (p.23).

North widens his theory of state in the following sense: “The state will specify rules to maximize the income of the ruler and his group and then, subject to that constraint, will devise rules that would lower transaction costs. Non-voluntary forms

of organization will exist if profitable to the ruler...; relatively inefficient forms of organization will survive if more efficient forms threatens the survival of the ruler from within or without...; and forms of organization that have low measurement costs to the rulers for tax collecting will persist even though they are relatively inefficient” (1981, p.43). It is important to note that North assumes in this context a rational ruler. In actual fact, a ruler’s conduct cannot be predicted without enough knowledge of his subjective position (Furubotn & Richter, 2005, p. 476).

When it comes to the role of political institutions on economic system, Weingast emphasizes the fundamental dilemma as is follows:

“A government strong enough to protect property rights and enforce contracts is also strong enough to confiscate the wealth of its citizens. Thriving markets require not only the appropriate system of property rights and a law of contracts, but also a secure political foundation that limits the ability of the state to confiscate wealth” (1995, p.1).

As the theory and practice from history shows us that, the power of the rulers can be limited by political institutions (Furubotn & Richter R, 2005, p. 479).

4.2.5 International Trade Theory

In the historical development of the developing countries throughout, Africa, Asia, Middle East and Latin America, international trade has played a crucial role. Overseas sale of agricultural products or other commodities formed 25-40 percent of the monetary GNP. In addition to the export dependence of these developing countries, the influence of imports on economy cannot be denied. Import demands exceeded the capacity to generate revenues provided from exports for developing countries in time. This situation led budget deficits on the current account. In order to compensate the budget deficit, countries began to ask foreign debts and investments. However, since these debts and investments reached to critical levels, repayment couldn’t be achieved. Severe deficits in most of the developing countries led depletion in international monetary reserves, which causes slow down in economic growth. As it is stated in the traditional argument of the trade theory and development, “trade is an important stimulator of economic growth” (Todaro, 1997, p.435).

5. Analysis

Before starting to analyze the reasons behind the decline of the Ottoman Empire, it would be better to draw the boundaries of this research first. Authors' aim is not to give a comprehensive economic history of the Ottoman Empire as it is stated before. The main purpose is to analyze either internal or external elements considered as significant factors that directly or indirectly caused economical deterioration of the Ottoman Empire. It is difficult to separate and examine those factors under a certain category as international or domestic because of their complex nature. However, this paper separated and examined those factors according to their zone of influence, whether they have affected a specific region in the world or remained limited within the empire and affected the Ottoman economy. The analysis of this paper is starting with the Industrial Revolution, which was one of the most fundamental international factors behind the decline. After examining the influence of industrialization on Ottoman economy and the situation of the empire during revolution, reform efforts of the empire will be studied. Although globalization and development of capitalism was an ongoing process, their effects and results on Ottoman economy will be investigated in the aftermath of reform movements. It will be touched upon the efforts of generating income of the empire while the economical decline was deepening. Following that, the effects of the empire's debt policies and debasements on Ottoman price and wage levels will be analyzed. It will be also mentioned about the effects of long depression and devastating World War I while Ottoman economy was getting closer to the collapse. However the decline of the Ottoman Empire cannot be fully explained by considering only international factors. The importance of the effects of domestic factors should not be underestimated. Existing framework of Ottoman institutions, traditional governing styles, characteristics of demographics and social dynamics of the empire had an important role on decline as well. These factors will be also highlighted in several parts of the paper in order to comprehend the big picture of the course of Ottoman economic decline.

5.1 Industrial Revolution

The story of decline actually begins with the Industrial Revolution, which was started in England around 1750. It was a period that a significant economic growth began in the UK and a number of other countries in Western Europe. It was one of biggest change around the world, which affected many economies. Before the Industrial Revolution, the production of goods and services had relied on human or animal power. However, with the spread of mechanical power like steam engines or factories producing cotton cloth, the amount that labors could produce had increased enormously (Hubbard & O'Brian, p.674-675). Starting with England and then the other Western European countries experienced long-run economic growth with increasing real GDP per capita and living standards. But why England was the first country experienced Industrial Revolution at first hand? It could have occurred in the Middle East, but it didn't. According to the economist Douglass North, England differed in its institutions from other countries. He believes that after the Glorious Revolution of 1688, the British court system became independent of the king, which means the parliament started to undertake the maintaining private property rights, protecting wealth and eliminating arbitrary increases in taxes (Hubbard & O'Brian, p.675). By those institutional changes, entrepreneurs took incentives to create new technologies that would be used in manufacturing, mining and transportation areas.

5.1.1 Growth Models Explaining the Influence of Industrialization and International Trade on Economic Growth

Industrialization and international trade are the two most important engines for economic growth. Especially the Industrial Revolution is accepted as the key for fast growth. Beginning with the steam engine, new inventions led rise in labor productivity in this period, which was the exogenous factor of growth. Besides, during the Industrial Revolution, many countries adopted new technologies to promote developments in manufacturing sector. Due to that, the importance of agriculture was placed after manufacturing sector in most of the industrialized countries. Addition to that, in international trade, which is seen as a second important factor in growth, open economies had experienced rapid economic growth during the 19th century. In order to see the influence of industrialization and

international trade on economic growth, a simple two-sector endogenous growth model could be helpful. According to the model, those two sectors are manufacturing and agriculture. Since manufacturing sector have learning-by-doing effect, both physical and human capital accumulation is possible, thus the growth of the manufacturing sector pulls the economy with it. However, learning-by-doing effect is not existed in agricultural sector of the economy, implying no growth in technology (Wong & Yip, 1999, p.164).

5.1.2 Industrial Revolution and the Middle East

The Industrial Revolution was first turned Great Britain then other countries in Western Europe into such economies that produce finished goods with low-cost and large amounts. In the second quarter of the 19th century, some leading countries in Europe were trying to find new markets for their finished goods and rich and low-priced raw material sources. After Industrial Revolution, the relations between industrialized countries got stronger and the finished-good trade between Western Europe and third world countries was rapidly expanded. Between 1820 and 1913, the economic integration of the Middle East with the world economy had occurred. As a result of this integration, the foreign trade of Middle East grew more than fifteen times. As the foreign trade grew, significant change in production facilities occurred. In the most of the regions around Middle East, agriculture became commercialized and the remaining agricultural production was directed to export markets. On the contrary, the development in foreign trade, industry was deteriorated. Handicraft tried to stand still but it deteriorated in opposition to the competition of import products (Pamuk, 2008, p.39).

Trade was not the only way that European economies utilized to flourish, Europe also exported its capital to other countries. European equity owners invested in infrastructure activities in railways and harbors to expand the trade. Besides, the exported capital from Europe was used as debt by third world countries, along with other investments utilized for agriculture and industry, which limited direct production until the WWI (Pamuk, 2008, p.4-5). Since the debts of Middle Eastern countries taken from Europe reached to high levels, Europe could have voice in affairs about Middle Eastern economy. After all, when it is compared with Europe,

the economical growth and living standards in the Middle East was lower (Pamuk, 2008, p.40).

5.1.3 Ottoman Empire During the Industrial Revolution

If a country cannot catch up with the developments in the pattern of the trade, it cannot keep in pace with the rest of the world and produce agriculture only (Wong & Yip, 1999, p.164). That was what Ottoman had experienced during the Industrial Revolution. “If the economy is completely specialized in agriculture, then no learning-by-doing effect exist, and the home economy will have no incentive to invest in physical capital because physical capital is not used in agricultural sector” (Wong & Yip, 1999, p.179).

Ottoman industry in the 18th century was not like the explosive industrial growth occurring in Western Europe during the Industrial Revolution. Ottoman industry sometimes expanded or shrunk and at other times it remained motionless. Nonetheless, patterns of Ottoman industrial development do not show trends, which are potential symptoms of modern economic growth.

One of the reasons for the failure of the Ottoman Empire to initiate a process of economic growth, might be policies that barred such a process. The principles – provisionism, traditionalism and fiscalism – that guided the Ottoman economic system, might have hindered the introduction of new technology. However, as it was emphasized in the neoclassical growth theory, advance in technology is the key determinant of economic growth since it triggers saving and investment. By hindering the introduction of new technologies, the productivity of labor force declined so as the capital per hour of labor. As no capital means no investment, the empire couldn't catch up with developed countries.

The first principle which Ottomans relied on called provisionism was postulating the maintenance of a steady supply so that all goods and services were cheap, plentiful, and of good quality. Provisionism sought to keep the supply of goods and services to internal markets at optimum level so that there could not be any shortage. This leads to the policies, which motivates imports instead of exports. Export was not encouraged with quotas, and extra taxes but imports, by contrast, were fostered and facilitated. There were no import substitution policies such as tariffs, quotas or taxes as long as imports helped to maintain the steady supply. At times when imports

could not carry out this purpose, import substitution policies were put in operation (Genc, 1994, p.60). The *miri mübaya* regime was one of the measures in Ottoman Empire to reduce expenses. This policy imposed a kind of tariff to facilitate the supply of goods and services for the empire at a price usually lower than the market levels. This policy was not concerning imports thus an import substitution policy was only implemented when the volume of imports threatened the state's fiscal standing. Even in these times, Ottomans did not prefer to pursue strong protectionist customs since this might lead to an increase in prices on the internal market. Later in the year 1838, these policies became very limited by *Baltalimani Agreement*, which will be mentioned in details on later chapters. In the following years, the empire would encounter with huge budget deficit on the current account resulted from exceeded import demands that couldn't be provided by revenues generated from exports. As the budget deficit expanded, Ottomans began to borrow foreign debts in order to finance the deficit. According to the theory of international trade, those severe deficits in most of the developing countries including Ottomans, led depletion in international monetary reserves, caused a slow-down in economic growth (Todaro, 1997, p.435).

The second important principle that ruled Ottoman economic policy was traditionalism. It may be summarized as the tendency to maintain existing systems and conditions instead of searching for new models and alternatives to find solutions when changes occurred. There was a very-well known genuine Ottoman motto '*kadimden olagelene aykırı iş yapılmaması*', which means one should not work against what comes from the olden time. Mehmet Genc (1994) claimed in his article that this expression remained a vital component of the referential framework of the Ottoman economic system that remained unchanged during the 18th century (p.60). Fiscalism was the third principle guiding Ottoman economic system. Fiscalism was suggesting maximizing the treasury income and preventing it from falling below already-attained levels. According to Genc, increasing the income of the treasury was difficult and slow since it was parallel to the rhythm of slow increase in the production capacity of the Ottoman economy and the degree of monetization. Consequently, Ottoman fiscalism developed in the direction of preventing a fall in incomes and reducing expenses. This principle was so inflexible that it viewed all economic activity only in terms of the tax income yielded (1994, p.60).

In the 18th century industrial developments in Ottoman Empire with its three economic principles (provisionism, traditionalism, fiscalism) the state control over production increased especially in urban industrial sector. In order to avoid the pressure and limitations of the state control, producers moved to small production places in distant provinces of the empire where such controls had not yet been established. However, rural industry was always active but because of the provisionist policies of the Ottoman Empire, never had the chance to develop. Furthermore, in such rural industry where producers produced and sold finished goods in the local markets, required the possibility of exporting in order to develop. However this was only possible along with active export policy against mercantilist and protectionist west. Due to the provisionist policies, export remained always as a marginal sector that the state heavily taxed and actively hindered (Genc, 1994, p.64).

The state was not only imposing policies against development of manufacturing, but it also worked against capital accumulation that might be necessary grounds for these developments. Along with the regime of *miri mübayaa*, those producing or trading cotton, thread, iron, timber etc. were burdened. Starting from 1770s, more burdens were imposed on the manufacturers who had some accumulated capital. Ottoman state forced these producers to equip troops or provide compulsory loans when the treasury was dangerously low. Furthermore, during the period 1770-1810, when finances were in a crisis, state confiscated the inheritance of private individuals who were rich. In these conditions, which were totally against capitalist developments in the world, the obstacles to capital accumulation and investment reached to a peak (Genc, 1994, p.66). The empire temporarily provided capital by confiscating properties and inheritance of private individuals. According to the neoclassical model of the state developed by North (1981), inefficient property rights and inherent instability of the state leads economic change and ultimately to economic decline (p.23). North (1981) also notes that the property-rights structure, which maximizes the social product, may not maximize the ruler's long-term monopoly rents. If the empire would have strong political institutions, these institutions might have limited the absolute power of the ruler (sultan). Considering the role of the political institutions on economic system, with strong political institutions, the government couldn't have confiscated the wealth of its citizens. By the same token, empire would have had an appropriate system of property rights

with a law of contracts and a secure political foundation that limits the ability of the state to confiscate wealth (Weingast, 1995, p.1).

The only group, which was not affected by this destructive atmosphere, was small-scale, craft production in the local markets. These craft organizations were the predominant form of organization in Ottoman industry during the 18th century. One of the feature of this Ottoman industry in the 18th century is that, the main concentration of the production was ordinary commodity products for non-luxury consumption such as cotton and woolen cloths, food, building materials, household items, earthen-and wooden-wares. Most of the high-quality products consumed by upper-income society were imports and according to provisionism; obtaining these goods from abroad was not considered as harmful in anyway. According to the Ottoman economic principles that the state relied upon, providing a custom protection would be meaningless. Thus, Ottoman manufacturing and factories faced stiff competition from Western Europe's increasingly developed industrial products. For instance, in Ottoman woolen market around 18th century, imports from Western Europe formed nearly fifty percent of the total. The amount of imports were constantly increasing thus the price of the imported goods were continually decreasing. The imported products became more available and a lot cheaper in the empire. The survival of local manufacturing under these circumstances required strong protectionist policies as well as entrepreneurs with accumulated capitals in order to establish most advanced industrial technology and organizational forms of manufacturing (Genc, 1994, p.73). However, there had never been any policies neither protecting against imports nor supporting capital accumulation in the empire. In writing the story of Ottoman industrial development, it is clear that many important manufacturing groups diminished and disappeared in opposition to European competition during 18th century. Other industries temporarily lost customers during the high amount of imports between 1820 and 1850, but later regained their customers after adapting themselves to new conditions. Beginning from the early 1870s and continuing, there was a manufacturing revival in the 19th century's Ottoman Empire fluctuating until World War I (Quataert, 1993, p.87). However this was limited in compare to international developments and efforts might not enough to change the empire's destiny.

5.2 Reforms

Countries in Middle East carried out many reforms as a response to Europe's developing military and political power, which has occurred after the Industrial Revolution. Existence of the new technologies in military, communication and transportation areas supported these reforms (Pamuk, 2008, p.78). The period under the royalty of Mahmut II (1808-1839) was a difficult time for Ottoman Empire. During 30 years, the government tried to cope with many commotions, nationalist revolutions and wars. Especially the wars with Russia, Iran and Egypt hurt the Ottoman economy badly. This period was a crucial period in which Ottomans were entering into reforms in order to shape governing style in Western type. Before that, under the royalty of Selim III (1789-1807), they tried to form an army in Western standards but encountered by *yeniceri* (janissary) opposition. After abolishing the janissary division in 1826, the activities to form a standing army "*Nizam-i Cedid*" accelerated. In 1820s, reforms were not limited in only military area but also covered management, justice and education areas. For those reforms, Ottomans necessitated more assets. Between 18th century and 1840, half of the government expenditures were in military area. Since the share of military expenditures rose in war times, it brought a huge burden to the government. Therefore, one of the targets of the reform process was to reorganize the empire and centralize the revenues (Pamuk, 2008, p.101). During the 18th century, since Ottoman Empire necessitated the financial support of the West, the empire had to give concessions. Due to that, two main reforms were prepared.

5.2.1 The Tanzimat and Islahat Decrees (1839 – 1856)

The *Tanzimat* and *Islahat (The Reform Edict)* Decrees promulgated under the ruler of Abdulmecid I and Abdulaziz, who were the pioneers of the first democratic attempts of the Ottoman Empire in order to prevent an economic and social disorder in the state. The two reforms were aiming to leave the decision making process to an independent parliament by limiting the absolute power of the sultan. Besides, in both reforms there were new arrangements in education, army, administration, provinces and the society. Besides its economic and social effects, political implications of the prescripts would have deeper effects in economy in the long run.

From the Ottoman point of view, the main purpose of declaring *Tanzimat* was to maintain and preserve the Ottoman state against uprisings and together with, to gain sympathy and diplomatic support of European countries. However, Europeans had a different goal by accepting *Tanzimat*. They were concerning about the rights of Christians living within the empire and they wanted those rights such as; principles of individual liberty, freedom from oppression, and equality before the law etc. to be improved. This led an increase in economic and political power of Christian middle class. On the other hand, Muslims received none of these benefits brought by the two reforms.

Islahat Decree was intended to carry out the promises of *Tanzimat*, but it was more specific about the religious issues. Since there was a constant pressure on non-Muslims to be converted into Islam, the idea of freedom to practice one's own religion without harassment was promoted by *Islahat* Decree (Deringil, 2000).

The effectiveness of these two reforms is open to debate. There were two sides during the *Tanzimat* period. On one side, which was against the reforms, claimed that "...although the movement was a democratic approach to the stagnant economic and political system, the concessions and incentives involved in the reforms allowed foreign powers to become more and more prominent in the stately affairs after the declaration" (Bayraktar, 2009). On the other hand, supporters of the reforms believed that new arrangements brought clarity to issues such as the equality of all subjects before the law, regardless of religion as well as being a decisive step towards extended guarantee by the Great Powers to the territorial integrity of the empire.

The state has an important role to establish a legal framework, however the economists accepted that institutional change might not be always parallel to the economic development. In the last 500 years history of societies, it is observed that institutional changes might not always be in the same direction with the capitalism and economic growth and states could be interventionist and obstructive to economic development rather than being supportive. In another words, political struggles and institutional changes do not yield results in the favor of capitalism and economic prosperity all the time, on the contrary it is exceptional if the institutional change is in favor of economic growth according to economists (Pamuk, 2009, p.2).

As a result, according to Bayraktar (2009), whether or not the reforms weakened the integrity of the empire and made it susceptible to foreign incursion is debatable, yet it is an accepted fact from both parties that the reforms intended for the Ottoman Empire was not applicable due to the absence of manufacturing performance, which is in turn fueled by the monopoly of the guilds and the autarchic governance of the economy. Combined with the failures in military campaigns and the failing *timar* system in the early 19th century, the decrees severely curbed the flow of income into the state (p. 7).

5.3 Globalization

One of the factors explaining why some of the developing countries didn't experienced rapid growth in the 19th century after the Industrial Revolution can be explained by classical growth theory, which is mainly related with low rates of saving and investment. In order to develop, countries should invest in factories, machineries etc. so that labor become more productive and businesses demand more labor. As the demand for productive labor increases, wages go up so does population. But for these investments the government needs funds. However, since in most of the developing countries, households barely survive by their income, so it was impossible to save enough. Hubbard and O'Brian (2008) states that, low saving rates in developing countries contribute to a *vicious cycle of poverty* (p.684). Since households couldn't save enough, few funds were available for firms to borrow and invest in physical capital. Therefore, most of the developing countries couldn't catch up with the European countries in terms of economic growth, and household incomes.

5.3.1 Ottoman Example During Globalization Period

The most important characteristic that distinguished Ottoman Empire from other developing countries during globalization period of opening into the World economy was a strong centralized government. From the beginning of the 19th century under the royalty of Mahmut II, Ottoman made many reforms against increasing military and economic power of Europe and nationalism movements of ethnic minorities in distant provinces and Balkans. As a result of these activities, influence of these

minorities was deteriorated. The control of central government in military and political aspects was increased. However, in order to increase the control and power of the central government, Ottomans had to take support from Europe. It is true that, Europe was supporting reforms; especially Great Britain wanted Ottomans to become more powerful in its politics related to Eastern-European region. In this way, it could block Russia to reach Mediterranean Sea.

European countries demanded Ottomans to open into the foreign market as much as possible as a reward for military, political and financial support. Therefore, reform activities followed with concessions in foreign trade and foreign capital. Besides, European control was increasing gradually as Ottoman Empire opened its economy to the world market. For instance, with the reform, which mandated in 1856, foreign capital investment and in 1867 purchasing land by foreigners were allowed. Although these activities were mentioned as a European control over Ottoman economy, according to Hubbard and O'Brian (2008), by allowing foreign capital investment, Ottoman Empire had a chance to break the vicious cycle of low saving and investment, which led low growth (p.697). With foreign capital investment, Ottomans could access new technologies by know-how and additional funds. The importance of technological change, which is more important than increase in capital, is mentioned in both economic growth models (neoclassical and endogenous). The easiest way that governments of developing countries should follow to access new technology is the path through foreign capital investment. Ottoman governors were thinking short-term political and financial support of European countries, not long-term financial results. The turning points of Ottomans' economy in the period of opening into the foreign market were; 1838s free trade agreement, 1854s foreign debt period and 1850s privileges given to foreign capital for establishing railways. (Pamuk, 2008, p.5-7)

5.3.2 Baltalimani Free Trade Agreement

In 1838, *Baltalimani* free trade agreement was first signed between Ottomans and Great Britain, then France and the rest of the European countries. According to this agreement, monopolies in foreign trade were taken out and Ottomans forwent its right to put higher taxes or limitations on foreign trade. These applications made it easier for Ottomans' economy to open into the foreign markets. However, Ottomans

were also losing most significant source of income by this agreement. Another arrangement that the agreement brought was about customs duty. The free trade agreement led customs duties to decline and made it difficult for Ottomans to raise the customs duties for financial or protectionist reasons (Pamuk, 2008, p.80).

Before 1838, Ottoman Empire was taking 3 percent customs duty from both imports and exports. Addition to that, both domestic and foreign dealers had to pay 8 percent internal customs duty when they transport their products within the empire's borders. This agreement increased the customs duty ratio on exports to 12 percent, and on imports to 5 percent. Besides, while domestic dealers continued to pay internal customs duty, foreign dealers were out of this application. Thus, foreign dealers obtained privilege against domestic dealers. In the following years, European countries caught some opportunities to decrease the customs duty ratio from 12 percent to 1 percent in 1860s. Only after WWI, Ottoman could able to retract *Baltalimani* agreement and followed more independent foreign trade policy.

Why Ottomans signed such an agreement having severe requirements? In order to give an answer to that question, the conditions in that century should be examined. Great Britain became unrivalled in the world market after Industrial Revolution. However, other countries, which haven't been industrialized yet, were blocking Great Britain to enter into their markets. In this condition, Great Britain was directed to other markets outside Europe and signed many free trade agreements from China to South America by force of arms if necessary. On the other hand, Ottoman Empire was looking for new ways to catch developments occurred in Europe after the Industrial Revolution. The empire realized that the only way to develop economically as European countries did, was to bring advance technology from Europe, since according to the neoclassical growth theory, adoption of new technology is the key of economic growth as advance in technology triggers savings and investments.

The volume of trade between Ottoman Empire and Great Britain was increasing starting from 1820s. But British dealers were complaining about trade limitations put by Ottomans and wanted to secure their relationships with long-term agreements. Great Britain was waiting for a weak time of Ottomans to sign those long-term trade agreements. That time arose with rebellion of Mehmet Ali Pasa in Egypt. When this

rebellion got bigger with the support of Russia, Ottomans wanted Britain to help. Britain supported Ottomans in terms of military and politics by taking financial concessions as a return. Therefore, *Baltalimani* agreement signed under these conditions. As a result of this agreement; imported goods invaded domestic markets and expanded quickly. Domestic goods deteriorated in opposition to the competition of imported goods. Some of the crafts showed endurance with respect to the developed technology coming from Europe by accepting working with low salaries. However, both using new technology, instead of animal or human power, and taxes paid for its usage hurt economic growth (Leung, 1999, p.184). Working with low salaries with intense production is accepted as an important reason for underdevelopment. (Pamuk, 2008, p.29-37)

5.3.3 Foreign Trade

In the economic development of the industrialized nations, free trade played a significant role. For most of the economists, free trade has often referred as the “engine of growth” (Todaro, 1997, p.120). Expansion of the export markets after the Industrial Revolution gave stimulus to the local demands, which led establishment of manufacturing industries. It is the fact that most poor countries need to obtain foreign exchange in addition to domestic savings in order to finance development projects, such as building manufacturing industries (Todaro, 1997, p.53). Export growth is said to result in increased output, employment and consumption, all of which lead to an increase in the demand for a country’s output (Jung and Marshall, 1985). Having relatively stable politics and flexible institutions, and increased export earnings enabled developing countries to borrow funds from the international capital market at very low interest rates. With this capital accumulation, the production of industries increased and led more diversified industrial structure (Todaro, 1997, p.120).

Terms of Trade in 19th Century’s Export of World and Middle East

19th century is a period to integrate rapidly with the world economy for Middle Eastern economies. However, in this period the growth speed of export in underdeveloped regions was same as the average growth speed of world export (Pamuk, 2008, p.42). Today’s underdeveloped regions, opened to world economy after the Industrial Revolution. Therefore, the initial effect of the Industrial Revolution

to the underdeveloped regions was an unprecedented growth in export capacity (Pamuk, 2008, p.56). Starting from the second quarter of the 19th century, Britain and other European countries were trying to create a market for their manufactured goods and reach cheap raw material sources.

In the early 19th century, foreign trade level per capita of Asian states in Ottoman Empire was comparable to Iran's. However, between 1840 and World War I, the export of Ottoman Empire grew twice as Iran's. Although, Ottomans' foreign trade grew gradually, the empire could not catch the great growth speed occurred during 1850 in world markets. It would be easier to comprehend Ottoman industrial growth rate when it is compared with other countries in the neighborhood. For instance, before WWI, the export per capita in Egypt was as big as 1,5 times of Ottomans' and four times of Iran's. In the early 20th century, income per capita in Egypt was lower than Ottomans' but higher than Iran's. In the view of this table compared to Ottomans and Iran, it is argued that unlike Ottoman Empire, Egypt achieved to direct a large part of its production to export (Pamuk, 2008, p.48).

Ottoman Empire and Egypt in the 19th Century: Comparison of Foreign Trade and Investment

From the 19th century till the WWI, the exports in Egypt kept increasing. Exports per capita increased ten times between 1840s and WWI. The total exports reached to treble in 1860s and between 1870s and WWI. Therefore, the prewar foreign trade level per capita in Egypt was 2,5 times higher than Anatolia's, where was the homeland of the Ottoman Empire. In compared to that, the production and income levels per capita in Anatolia were higher than Egypt's. In that case, the production in Egypt was more directed to the world markets than Anatolia's in the prewar period. Especially after 1870s, the growth speed of exports in Anatolia was behind the underdeveloped countries' levels. In pre-war period, the export level per capita in Anatolia was behind the medium-scale Asian, African and Latin American countries. In contrast, the export level per capita in Egypt, in terms of both volume and speed, was higher than those medium-scale countries (Pamuk, 2008, p.81).

Internal and External Factors in Growth of Foreign Trade

The fundamental reason of growth in the Middle Eastern foreign trade was; appearance of economies, which need raw materials, and their production of low-priced products along with the Industrial Revolution (Pamuk, 2008, p.49).

After the year 1860, the demand of industrialized countries was increasing gradually, however, the total demand was receding from export products of Ottoman Empire, Iran and Egypt. Ottomans left its place in industrialized country markets to other countries, which export the same products as Ottomans after 1870s (Pamuk, 2008, p.51).

Until the beginning of the 20th century, the share of export in total production was less than 10 percent in Ottoman Empire. If those economies provided a rise in production per capita -Ottoman achieved in pre WWI- the explanation of this fact should be looked for another place. The growth in exports is one of the factors that affect economical growth (Pamuk, 2008, p.53).

Comparison of Trade and Foreign Investment

In the early 1820s, the ratio of Ottomans' exports and imports to total capacity of production was under 5 percent, however, during the century the foreign trade of Ottoman Empire, especially with Western Europe, grew rapidly. Free trade agreements supported these inclinations by eliminating protectionist approach of Ottoman Empire. According to Hubbard and O'Brian (2008), by protectionist approach, like putting higher tariffs on foreign imports and discouraging or even prohibiting foreign investment, a developing country cannot break the vicious cycle of poverty (p.697). European capital started to evolve in fiscal area of Ottoman Empire in mid-century. In twenty years, the Ottoman Empire became heavily foreign indebted and could not repay, so this led Europe to have control over Ottomans' internal affairs (Pamuk, 2008, p.63).

The foreign investments in Ottoman Empire were mostly in infrastructure areas, especially, railways and harbors. In contrast, the foreign investments in production activities in agriculture, industry and mining areas were limited. Therefore, foreign investors didn't have much effect on production facilities; they only tried to

encourage the enlargement of foreign trade and integration with the world economy (Pamuk, 2008, p.63-64).

Enlargement in foreign trade caused agriculture to become commercial and handicraft activities to deteriorate. Against the competition of imported goods, until 1910s, the employment and the production level in the sector declined (Pamuk, 2008, p.64). The factors that determines the integration of a peripheral country with the world economy were; the size of the country, the geographical location of the region and the natural resources, climate and agricultural conditions of the country in the beginning of 1910s. In addition to these factors, inside and outside political power relations determines the level of integration with the world economy (Pamuk, 2008, p.70).

5.4 Ottoman Economic Policy

In order to understand Ottomans' economic policy, first and foremost it is necessary to investigate the qualities of the state and its relations with different social groups. In the Ottoman society, up until the end of the 15th century there were intensive conflicts between Turkish originated aristocracy living in the provinces of the empire and bureaucracy in the central government. After Sultan Mehmed II, state confiscated the lands under private property and power shifted from aristocracy to the bureaucracy in the center. This was the end of aristocracy based on lands possessed. After this reform, the effect of landowners, merchants and moneylenders on state's economic policies became limited.

Central bureaucracy was aiming to establish a social order in which they have the authority. The supplies of the city economy, long-distance trade and import were going to maintain stability in this order. The state was supporting the operations of the merchants, guilds and moneylenders as long as they contribute to form this social order. Although central institutions got weaker during 17th and 18th centuries, producers and merchants did not get strong enough to put pressure on the state to change these traditional policies. However in Europe, mercantilist policies dominated since producers and merchants were getting stronger everyday (Pamuk, 2009, p.21).

In the article of Mehmet Genç, economic policies and priorities of the central bureaucracy are investigated. Genç argued that economic issues should always been considered among religious, military, administrative and fiscal concerns in the Ottoman Empire. According to Genç, the number one priority of the Ottomans about the economic issues was feeding of the city economy including army, palace and bureaucracy. Ottomans were aware of the importance of merchants supplying the city markets (1989).

In the 16th century, after conquering Syria and Egypt, long-distance trade and controlling of the trade routes became even more important (Güçer, 1987 & Inalcik, Quataert 1994).

Ottomans were showing a special interest to foreign merchants since they brought the goods, which were not available in the empire. The privileges, which is going to be mentioned as capitulations later, given to foreign merchants starting from the 16th century was emanated from these concerns.

According to Genç, the second priority of the central state was generating financial income. State was intervening to the economic activities in order to collect tax. Ottoman authorities were aware that the economy should be vital and strong in order to stay fiscally powerful however, they were not hesitating to force producers and charge extra taxes to them in the short-term economic recession periods. The third priority was closely related with the first two; maintaining the traditional order. According to Ottoman ruling class, there was a social order and a balance between farmer, merchant and guild. State was trying to protect this order and balance in the society (1989).

State's attitudes towards merchants was involving serious dilemmas. On one side, it was accepted that small or big; all merchants had an important role in the administration of the city economy. However, profit oriented activities of the merchants may cause scarcity of some of the fundamental goods and put guilds and city economy in difficult situations. In those cases, state prefers to inspect these merchants instead of support or protect them. State's attitudes towards moneylenders and usurers were also including ambiguities (İslamoğlu & Keyder, 1977, p. 31-55).

Ottoman government did not hesitate to intervene to the local and long-distance trade in order to manage city economy by following these priorities. When it is

compared to the other states' ruled by Islamic laws and practices, it is observed that Ottomans intervened more to the economy (Pamuk, 2009, p.22).

5.4.1 Why Ottomans did not Follow Mercantilist Policies?

Why Ottomans did not follow mercantilist policies supporting merchants and producers, while other European states did follow in the same era, and why Ottomans did not foresee the destructive effects of the imports on economy are among the frequently discussed issues. In the Ottoman Empire, importing was supported by the state, since it caused the supply of the local goods increase in the local markets. However, exporting was only allowed if the local demand was met. The state was not hesitating to ban exporting of food and raw materials during economic downturns.

The difference is apparent between the Ottoman policies, which give priority to urban consumers, and mercantilist practices in the Europe. Ottomans were aware of the mercantilist concept and practices. For instance, in the beginning of the 18th century, Efendi defended mercantilist practices and argued that Ottoman money would stay in the empire if Muslims preferred to buy local goods instead of exports (1968).

There could be many reasons behind Ottoman policies, which were not mercantilist at all. Could it be the Ottoman bureaucrats' shortsighted thoughts? Or maybe because of vast majority of the Ottoman imports were not usually produced in the empire, thus not threatening the local production. According to Pamuk (2009), these arguments should include some elements of truth, but the main reason behind is that, the economic practices of the Ottoman Empire were demonstrating the priorities of the central bureaucracy (p.30).

The pioneers of the mercantilist concept, merchants and producers in Europe, were not effective on Ottoman economic policies. Even in the 17th and 18th centuries of the Ottoman Empire, where the influence of the regions far away from the center got stronger, the priorities of the central bureaucracy dominated the motives behind economic practices in the Ottoman Empire. As a result, Ottomans were successful to maintain their traditional order by ruling flexible and pragmatic. They averted the local regions to empower, which might harm this social order. However, starting from the 15th centuries, after all institutional and technological reforms and

transformations, Ottomans could not stop loosening of this traditional order in the 19th century (Pamuk, 2009, p.30).

5.5 European Capitalism

'Why is *Duyun-i Umumiye* system and state trading devastating us? State is buying our tobacco from 60 *para* and selling it from 30 *kuruş* (1200 *para*). Every state has debts but we are the only one having *Duyun* management. Why is that, every single day Europeans come to our lands and make fortune from our deficits? They send us workers like we don't have any.' This statement from 1895 is referred to so called fanatic adherents of Istanbul (G St, III HA, Nr 1100, 20 November 1895, Pera'dan Saurma, Bl. 2007-2008) and it summarizes to a certain extent, the effects of changing world economy on Ottomans under the European capitalism. While European economic influence was spreading all over the world, this influence struggled with the existing social, economical and political institutions and at the end, converted local institutions (Quataert, 1987, p.13). Although Ottoman Empire showed considerably effective resistance to European penetration in terms of capital and trades, the result of these attempts had seriously contributed to economical decline of the empire. As it is mentioned before, starting from 1820s, in rapid globalization period, by signing free trade agreements, Ottoman economy was opened to the international market and became vulnerable. Although opening into the world economy supposed to led Ottoman economy to grow, in opposition to that, it led the empire to borrow debts to cover its budget deficit emanated from the gap between import and export rates (Pamuk, 2008, p. XIV).

The Industrial Revolution converted economies of Western European countries, started with England, into economies, which were performing low-cost and large amount of production. Relations with European capitalism not only brought a change in Ottoman economy in terms of production patterns and trade capital, but also brought a change in society and led to emerge new classes (Pamuk, 2008, p.78).

5.5.1 Foreign Direct Investment

The spread of European capitalism was not only occurred by foreign trade but also with foreign capital investments, which were given as debts to the Third World countries including the Ottoman Empire. Besides, most of the European investment in Ottoman was oriented to infrastructure, railways, harbors and canals in order to expand foreign trade. In compared to that, the foreign capital investments directed to production activities such as agriculture, mining and industry, were limited until the WWI. This sector-specific dispersion shows the tendency of the foreign capital to support foreign trade and exports. Although before the WWI, the trade between Ottoman and Europe was deteriorated, foreign investment activities especially with France and Germany increased. While foreign direct investment was stable in early 1860s till the late 1880s, increased rapidly between 1890 and 1914 (Quataert, 1987, p.18).

5.5.2 Railroads

Developments in transportation in the Ottoman Empire had an important place in commercialization of agriculture and entering into the world economy. It enabled the empire to be more effective in European trade. Therefore, in 1890, Europeans financed the activities to broaden *Izmir, Beyrut, Istanbul, Haydarpasa, Yafa and Hayfa* harbors. Other than that, foreign investors implemented the railway network in the Ottoman Empire's lands in Asia to increase overall railway network by threefold (Quataert, 1987, p.20).

Infrastructure of railroads enabled Ottoman to provide domestic security, increase the power of central government in rural areas, decrease the transportation cost between Istanbul and markets in Central Anatolia, and transport equipments and soldiers during wars. Moreover, the government could collect agricultural taxes more efficiently and easily. Due to these expectations, Ottoman made concessions with foreign companies even in paying fees for every kilometer that was built. However, these payments brought extra burden to Ottomans' economy, so railroads didn't provide the benefits, which were expected. On the other hand, English, French, German and Austrian equity owners, who undertook the structure and

management of railroads, were the most profitable ones from these investments (Quataert, 1987, p.20).

5.6 Efforts of Generating Income

5.6.1 Debts

European powers often used debts to increase their activities in Istanbul. They supported their investors to give debts to Ottoman Empire and they sometimes gave guarantees. In 1881, with the establishment of *Duyun-i Umumiye*, Europeans took the control of Ottomans' internal affairs such as economical policies. This also gave a guarantee to the investors (Pamuk, 2008, p.72).

In the 18th and 19th century, since Ottomans' political and managerial capacity was limited, the financial income arriving to the center was limited too. The government was lack of network to gather taxes, so had to share those tax incomes with strong groups living in distant provinces. However, starting from 1820s, the empire attenuated the power of these provinces thus could control tax gatherings again. This led incomes to increase in real terms; nevertheless, expenditures were rising in that time. Therefore, the financial reorganization and centralization activities of the empire were managed together with long-term internal borrowing.

Since the 16th century, the empire was taking credits from money agents, but they couldn't even compensate the empire's gradually increasing needs. Then, the empire started a system called *esham* (share certificates), a long-term internal borrowing. With this system, the empire was aiming to expand the base of the public debt, discourage equity owners instead, support small and medium size owners of capital. However, the empire couldn't control or restrict selling *eshams* from a person to another. As a result, it was realized that the internal borrowing provided from *esham* system had high costs (Pamuk, 2008, p.102-103).

Foreign Capital Invested in National Debts

In the 19th century, plenty of foreign capital entry occurred in Ottoman Empire and Egypt. The major part of this capital was in terms of debts given to the other countries. In the pre-war (WWI) period, two third of the total foreign investments in

Ottoman Empire, half of the total foreign investments in Egypt has gone to national debt. The period between 1870s and WWI, Ottoman Empire and Egypt became the most indebted ones among other countries in the world. These foreign borrowings had many effects over both Ottomans' and Egypt's economies (Pamuk, 2008, p.83).

Ottoman used most of the debts that were taken to finance military expenses and current expenditures. A small part of the funds were directed to railways and irrigation infrastructure investment projects. Britain and France perceived this process as a significant tool to maintain influence over the Ottoman Empire. Although, they were aware of Ottomans' troubles with repaying, they encouraged their bankers and financial markets to issue loans.

On the other hand, in Egypt the debts were directed to large-scale farming and irrigation projects. However, those projects couldn't provide the expected yield in terms of production and tax income (Pamuk, 2008, p.83).

At the end of the year 1875, the Ottoman Empire announced a partial moratorium. In 1876, the empire ceased the whole debt payments. Egypt had to do the same at the beginning of 1876. Although Ottomans' debts diminished by 40 percent, *Duyun-i Umumiye* authority was established as a European attorney controlling Ottomans' leading source of incomes. Until the end of the century, Ottomans' loans were limited and under the *Duyun-i Umumiye* authority's close supervision. Therefore repaying of the existing debts maintained in a coordinated way. However, especially after 1903, because of military and financial problems, Ottomans started to borrow again. At this time, France and Germany used their credits given, as a tool to reinforce their influence on Ottoman Empire. New credits for manufacturing railways or other essence of economic projects were given to the countries' investors who lent money (Pamuk, 2008, p.85).

Different financial and political supervision systems that Europe had built over Ottoman Empire provided important guarantees to the European investors. This supervision encouraged European capital to be invested directly after 1880. Foreign investments, excluding national debts, played an important role in directing to export and entering to the world economy (Pamuk, 2008, p.86).

Domestic Borrowing

System of *iltizam* were being used in the domestic borrowing of Ottoman Empire starting from the middle ages up to the 19th and 20th centuries. *Iltizam* means tax farming in Ottoman and it allowed individuals with enough capital to have the rights of collecting tax revenues from a certain region in return of cash payments to the government. In the 15th and 16th centuries, only a limited part of the tax revenues of the empire were being collected by *iltizam* system. Knights collected the major part of the revenues via *timar* system from farmers. However, along with the changing war technology, the necessity of having bigger and settled armies in the center appeared, thus *timar* system started to lose its economical and military importance. Consequently state started to give up on *timar* system and focus on *iltizam* more and more. On the other hand, stalling financial circumstances empowered the state's tendency to borrow more via *iltizam* (Pamuk, 2009, p.14).

Along with the increasing need of borrowing, in 1695 a new system called *malikane* was applied. *Malikane* system allowed individuals to use their rights to collect tax revenues for a lifetime. In compare to short-term *iltizam*, the new system of *malikane* allowed state to borrow with longer-terms (Genç & Okyar & Nalbandoglu, 1975, p. 231-296). This system had some positive economic impacts on Ottoman income; however, it was less than anticipated by the state. New contractors helped to improve productivity in the *malikanes* they bought, maintained security and made long-term investments. Nevertheless, *malikane* owners started to sub-contract their tax collecting duties to second or even third parties. Thus, this system could not help to reduce the burden of taxes, on the contrary increased by transferring the surplus (Genc, 1994, p.61).

Eventually this system was not enough to solve the empire's fiscal problems. When the owner of the rights died, it was almost impossible for the contracts to return to state's control again. Thus this system did not increase tax revenues, on the contrary, caused to decrease. After the war between 1768 and 1774, fiscal bureaucracy started a new system called *esham*, which was mentioned before. In this system, state was designating the annual tax revenue in advance. This amount was going to be divided in many portions and each portion was going to be sold to numerous buyers. The tax was going to be collected by the state and *esham* parts

were going to be sold with 6 or 7 times higher prices than their annual returns. The fundamental motive behind *esham* was to distribute domestic borrowing among many equity owners instead of a couple of giant equity owners. However, state did not manage to control internal trading of these *esham* parts between equity owners, thus after the first owners died, the inheritors of the owners were continuing to earn from the state. This was why the benefits of the *esham* system were limited. In the period of over 50 years, the bureaucracy tried to end this expensive way of borrowing during economic revivals, on the contrary they tried to expand this system at all expenses during recessions (Pamuk, 2009, p.15).

Another phase in Ottomans' domestic borrowing was started in 1830 along with the increasing military expenses and reform attempts. The empire started to use special sales notes called *kaime* in order to afford its expenditures when the financial resources depleted. These sales notes were 8-year time loans with 12,5 interest rate by the time they were launched. However, when the interest was ceased to be in effect in Ottoman Empire, these sale notes lost their functions (Pamuk, 2009, p.15).

In the 18th century, there were many developments in terms of public financing, tax collecting and institutions dealing with domestic borrowing, however, it is important to note that the developments in private finance sector was limited because of religious reasons, which is going to be mentioned later. It should be noted that, the institutional changes in private finance field affected operations of non-Muslims who were involved with Europe not Muslim businessmen's (Pamuk, 2009, p.16).

Ottoman Empire's Foreign Borrowing Experience

It has been questioned why Ottoman chose foreign debt, instead of debasing or internal borrowing, to finance its budget deficit during 70 years especially after 1850. In the 19th century, internal loan market was small compared to national debt necessity; so long-term internal borrowing was not a good alternative. Although, Ottoman Empire used debasing up until the end of the 18th century, debasing system was no more practical in the 19th century. Therefore, Ottomans had only one option remained; foreign debts (Pamuk, 2008, p.113).

The first foreign debt was provided from French banks by the mediation of *Galata* bankers for short-term. Government was hesitating to start long-term foreign

borrowing. However, after the *Crimean* war, borrowing from European money market started. Between 1854 and 1876, Ottoman borrowed large amount of debts with higher interests compared to other countries. These borrowings used to finance current account deficit, renovate palaces, establish a huge navy and compensate bureaucracy's salaries instead of reviving the economy and investments to increase financial income. Therefore, Ottomans borrowed money to finance its debts and their interests. While, repaying process was gradually getting difficult for Ottoman Empire, Europe was yielding from this situation (Pamuk, 2008, p.119-120).

5.6.2 Debasing

Fiscal Deficits and Debasing the Coinage

Fiscal deficits resulted mostly from wars were problem for many European countries in modern period (1500-1800). However, in the 19th century this problem seemed to be diminished. Ottomans' budget started to show deficit after the 16th century during wars and gradually enlarged in the 18th and 19th centuries. Those budget deficits in war periods and activities to finance them created great pressure on Ottoman economy.

Ottomans' budget deficit started to enlarge at the end of 1760s and culminated in 1820s and 1830s. In that case, the government tried to raise its control over the income sources, tried internal borrowing and invoked debasing when the pressures peaked (Pamuk, 2008, p.97-98).

18th century is relatively a peaceful, stable and prosperous period for Ottoman Empire till the end of 1760s. The data shows us that, in this period, the empire made a lot of investments in agriculture and handicrafts areas in Anatolia and Balkans (Genc, 1984, p.52-61). In addition to that, the trade between Ottoman Empire and Middle and Western Europe -through the Mediterranean Sea by land route- increased significantly. This period was also a stable period from financial side. Ottomans' financial data shows that the empire's budget was in balance till the end of 1760s, even there were sometimes budget surpluses (Pamuk, 2008, p.99).

Wars between 1768 and 1774 with Russia and wars between 1787 and 1792 with both Russia and Habsburg Ruling House shook Ottomans' economy. Not after the first war but after the second war, Ottomans diminished the ratio of gram silver in

coin (*kurus*) by one third. With debasing, the government invited the public to hand in the silver they have at a price determined under the market (Pamuk, 2008, p.100).

In 60 years period, Ottomans' *kurus* devaluated 90 percent in opposition to the other leading monetary units. Under the royalty of Mahmut II, Ottoman Empire produced many gold coins in different standards. The ratio of debasement was less in gold coins than silver ones. In 30 years period the ratio of valuable metal in gold coins didn't go beyond 20 percent. The empire's approach to the gold was different than silver. The most important reason behind was that; the empire was paying its expenditures by silver coins. Therefore, debasing gold coins didn't bring much benefit to the empire (Pamuk, 2008, p.104).

Advantages and Disadvantages of Debasement

Debasement was seen as a tool that provide financial income to the empire in short-term. Although, debasing increased the empire's income, it also increased the inflation. In another words, debasing affected price levels to go up. This effect might be explained by the quantity theory of money. The quantity theory of money is the proposition that in the long run, an increase in the quantity of money brings an equal percentage increase in the price levels (Parkin, 2003, p.643). Since debasement allowed the empire to issue more money by reducing the silver amount for each unit, it has similar effects of increasing the quantity of money. According to the theory, money growth and inflation are correlated. But the correlation between money growth and inflation cannot prove that money growth causes inflation. One possible third factor is a large and persistent government budget deficit that gets financed by creating money (*ibid.*). There are some historical evidences, which allow us to test this assumption. Apart from the Ottoman Empire's situation, World War II and the following years could be another occasion. Rapid money growth during war years allowed price levels to rise immediately after the war. The consequence of wartime rapid money growth was severe postwar inflation (Parkin, 2003, p.647). The results of upward shifting price levels after debasements in order to finance budget deficits in the Ottoman Empire could be another evidence as well.

As the inflation increased, the income decreased gradually in time. In order to prevent that, the empire should renew the debasement process and raise taxes.

However, in case the public realizes that the empire would renew the debasement process, they would lose their trust to the monetary unit, which could make the things even more difficult for the empire to provide additional income. Then, people would want to hold foreign coins instead of their own *kurus*. This case was happened first in the beginning of the 17th century and then under the royalty of Mahmut II. A drift had happened from *kurus* to the foreign coins in the markets. Another disadvantage of debasing was increased difficulty for the empire to borrow from domestic market. Since the domestic market expected that the empire would renew the debasement process, they forwent to lend money or demanded more interest (Pamuk, 2008, p.105-106).

A New Strategy: Stable Money

19th century was different in terms of Ottoman economy and monetary history. In this century, Western style reforms were done not only in education, law and justice but also management, economy, finance and money. Furthermore, integration with the world market was provided, and foreign trade with Europe made Ottoman economy to grow faster in exports. European countries especially Britain, were considering that Ottoman should make reforms to provide regional integration. European countries were thinking that gradually increasing trade relationships between Europe and Ottoman Empire and direct investments were necessary for Ottomans' economic growth. Due to that, stable money was seen as a requirement for growth in reforms and international trade. Thus, Europeans especially Britain, leaned on Ottomans to create more stable money system (Pamuk, 2008, p.109-110).

From 1850s to WWI, Ottomans didn't use debasement, so relative monetary stability was achieved and foreign borrowing became the basic tool to finance budget deficits. In these activities, there was a European encouragement and their desire to make Ottomans more trustful in European financial markets.

What was the result of these changes in the 19th century? The positive developments were; monetary stability, quick growth in foreign trade and direct investments of Europe. However, in 1881 by the establishment of *Duyun-i Umumiye* in the Ottoman Empire led the significant income sources captured by European investors, thus Ottomans became indebted in large amounts before financial balance was built (Pamuk, 2008, p.115).

5.7 Prices and Wages

There are some gaps in the Ottoman history, and the history of prices is one of them. However, it is vital to understand these data and comparisons for different periods of time in order to comprehend the economic history of the empire. It is the fact that, there is a strong and bi-directional correlation between monetary and economic situations. Monetary stability usually leads to the expansion in trade and production. Monetary instability or monetary difficulties affects credits, production and trade negatively. Furthermore, economic prosperity or any expansion in economic activities contribute to an increase in the fiscal income of the state and maintain monetary stability. Consequently, it may well be argued that there is a strong causal correlation between price tendencies and economic situations (Pamuk, 2009, p.104).

5.7.1 Prices and Inflation

Researches show that the most rapid debasement and inflation period were around the beginning of the 19th century by the time wars, rebellions and reforms were taking place throughout the empire. According to Pamuk's work (2009), in the medium and long run, prices in the cities outside the capital was moving along with the prices in the capital city; Istanbul. In terms of silver grams, it is observed that the prices in the capital were also moving along with the prices around Mediterranean. This shows that, the empire was strongly connected to the thousand miles away markets and economies depending on the weight of maritime trade (p.104).

In the research of Pamuk, over 6 thousand book of accounts and price lists such as *narh* lists for standard goods for Istanbul and less for other cities in the Prime Ministry's Ottoman Archives are used and price series for four and a half centuries are formed. These *narh* lists were made by local authorities to determine the prices of fundamental goods in the empire. According to the records dating from the 15th century to the 19th century, it is observed that these lists were not published periodically or continuously but especially after the 16th century they were published during poverty, recessions or instability periods. However during stable periods, we understood that these lists were not prepared for up to 30 years (Pamuk, 2009, p.10). As it is observed from the table in the appendix **figure 2**, the consumer prices

in the empire increased by 300 times starting from the year 1496 until the World War I. That means 1,3 percent annual increase in average (Pamuk, 2009, p.110).

Indexes showed that from the mid of the 16th century until the mid of the 17th century, prices increased five fold and it seems that Istanbul experienced a severe inflation period along these years.

The price increase in this period usually explained by price revolution, which refers most specifically to the high rate of inflation that characterized the period across Western Europe, with prices on average rising perhaps six fold over 150 years (http://en.wikipedia.org/wiki/Price_revolution). However, Pamuk argued that Ottoman prices increased mainly because of debasements in this period (2009, p.110).

The figures also indicate that there was another and more severe inflation wave starting from the end of the 18th century and extended until 1850 in the empire. In this second period, prices increased twelve to fifteen folds. And these second climbs in the prices could be explained by mainly debasements, which started from 1780 and accelerated during the sultan Mahmud II (1808-1839). However, the overall price level in Istanbul remained more stable during 1650-1780 and 1860-1914.

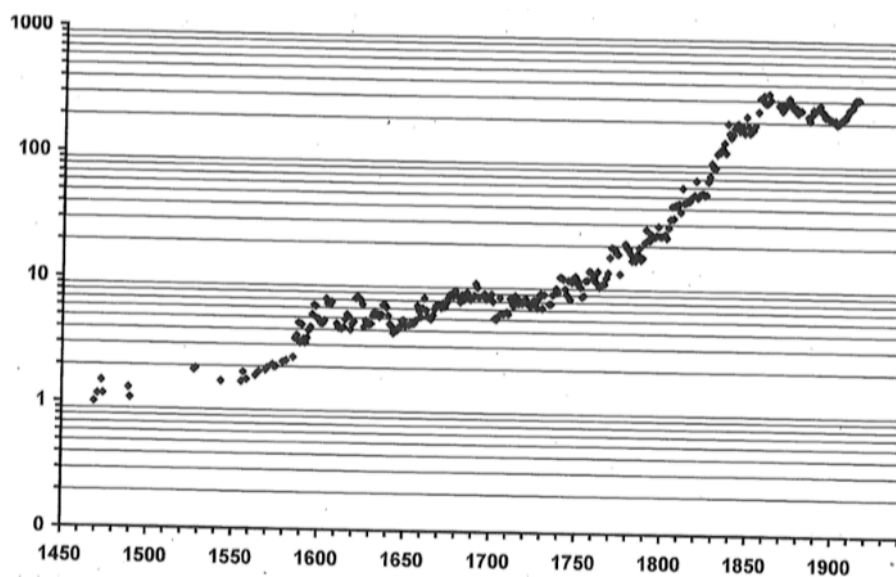


Figure 3: Consumer Prices in Istanbul 1469-1914 (in terms of nominal prices)

Source: Pamuk, 2009, p.112

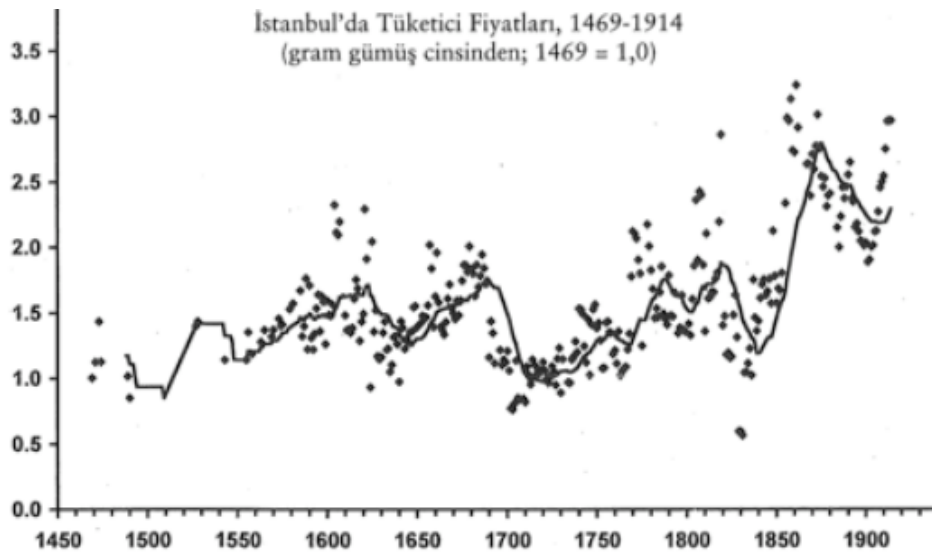


Figure 4: Consumer Prices in Istanbul, 1469-1914 (in terms of gram silver; 1469=1,0)

Source: Pamuk, 2009, p.113

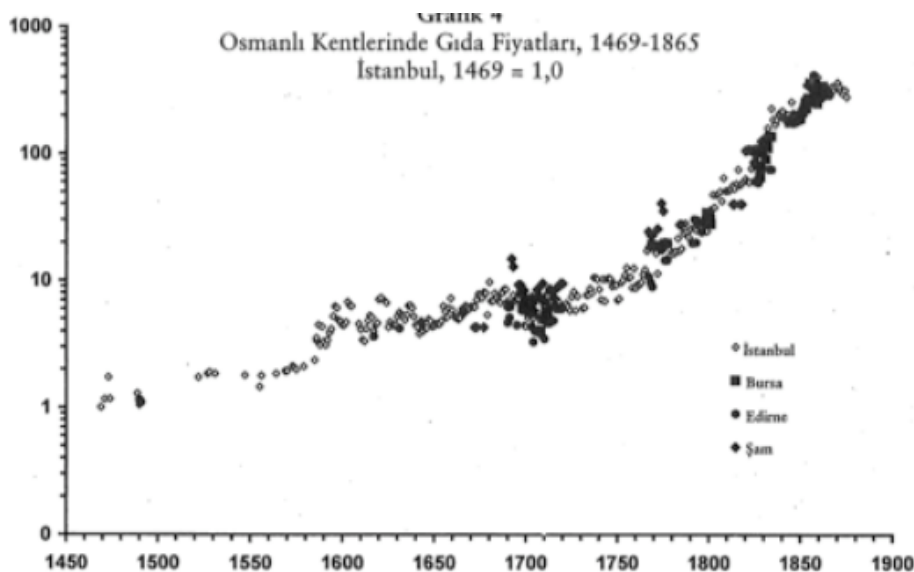


Figure 5: Food Prices in Ottoman cities, Istanbul, 1469-1865 (1469=1,0)

Source: Pamuk, 2009, p.114

On the other hand, according to Ljuben Berov's price data gathered from the Balkans during 16th and 17th centuries showed that prices increased in a similar manner (1976). All these data showed that from the Balkans to the Anatolia and Syria, all Ottoman money zones have similar price tendencies. When we look at the price indexes from Egypt formed by Andre Raymond, it is observed that prices in terms of gram silver in Cairo between the years 1624 and 1800 moved parallel to

the other Ottoman cities. It may be argued that sea trade and transportation was the reason behind similar price movements around East Mediterranean region (Pamuk, 2009, p.110).

5.7.2 Reasons of Price Movements and its Results

According to Pamuk, although there were various reasons behind price changes such as the quality of harvest, wars etc., the main reason was debasements. The main reason behind debasement was the intention of raising extra fund for the state. The relation between price level and debasements could be observed better when the amount of silver in Ottoman money is tracked after the year 1450. The graph showed that the fastest decrease in the amount of silver in money happened at the end of the 16th century and the beginning of the 17th century, and later at the end of the 18th century and the beginning of the 19th century.

However, there were some slight changes in the amount of silver during 1650-1770 and never changed again after 1844. When the two graphs, **figure 3** and **figure 6**, are analyzed together, the correlation between debasements and changing price levels could be observed easily (Pamuk, 2007, p.114).

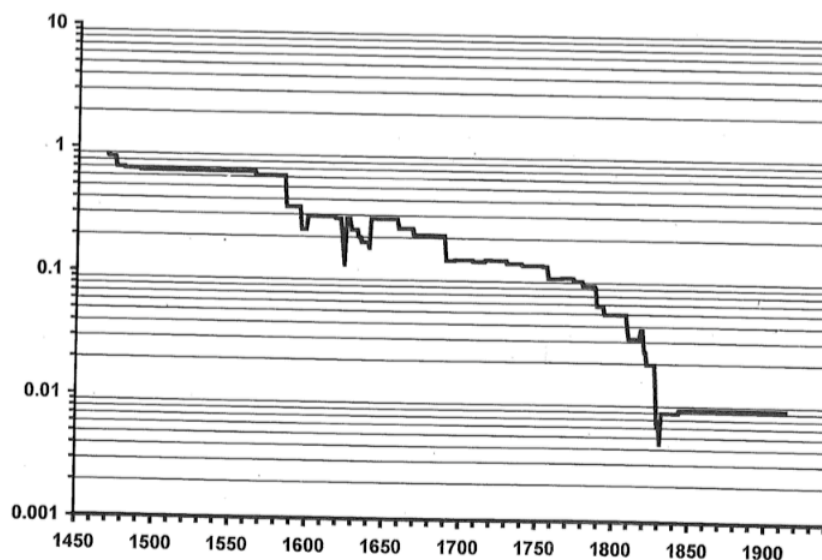


Figure 6: Content of Gram Silver in Ottoman monetary unit

Source: Pamuk, 2007, p.112

As it is stated before, for four and a half hundred years, the nominal prices increased by 300 fold in the empire, however, when prices are expressed in silver

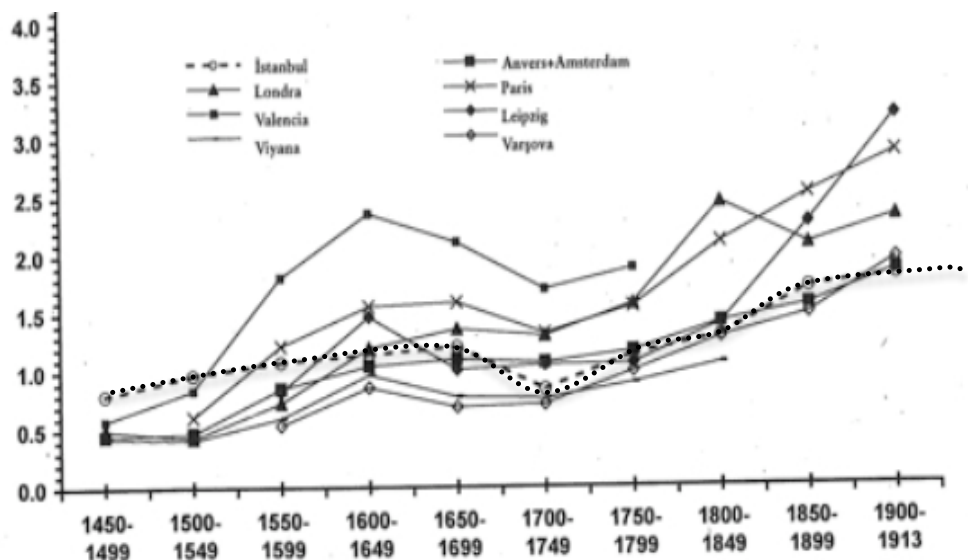
grams it is interesting and important to observe that the movement remained between narrow intervals. The gram silver prices increased by 60 percent during the Price Revolution, however, it dropped at the first half of the 18th century. Later than that, until the second half of the 19th century, gram silver prices increased by only two fold. This shows us that the silver inflation contributed to the overall price level in the empire, but beside the effects of the debasements, Pamuk argues that the silver inflation effect were insignificant (ibid). In another words, it is concluded that the main reason behind price movements in the empire was mainly debasements. Debasements in the empire had similar symptoms of printing money in governments. It reduces the value of money and this invariably causes inflation. Debasements decrease the amount of gram silver in Ottoman coins thus reduces its value, which leads to an increase in price levels. Although silver as a currency was losing value alone, its effects on prices were insignificant beside the effects of debasements.

5.7.3 Price Comparisons with Europe

According to Robert Allen's research (2001), which includes vast amount of price data, in terms of gram silver, from Europe gathered from Middle Ages up to the World War I, leads us to different questions and interesting observations (p. 411-47).

The research showed that in the first half of the 16th century the prices in the South Europe were higher than any other parts of Europe. In a similar manner, the prices in Istanbul around these dates were highest among all other European cities.

Figure 7:
Consumer Prices in
European cities, 1450-
1913 (in terms of gram
silver; Strasbourg 1700-
49=1,0) Source: Pamuk,
2007, p. 117
..... Istanbul



Another point is that the prices in Istanbul in terms of gram silver increased in a slower pace than other cities of the Europe up to 1650. After Price Revolution, the price levels in Istanbul started to remain lower than Mediterranean and European price levels. This incident has occurred around the same date when difference of income per capita levels between Ottoman Empire and North Europe increased. In the later centuries, the Ottoman price levels were still lower than European levels. These long term price movements showed that just like today, the prices in the countries with high income per capita are tend to be high as well. Starting from the 16th century, while the level of income per capita were increasing in Northwest Europe, the price levels increased faster than Southern Europe and Ottoman Empire price levels. It is important to note that, in the 18th and 19th centuries the most expensive city of Europe in terms of gram silver was London, which was the city with highest income per capita in Europe as well (Pamuk, 2007, p.119).

5.7.4 Wages in Europe and the Ottoman Empire

For the last 20 years, the economists and economic historians put a lot of efforts to distinguish different countries' per capita production and income levels and the tendencies of the differences between 'leaders' and 'followers'. It is the fact that the difference between these levels of the countries was so small or equal before the Industrial Revolution and modern economic growth, although today the gap is huge (Pamuk, 2007, p.155).

The research of Angus Maddison (2001) shows that this difference was an actual fact in the year 1820. Furthermore, the difference between developed and developing countries was not only increasing during the Industrial Revolution but also during 1914 and 1950.

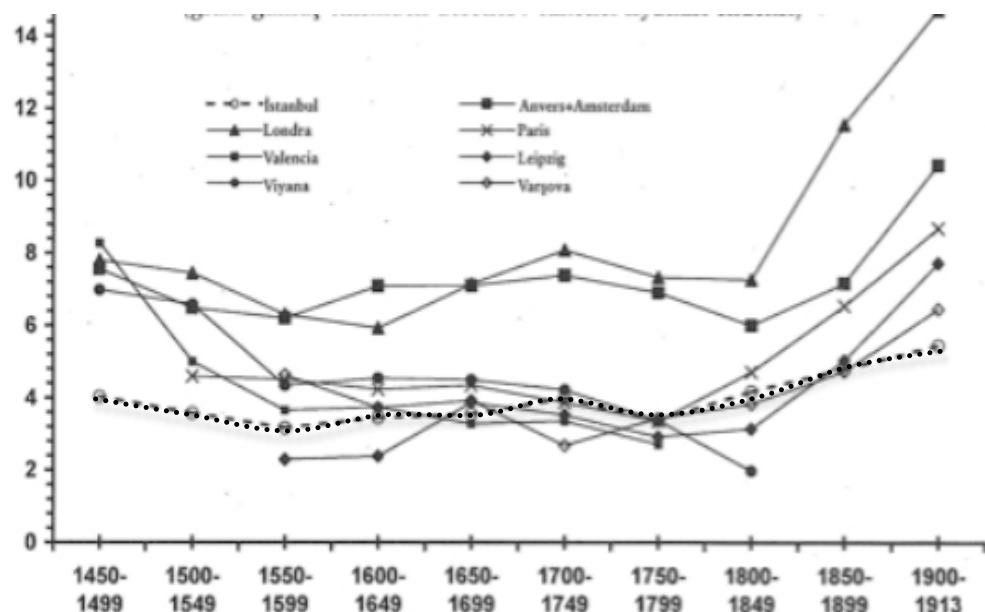
In order to analyze per capita income and level of living standards of a country, an alternative way is to compare real wage rates of the workers in specific regions of this country. A decrease in wage rates means, less consumer products per worker or less prosperity for this worker's family. Pamuk (2009) conducted a research in which over 5000 account books of construction projects of the empire are used to form accurate wage data. In **figure 8** attached in the appendix, the real daily wage rates are presented for regular and skilled workers.

It is difficult to distinguish the effects of institutional factors and market situation over daily wages. However, it is still observed that in the periods of fast debasements, the wages dropped first and moved upward afterwards. This proves to some extent the process of formation of daily wages is connected to the market structure. The indexes shows that the wage rates of regular construction workers in the Ottoman Empire decreased by 30 to 40 percent in the 16th century, slightly changed during the 18th century, increased by 30 percent until the mid-19th century and again increased by 40 percent later at the end of the 19th century up to the beginning of the 20th century. Wages of the regular workers were 20 percent higher before the World War I in compare to its levels around 1500. It is also observed that real wage rates of skilled workers in 1914 were 50 percent higher than the level in 1500 since the difference between regular and skilled worker in terms of wages started to increase at the end of the 19th century (p.172).

5.7.5 Wage Comparisons with Europe

Pamuk's research (2009) shows that wages in terms of gram silver in Istanbul and East-Mediterranean cities at the beginning of the 16th century were so close to the wage levels in North and South Europe. However, at the same period of time, the price levels in terms of gram silver in Istanbul were highest among all other European cities in the research thus the real wages in Istanbul were between 60 and 90 percent of other European cities.

Figure 9: Real Wages of Regular Construction Worker in European Cities (wages in terms of gram silver/CPI)
Source: Pamuk, 2007, p.174
..... Istanbul



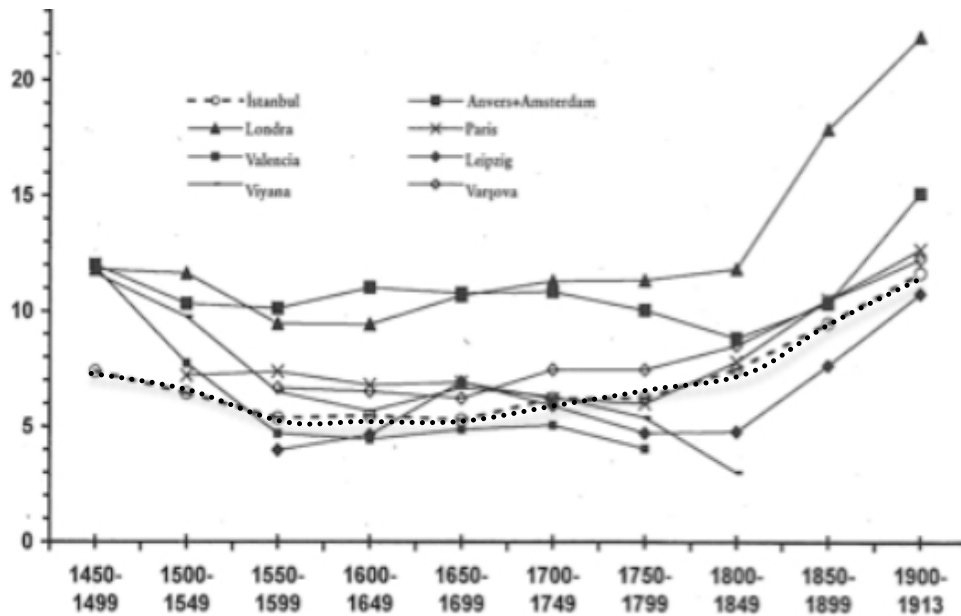


Figure 10: Real Wages of Skilled Worker in European Cities (wages in terms of gram silver/CPI)
Source: Pamuk, 2007, p.174

..... Istanbul

Real wages were intended to decline in most of the European cities just like in Istanbul. It is interesting that, although the real wages had a declining trend after 1600 in European cities, in Istanbul they slightly changed until the end of the 18th century. In the 17th and 18th centuries, the wages in Istanbul had a tendency to get close to the levels in Northwestern Europe. However, the difference in wage rates (from 1/3 to 1/2) between Istanbul and Northwest Europe continued until the Industrial Revolution (p.173).

When the price rates in Istanbul were compared to West Holland in the first half of the 16th century, it is observed that prices in Istanbul was higher than West Holland by 60 to 80 percent. During two hundred years after that, nominal wages following prices in terms of gram silver have increased by 250 percent in West Holland. However in Istanbul, prices in gram silver almost did not change and real wages declined slightly (Pamuk, 2007, p.173).

Real wage rates in Istanbul increased by approximately 66 percent beginning from the last quarter of the 18th century until the World War I. As a result, the difference between Istanbul and Northwestern European cities, in terms of wages, increased after the Industrial Revolution. Before the World War I, the wages of the regular

construction workers in London were 2,7 times higher than in Istanbul. This was 1,9 for Amsterdam and 1,6 for Paris (Pamuk, 2007, p.174).

All of these results guided us towards three important conclusions. First, the real wages in Ottoman cities in 1750 were lower than it was in 1500. However, this deterioration was not as big as it was in Europe around these dates. Consequently, until the mid of the 18th centuries, real wages in Istanbul and any other Ottoman cities were so close to the real wages in many cities of Europe. Second is that, comparisons shows that real wages in Northwestern Europe were higher than Istanbul's levels at the beginning of the 16th century and this situation remained same until the Industrial Revolution. The third is that, after the Industrial Revolution especially after 1850, the real wages in most of the European cities had tendency to increase. At the same period, real wages in Western Europe increased more than Eastern Mediterranean and the difference between the wage levels increased as well (Pamuk, 2007, p.175).

5.8 Long Depression (1873 – 1896)

Evidences for both industrialized countries and the world economy show that, the period between 1873 and 1896 was different than both the quick growth period from the mid 19th century to 1873, and the period from then till the WWI. However, the information about the other neighborhood countries is limited. According to the study that Hanson conducted, at the end of 19th century, it is seen that exports didn't grow faster, and foreign trade slowed down. Hanson, do not want to refer this slowing down as long depression in industrialized countries and decline in the growth speed of demand. He introduces "unspecified structural changes" largely caused to the decline in exports of underdeveloped countries and growth speed of world trade (1980).

5.8.1 Long Term Activities in terms of Foreign Trade

In the 19th century Ottomans' foreign trade was depended on exports of basic products and imports of finished goods. In the last quarter of the century, the export of grain, rice and sugar became important (Aybar, 1939 & Issawi, 1988). Between 1780 and 1830, the growth speed of trade relationship between Ottoman Empire

and Europe was under 1,5 percent (Issawi, 1966, p.30 & Paris, 1957, p.572-577 & Masson, 1911). Compared to that, in the 19th century, according to the calculations made by current prices and 1880's fixed prices, the growth speed of exports and imports was approximately over 5 percent. The free trade agreement signed between Ottomans and European countries in 1838 played a significant role in Ottomans' entrance to the world market. The foreign trade share of Western-Eastern Europe and USA was over 70 percent in 1870s (Pamuk, 1978, p.36-37).

The growth speed of Ottoman foreign trade was clearly low in 1880s and 1890s. As it is seen from the table (**figure 11**), increase in the scale of imports and exports calculated by fixed prices of 1880 were under 3 percent per annum between the periods 1879-81 and 1897-99. When the growth and exchange ratio is calculated by current prices, exports deteriorated by 0,9 percent per annum between the periods 1879-80 and 1887-88. Between the periods 1887-88 and 1898-99, a recovery happened so; year-to-year growth rate became 1,2 percent between the periods 1879-81 and 1897-99. Year-to-year growth rate in imports calculated by current prices became 0,6 percent through the recovery process (Pamuk, 2008, p.128).

Years	Exports		Imports	
	Current Prices	1880 Prices	Current Prices	1880 Prices
1839/41- 1852/54	5,3	5,3	5,5	6,4
1857/59- 1871/73	5,0	6,2	4,9	5,2
1879/81- 1897/99	1,2	2,7	0,6	2,5
1879/80- 1887/88	0,9	2,8	-0,8	2,0
1887/88- 1898/99	2,3	2,2	1,4	2,7
1897/99- 1905/07	4,3	3,4	6,0	4,3

Figure 11: Growth Speed of Ottoman Foreign Trade (prices in terms of pound sterling)

Source: Pamuk, 2008, p.127

The slowing down process in Ottoman foreign trade didn't affect the allocation of trade among countries. The share of industrialized Western-Eastern European countries and the USA continued to increase relative to Ottomans'. Germany started to expand its share in Ottoman foreign trade with respect to Great Britain in 1880s. However, Great Britain maintained its position as having the biggest share in Ottomans' exports and imports until 1913 (Pamuk, 1978, Section 2). It is only possible to compare total trade numbers until 1907 because, the empire had lost one fourth of its population living in European region, developed in trade and agriculture and had higher living standards, and lost over 10 percent of its land in 1908 (Eldem, 1970, p.56-62). However in 1913, the empire caught the export level of 1907 again, and import level exceeded by 25 percent of its levels in 1907s (Pamuk, 2008, p.126-129).

The Ottoman Empire was a small country in terms of international trade. Tobacco was the only product that Ottoman had an important share in the world trade. Still, the total share of this product in export didn't exceed 10 percent until 1913 (Eldem, 1970, p.134). Since Ottoman economy couldn't affect the prices of imports and exports by itself, foreign trade prices were accepted as the data for Ottoman economy. One of the reasons for the negative disposition of Ottomans' terms of trade during the long depression was, rapid and constant decrease in world wheat prices. Between 1873 and 1894, wheat production in the USA increased by 350 percent and USA got ahead of the total production of Western Europe and Russia. As the USA entered into the international market, wheat prices decreased 60 percent between 1873 and 1894. This decrease in prices affected the economy of Ottoman Empire, as a producer of wheat, negatively. These developments in wheat prices ruined small and medium peasants who produce wheat. Since 90 percent of Ottomans' land was cultivated with wheat and one-fourth of tax incomes were coming from agricultural production, the empire's economy affected badly (Shaw, 1975, p.451-453).

5.8.2 Long Term Dispositions in Foreign Investments

As it is briefly introduced in **figure 12**, in 20 years period before 1874 direct investments in Ottoman Empire was limited. In this period, most of the foreign investments were invested in railways as it is mentioned before. In response to that, the amount invested to Ottomans' foreign debts was high and gradually rising. In compared to 1854-1864 periods, between 1865 and 1874 Ottomans' level of indebtedness to European finance markets increased. Repaying of these debts gradually became difficult. Announcement of partially moratorium was after the 1873 crisis. When flow of capital from industrialized countries to their neighborhood ceased, Ottoman Empire was unable to pay its debts (Pamuk, 2008, p.131).

Years	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	State Debt		Foreign Direct Investment		Total Flow		
	Capital Flow related with New Loans	Total Debt Payments	Net New Investment	Profit Transfers	Capital Flows (1)=(3)	Debt Payments and Profit Transfers (2)=(4)	Net (5)-(6)
1854-1875	4,7	3,1	0,6	0,2	5,2	3,3	2,0
1880-1898	0,9	2,8	2,3	1,1	3,1	3,9	-0,8
1899-1913	2,7	4,6	1,4	2,7	4,1	7,2	-3,1
1854-1864	2,0	0,8	0,4	0,04	2,4	0,8	1,6
1865-1875	7,3	5,4	0,8	0,3	8,1	5,8	2,3
1876-1879	0,7	0,6	0,04	0,3	0,7	0,9	-0,2
1880-1887	0,8	2,1	0,3	0,7	1,1	2,8	-1,7
1888-1898	0,9	3,4	3,7	1,3	4,6	4,7	-0,1

Figure 12: Estimated Fund Flows Emanated From Foreign Investments in The Ottoman Empire (annual averages; million pound sterling) Source: *Pamuk, 2008, p.132*

5.8.3 Changes in Production Level

What could it be said for Ottomans' economic performance between 1873 and 1896? Could it be said that, the basic disposition of this period was a decline in total production growth speed, as it was contending for industrialized countries? Or, was it more serious than that? First of all, neither in composition of total production nor in Ottomans' international division of labor, there wasn't any substantial change. On

the contrary to industrialization, agricultural economy and expertise in exporting of agricultural products were gradually increased. There wasn't any revival in handicraft activities. In direct contradiction, the production of handicraft was decreased (Pamuk, 2008, p.134).

To sum up, two main points show how Ottomans' economy was influenced by the developments in the world economy;

1. After the establishment of *Duyun-i Umumiye*, European capital had control over Ottomans' economy, and repaying foreign debts affected finance and economy negatively.
2. Regression in terms of trade, and decline in growth rate, along with rapid decline in global wheat prices, had influence on Ottomans' economic performance negatively (Pamuk, 2008, p.136-137).

5.9 Demography

5.9.1 Education

Since Ottoman Empire included many people differ in ethnicity and religion, the educational system was complicated. For instance, heirs to the throne of Ottomans, commanders and government officers were educated in *enderun* universities where they could take physical training, Islamic education, learn palace (*saray*) activities in practice and specialize in one of the branches of art. Education for the rest of the Muslims was controlled by the *ulema*, a clergy formed by people who have studied Islamic sciences. Besides, foreign people were allowed to open their own schools next to churches, which were controlled by patriarchates independent from the empire.

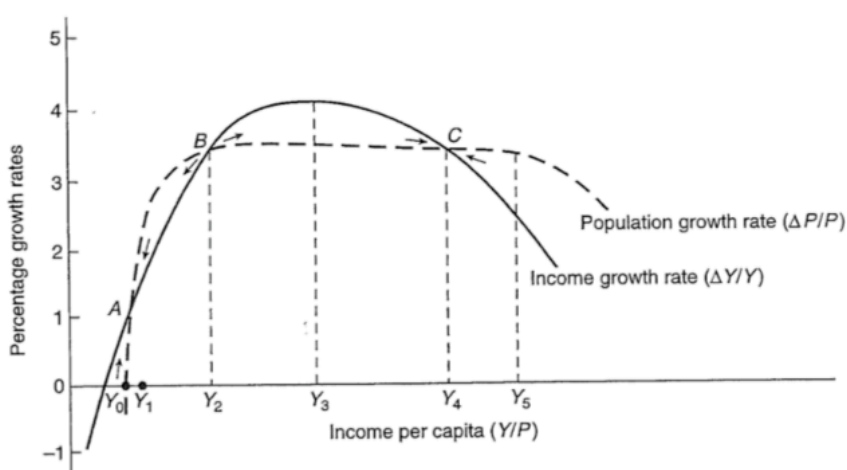
According to some of the modern intellectuals in Ottoman, religion was limiting secular knowledge of education. "Rather than teaching the ideals of the French Revolution and Enlightenment-inspired individualism, schools continued as vehicles for religio-moral social disciplining" (Encyclopedia Britannica: Ottoman Empire). Misinterpretation of Islam inhibited education of women. Therefore, this led to a decline in human capital. The effect of the diminishing human capital due to limited

education in Ottoman Empire on its economic decline, can be explained by Romer's statement defining human capital as a key determinant of economic growth. Together with *Tanzimat*, from 1870 to the early 1880s, Ottoman education system was relieved by modernization and secularization in the sense of esteeming non-religious knowledge (Salmoni, 2002). However, since the empire was limited in terms of financing education, progress of reforms in educational system was slow.

5.9.2 Population

There are several different data about Ottomans' population. According to the most reliable data, the total population of the empire was 17,134,000 in 1884, 17,381,670 in 1893, 19,050,000 in 1897, 28,652,000 in 1910 and increased gradually, then reached to 29,357,000 in 1913 (Bilginin Adresi: Ottomans population and Regime, 2008)

Population is another factor that distinguishes the difference between the developed and developing countries, because population growth is exogenous and has an impact on economic growth. However, it is important to recall classical growth model where population growth is endogenous. Following Thomas Malthus (1798) as it is depicted in **figure 13**, growth in food supplies couldn't keep pace with the growth in population so that it led to a decline in per capita income (Todaro, 1997, p.202-203). Lower per capita income brings poverty, diseases and starvation. This argument is



also related with saving rates. As the income per capita decreases, saving rates decrease, which leads slowing down in economic growth process as it is stated in neoclassical growth model.

Figure 13: The Malthusian Population Trap, Source: *Todaro, 1997, p.204*

In the 19th century, Ottomans' population reached to its peak level and, the economic growth of the empire declined. However, it would be a mistake by explaining the decline in economic growth only with population growth. Technological change is one of the points that the Malthus model has ignored. With the advance in technology, machineries could take the place from human or animal power, which would increase productivity and quality, thus brings an upward shift to income level.

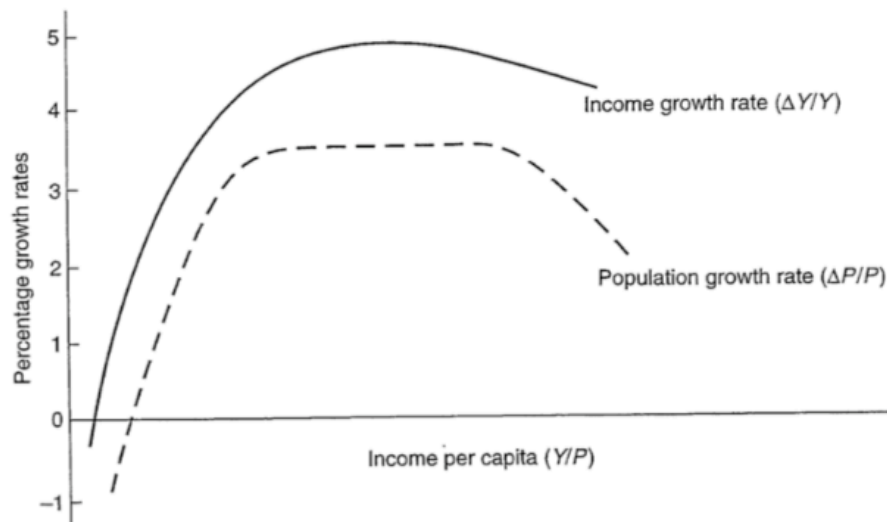


Figure 14: How Technological and Social Progress Allows Nations to Avoid the Population Trap

Source: *Todaro, 1997, p.206*

The second point, which was ignored in the model, is the relationship between the population growth rates and levels of per capita income. As it is shown in the graph (**figure 14**), there is no definite relationship between population growth rate and per capita income levels.

As a conclusion, it would be incomplete to say that the population growth caused Ottoman Empire to experience an economic decline, because, after the Industrial Revolution, Ottomans couldn't keep pace with the technological developments occurred in the world. However, even the empire could have kept pace with the advanced technology, since the education level of Ottoman women was low, they couldn't contribute to household income (Todaro, 1997, p.211). Therefore, as it was stated in neoclassical growth model, the opportunity cost of having a child became low. Besides, children were mostly seen as an investment and future labors for the parents, which would provide economic benefits during the 19th century.

5.9.3 Ethnicity

Ottomans didn't have a homogenous population. There were several different ethnic and religious groups. Determining the size of all the ethnic groups was difficult in the light of limited data about the 19th century. However, there were four largest ethnic groups, which formed most of the population; and those were Turks (10 millions), Arabs (6 millions), Kurds (1.5 millions), Greeks (1.5 millions), and Armenians (between 1.5 and 2 million) (Encyclopedia Britannica: Ottoman Empire). Even the rulers of the empire could have different ethnic origins because of *harem*, which contained women brought from various countries. The sultan of the empire chose his wife among those foreign women, so the heir of the throne could have a different ethnic origin.

Although, there were many diverse ethnic and religious groups, the empire identified itself with a common ethnic background, history, culture and language. While doing this, the Ottoman Empire was tolerant to different beliefs and cultures. Non-Muslims were allowed to go to churches and perpetuate their cultures. Therefore, they could develop their own nationalisms. Before 1850, Ottomans had sought to organize the various ethnic and religious communities into a smaller number of religious nations, called *millet*s; in which each of the *millet*s organized, funded, and administered its own religious and educational institutions (Encyclopedia Britannica: Millet). For some economists and historians, this separatism was one of the fundamental reasons for the end of Ottoman Empire. Since the empire established non-patriotic, non-loyal *millet* system, during war periods the empire was lack of support from most of the minority groups (ibid.).

Like the ethnicity in the empire, the religion was also equally diverse. There were Christians of various denominations, and also Armenian and Greek Orthodox Catholics. There was a diverse but small population of Jews as well. Within the Ottoman Islamic community, there were adherents of Sunni Islam and outnumbered adherents of Shi'ism. However, during the 19th century, Islam became the predominant religion in the empire, just as Turks became the dominant ethnic group. By 1914, about 83 percent of the population practiced Islam (Encyclopedia Britannica: Ottoman Empire).

Paul and Feng (2005) explain that, diversity in both ethnicity and religion has effects on economic growth in most of the countries in the world. Diversity in ethnic and religious groups creates ideological conflicts, which play a major role in social instability that affects economic development of a nation negatively. Social instability is associated with poor economic performance and high economic inequality (Nettle, Grace, Choisy, Cornell, Guégan, et al. 2007).

5.9.4 Religion

Before speculating about the effects of the dominant religion on different issues like finance, society etc. in the empire, it would be right thing to start trying to get acquainted with the major religion, Islam first. Islam as a word formed by two different root words, which are *silm* and *selam* in Arabic language. The first one literally means **peace** and the second one means **happiness**. That tells us that the religion of Islam by its name should be a religion of peace, happiness and wellbeing. Unfortunately it is observed in today's world that these values do not reflect upon the land of the geography of this religion (Ozturk, 1997, p.8).

According to a Turkish theologian, lawyer, columnist and a former member of Turkish parliament, who is selected as one of the top 10 influential people of the century by Time Magazine; Yasar Nuri Ozturk (1997), this is mainly because of corruption starting from the death of the prophet Muhammed by Arab-Umayyad intervention and it is deepened by hundreds of different sects and cliques in the history. He claimed that during Umayyad caliphate many superstitions and false beliefs are ascribed to the prophet Muhammed and most of the traditions and customs are served to the society as Islam or the practice of the prophet (p.9).

It is important to note that the speculations below about the effects of Islam in Ottoman Empire cannot reflect the real religion itself since many of the practices were products of this historical corruption and not reflecting the original content of Qur'an.

Islam and its Effects on Finance

It is a popular debate as if the religion of Islam suppresses the improvement of credit relations in Islamic societies by banning interest profit. On the other hand, in

the absence of deposit banking, many observations from outside concluded that there are no financial institutions and instruments in Islamic societies. It is true that there is a religious ban in both Muslim and Christian societies in order to prevent usury around Mediterranean in the Middle Ages (Pamuk, 2007, p.6).

However, as it is in Islam, *riba* in Arabic, which means usury is strictly banned not the interest. Interest income at the inflation rate could only compensate loss on wealth due to the inflation. Islam and almost all religions are against ill-gotten gains and this is why usury is banned. Interest is to protect wealth against inflation thus it would be inconceivable to consider interest as banned by Islam.

Although interest was frequently criticized among many traditional Islamic parties, eventually Ottomans did not find it against Islam. Religious consensus maintained their pragmatic approach and they concluded that if something is beneficial for Islamic society, it is also beneficial for Islam as well. Consequently, it was not difficult for Ottomans to develop financial institutions and instruments in the Middle Ages (Pamuk, 2007, p.6).

Research of Ronald Jennings (1973) shows that there was an intense credit relationships between money lenders and debt raisers during the 16th centuries around Anatolia and it is observed that interest was applied to all of these credits according to the records. Interest rate was fluctuating between 10 and 20 percent annually around these dates. However, it is important to note that there was some differences about the credits with interest and its incidence vary according to different geographies of the empire. These regional differences considering the practice of interest shows us that Islam was interpreted more strictly in Arabian provinces than Anatolian provinces (Çizakça, 2000).

5.9.5 State and Society Relations

Ottomans' economic policies and the structure of its institutions depended on the characteristics of the relationship between state and society. Different social groups, segments in the empire were constantly trying to affect state policies and they were trying to secure their benefits. In the Ottoman society, up until the end of the 15th century, there were intensive conflicts between Turkish originated aristocracy living in the provinces of the empire and bureaucracy in the central government. After

Sultan Mehmed II, state confiscated the lands under private property and power shifted to the bureaucracy in the center. This was the end of aristocracy based on lands possessed. After this reform the effect of landowners, merchants and moneylenders on state's economic policies became limited (Pamuk, 2007, p.9).

In spite of increasing power and influence of the elites living in provinces, it is interesting that the most important characteristic of the Ottoman order in the 18th centuries, which is the state ownership of the land, was not changed at all. Thanks to this, central bureaucracy maintained its existence up until the 19th century. The partnership based on sharing tax revenues was going to be re-arranged in favor of the central bureaucracy with sultan Mahmud II and *Tanzimat*. In the 19th century, central government got stronger and the ones collecting tax on behalf of the state got weaker (Pamuk, 2007, p.16).

5.10 Economic and Fiscal Institutions

The most important economic institution in classical period Ottoman society was *timar* without any doubt. System of *timar* was furnishing an army relying on special knights called *sipahi* by collecting tax revenues from peasants working on state-owned lands. The *sipahi* was the holder of the land granted directly by the Ottoman sultan, and was entitled to all of the income from that land, in return for military service during wartime and maintaining public security in peacetime. Thereby *timar* was not only an important institution for organization of land ownership but also a key one regarding fiscal and military systems.

However, Ottomans did not put efforts to establish their genuine institutions in all conquered territories. It is known that Ottomans gave importance to collect tax revenues and did not interfere to existing rules and organizations to a large extent in the distant geographies such as East Anatolia, Baghdad, Basra, Egypt, Yemen, Wallachia, Moldavia, Georgia and Northwest Africa (Pamuk, 2007, p.5).

It is the fact that Ottomans preferred to accept existing institutions and legislations in these places instead of forcing to replace with Ottoman institutions and legislations (Barkan, 1942 & Akgunduz, 1990-94, p.180-85).

For example, when it comes to monetary in the Ottomans, they preferred to live with the existing monetary units in the new conquered lands with minor changes like just printing the name of Ottoman sultan on it.

The important reason behind keeping the pace of institutional change limited in distant provinces, was not to cause economic, social and political disturbance. On the other hand, it was not certain that central government had enough fiscal and political power to make these radical changes. It may well be argued that Ottomans' down-to-earth assessment of their capabilities and efficient utilization of their economic, military and political power throughout the empire could be another reason (Pamuk, 2007, p.5).

When we consider today's efforts of moving to single monetary unit in Europe, its slow pace and difficulties shows us that, Ottomans were being realistic by not forcing to establish a single monetary unit in the empire (Pamuk, 2007, p.12).

Agriculture in the Ottoman Empire was not the only the basic key source of economic foundation but it was a dominant way of life, providing both livelihood and employment for the majority of Ottomans throughout the history. According to the calculations of the economist Vedat Elkem (1970), agriculture directly contributed 59 percent of Anatolian GNP, while Anatolia provided 55 percent of all agricultural income and 48 percent of total GNP (p.302-303). Especially the fertile soil in northern Greece, where 88 percent of all cultivated land was set aside for wheat, barley and other cereals, accounted for 76 percent of the total value of agricultural production excluding animal products in 1907 (Pamuk, 1987, p.181).

Although, there were many areas with high birth rate, especially in western and southern Anatolia, since the empire had to deal with many problems, the efficiency from agriculture couldn't be provided or improved enough. One of the problems was the *ayan* class. Together with the weakening power of central government, *ayan* class became more powerful and dominant in Anatolia by the late eighteenth century, who was responsible as an intermediary between the government and the public in collecting taxes. They were collecting taxes in favor of large landowners, and burdening heavy taxes on small and medium peasant enterprises. It is argued that, although the empire or the ruler needed tax collectors (i.e., agents), in the

Ottomans' situation, this created a principle-agent problem. According to North (1981), the rents of the ruler will be diminished to some extent by his tax collectors, for example, the public bureaucracy.

In the early 19th century, by signing *Sened-i Ittifak* agreement (1808) the balance of power between central government and *ayan* class changed. This agreement was a signal of the beginning of centralization in the empire.

Second reason was scarcity in agrarian labor force compared to abundance of land. Between the 16th and 18th centuries, the population in Anatolia showed a net decline. Besides, wars, exploitation of peasants by *ayans* with heavy taxes, and economic and fiscal crisis, contributed to this outcome (Pamuk, 1987, p.183). The empire was aware that, the economic growth of the empire was dependent on the growth in agricultural production and inexpensive transportation of those products. Therefore, in the 19th century the population began to increase by immigration of Muslims from Caucasus and Crimean Khanate. The government settled those immigrants to places where there were labor shortage and railways. However, scarcity of labor continued to be an important feature of Ottoman agriculture until the WWI.

Limited use of technology and inadequacy of transportation was another problem for Ottoman in agricultural production. After the Industrial Revolution, most of the European countries began to exploit the benefits of the new technology since technological progress is an essential factor explaining the long-term growth in Solow's model. It explains how people today are more productive than they were a hundred years ago. Technological changes throughout the years make huge contribution to increasing productivity (Parkin, 2003, p.552). However, this technology came to the empire in the late 19th century. Large landowners in the western Anatolia began to employ laborsaving machinery since there was a labor shortage. In a normal economy, when there was an abundance of land but scarce labor, wages were expected to increase. However, in order not to lose their jobs, peasants accepted to work with great effort in consideration of lower wages. Although, this led small peasant enterprises to survive, it also prevented new technologies to be used in agriculture. Like agricultural production, the transportation of the products was also important for economic growth to be

achieved. After the establishment of railways, agricultural production increased by; first enabling immigrants to settle the areas where labor force was needed, then accessing to the cities where agricultural products demanded in large amounts.

Todaro (1997) states that, “the core problems of widespread poverty, growing inequality, rapid population growth, and rising unemployment all find their origins in the stagnation and often retrogression of economic life in rural areas” and he continues “if development is to take place and become self-sustaining, it will, have to start in the rural areas in general and the agricultural sector in particular” (p.296). An economy like Ottomans’, which was mainly based on agriculture and labor force, should have followed technological improvements, necessary institutional reforms and price incentive changes, in order to try to rise domestic demand for agricultural output and diversify activities that supports farming community. By this way, the empire could have developed in agriculture and support sustainable economic growth.

5.11 World War I

5.11.1 The Economy in Pre-War Conditions

Despite the growth in global economy in the 19th century especially after 1880, Ottoman still had agricultural economy before the WWI. Also national income per person was under Western and Eastern Europe’s averages (Pamuk, 2008, p.140). As it is mentioned earlier, the 19th century was a period that Ottoman Empire made many political, social and economical reforms to hold the empire together against inside and outside threats. Besides, during the 19th century Ottoman economy entered to the world economy. Empire’s foreign trade grew more than ten times between 1820 and 1914. 12 percent of the total productions were exporting, before the WWI. On the other hand, this rapid growth in foreign trade led the empire to import large amounts of finished goods. Due to the free trade agreement, domestic producers couldn’t be supported; the grain produced within hinterland couldn’t compete with imported grain. More than three fourth of Ottomans’ foreign trade was among European countries including Great Britain, Germany and France (ibid).

In rural areas, both small and large peasant enterprises had activities. The basic production unit was family enterprises who had two oxen and a land to cultivate. Coastal areas were cultivated intensively compared to hinterlands, which were scarce in terms of labor force and convenient land (ibid.).

On the other hand, manufacturing activities were mostly relied on craft. Tanneries, cotton mills, flour mills, factories producing glass and brick, which were using new technology arose barely at the end of the 19th century. According to the industrial census in 1913, within the borders of today's Turkey there were only 600 industrial enterprises, which employed ten or more labors. In these enterprises approximately 35,000 people were employed and this number formed 0,2 percent of the total population. Most of these employments were intensively in textile, food processing, paper and printing and construction products (ibid).

As it is mentioned before, in 1830s with many international agreements, Ottomans agreed to stabilize the customs duty around 5 percent at product's value. These taxes were increased due to the opposition from guilds and manufacturers and it became over 15 percent before the WWI. Low customs duty made development of the domestic manufacturers difficult (ibid).

Another important aspect of Ottoman economy opening into the world economy was, direct investments made by European capital. These investments became 75 million pound sterling when it reached at its peak level. 60 percent of this amount was invested to railways especially in Anatolia and Syria. Railways helped Ottoman economy to integrate with the world economy by attaching productive agricultural areas to harbors. European capital made direct investments to infrastructure areas, public services, insurance and navigation, but investments to agriculture; mining and industrial areas were limited (ibid).

Beginning from the Crimean war, Ottoman Empire tried to finance its budget deficit, which was mainly made up of military expenditures. In 1876, Ottoman announced that, the empire couldn't continue to repay its debts. This is why *Duyun-i Umumiye* started to control most of the income sources. In 1914, the total amount of national debts was 140 million pound sterling. This amount was nearly 60 percent of the national income. More than half of the Ottoman Empire's equity securities were

belonging to France, more than 20 percent was belonging to Germany and less than 15 percent was belonging to Great Britain. Industry was poor and foreign debts were increasing gradually. Together with loss of lands in Balkans war, Ottomans' population was increasing 1 percent per annum. Between 1880 and 1914, income per person was increasing a little less than 1 percent per annum (Pamuk, 2008, p.143).

5.11.2 How Ready was Ottoman Empire for a Long Term War?

Ottoman was less prepared for a long-term war than the other countries in terms of economic indicators. Ottoman Empire had over 12,000 km borders with 8,000 km shoreline and over 1,7 million km² area excluding Arabian peninsula. Before the commencement of WWI, most of the trade was taking place via sea routes. After transportation by sea was stopped by allied powers, Ottoman could only use land route transportation for military activities. Years before the WWI, infrastructure programs of the empire had risen. Although, the government managed to maintain building railways, roads and telegraph lines, which first started under Abdulhamit II royalty, Ottomans' transportation network was not enough to cover this wide geography (Pamuk, 2008, p.144). Eastern Anatolia, which had a significant place in the war, was lack of railways because Ottomans agreed on not to build any railways without Russia's permission. In addition to that, when the war started, the railway connection between Anatolia, Syria and Mesopotamia was not built yet. Land routes were poor; pack animals were used in carrying. The empire was also lacking of modern communication tools, and communication network was limited (McCarty, 2001, p.95-98 & Erickson, 2001, p.51-73).

Ottoman Empire was not able to manufacture necessary war materials. Before the war, production of raw iron and steel was limited. Chemical production and refined petroleum production was also limited. There were only one gun foundry, one squib factory and one gunpowder factory. All of these factories were built outside Istanbul and they were not enough to meet internal demand. Another scarcity was energy. The empire was adequate for itself in terms of coal, but after bombing of coalmines in Black Sea region by Russia, Ottoman had to import coal from Germany. The production of coal was declined by 40 percent in 1916 and 75 percent in 1918. Another important point was the scarcity in skilled labor force. Since a lot of men

had gone to the war, the scarcity of labor force in industry sector was increased and this problem couldn't be solved until the end of the war (Eldem, 1994, p.75-82). In addition to all these scarcities, Ottoman had to fight against British, French, Russian and Arabs in many fronts.

Beginning from the end of 19th century, Ottoman was taking military consultancy support from Western European countries. Activities of German committee were started in 1880s during the royalty of Abdulhamit II. In the beginning of 20th century, Ottoman army was configured by taking German army as a model. However, in 1912 and 1913 from Balkans alliance point of perspective, Ottoman suffered a defeat. Therefore, a radical change had happened; military budget was doubled and activities to form a modern army were started. Ottoman gave an order to British navy yard for new war ships and a new air force. Old army officers were retired to give their places to young better-educated officers (Pamuk, 2008, p.145).

However, in 1914 the army was exhausted because of the Balkans War. In order to improve the army to the European standards, there was a limited time. Addition to that, there were some barriers to conscript men for the army too. 20 percent of the population was non-Muslim and they were paying taxes not to join the army. Besides, Ottoman had difficulties in keeping Muslims in the army. The total number of soldiers in the army was 800,000 during the war. This number was approximately less than 4 percent of the whole population and it was under the level of other countries' average. Ottomans were dependent to import guns and military supplies until the end of the war. After the campaign of Serbia at the end of 1915, the empire faced with a scarcity of military supplies and raw materials until re-establishment of the railways between Western Europe. Despite these scarcities, while the other countries' armies surrendered to the enemy, Ottoman army remained the last until October 1918 (Zurcher, 1996). During the war, support from German army was no more than giving consultancy. Both financial support and materials provided were poor. Right to the end of 1914, sources provided from Germany were increased. However, German military union in Ottoman army was still limited. (Pamuk, 2008, p.146-147).

5.11.3 The Ottoman Economy During WWI

As it is mentioned before, Ottoman economy was dependent to import not only because of providing manufacturing and war supplies but also, in order to provide food requirements especially to the capital city. The first impact of the war was declining foreign trade. Therefore, Ottomans' volume of foreign trade got smaller. In 1916, Ottomans' foreign trade volume decreased to one fifth of the level before the war and 90 percent of this volume was between Germany and Austria. In that case, scarcity especially in grain and sugar spread out rapidly. However, instead of implementing policies to support domestic production in order to meet the demand, the empire preferred to attach itself to the free trade agreements, and on going capitulation system, which allowed economical and legal concessions to foreign countries (Pamuk, 2008, p.148).

After entering into the war, Ottoman government performed three important changes. First of all, they terminated the practice that allowed low customs duty on the value of the import products and started to apply higher customs duty on some of the specific import products to protect and support domestic industry. Secondly, Ottomans stopped repaying debts to France, Germany and Great Britain, suspended the activities of *Duyun-i Umumiye*. Lastly, capitulations were revoked (Pamuk, 2008, p.149-150). However, all of these efforts were so late to have enough corrective impacts on Ottoman economy.

Furthermore, it is important to note that, during the war, Ottoman Empire experienced serious problems in agriculture sector. Due to the special requirements of the army, the production, which was lack of machinery, affected badly. Since most of the pack animals used in agriculture were confiscated by the army, both the number of farm animals and the production capacity declined (ibid).

War period causes disequilibrium between the demand and the supply of food. But there is a difference between underdeveloped economies and developed economies in this respect. Agricultural structures in developed economies tried to maintain their production level as in the peace period. Since agricultural production of those developed economies was diversified, the sector did not affected seriously from stagnation. When there was a scarcity in labor force, this problem could be

replaced by machines or fertilizers for instance. Agricultural structures in underdeveloped economies were lack of this flexibility. Production structures of these countries were tougher and production techniques were basic, for instance, replacement of labor force and pack animals with machines wasn't easy. In addition to that, underdeveloped economies were poor to provide a good transportation infrastructure between the regions. Overall, underdeveloped economies were less flexible and unprotected against the pressure of the war. Therefore, Ottomans' imports and production declined rapidly (Pamuk, 2008, p.151-157).

Beside the scarcity in the supply of food, inequality in distribution and consumption of food products caused damages in public spirit and motivation, thus affected the efforts shown in the war negatively. Therefore, controlling equal distribution of food supplies was Ottomans' another problem experienced during the WWI (ibid).

Briefly, during war period, Ottoman agriculture was less flexible and unprotected in compared to developed economies. War conditions caused serious problems especially in food supplies. While food production and imports were declining, supplies of the military and cities, and maintaining the stability of politics became vital problems for the empire (ibid).

5.11.4 Financing War

With the commencement of WWI, the military expenditures were increased rapidly. One way of financing war expenditures was to increase taxes. Before the war, total income coming from taxes was 12 percent of the empire's national income (Eldem, 1970, p.243-303). Two third of these taxes were collected from agricultural area. With the commencement of the war, all direct and indirect taxes were increased, but despite of all these efforts, income taxes didn't increase. One of the reasons was, a serious decrease in agricultural and industrial production. The second, maybe the most important reason was, increased affinity to be reluctant to pay taxes in both cities and rural areas, and decrease in empire's force to collect those taxes (Pamuk, 2008, p.157-162).

Rapid increase in war expenditures caused budget deficit to become huge. In order to control this deficit, the empire targeted salary payments, which was 40 percent of the empire's total expenditures. Although, the number of civil servants increased by

20 percent during the war, the expenditures in terms of salaries decreased to the levels under 18 percent of the empire's total expenditures (ibid).

During the war, the empire indebted to foreign countries especially to the allied countries. 56 million pound sterling from Germany, 8,5 million pound sterling from Austria-Hungary was provided. The total value of all credits in terms of pre-war rate was 20 million pound sterling (ibid).

Since the empire couldn't achieve any results from all these methods, it introduced *kaime* (special sales notes) into the market. Therefore, printing banknotes became an important tool for Ottomans to finance its war expenditures. While the amount of money in circulation increased, its value against gold coins decreased as it is expected. Not only because of this monetary expansion but also along with encountering problems in food supply, caused prices to soar continuously. According to the data from *Duyun-i Umumiye*, prices were increased by over 20 times from July 1914 to the end of 1918, and by over 18 times in the last quarter of 1918. The inflation rate was 300 percent and this rate has never been experienced before in Ottoman history (ibid).

5.11.5 Results of the War

During the WWI, Ottoman Empire experienced an underdeveloped economy with limited managerial capacity. Neither the economy nor the empire could give enough response to the pressures generated by the war in the long run, and they remained under their performance during the peace period as well. Due to the pressures generated by the war, the production in both agriculture and industry decreased in large amounts. The empire was lack of ability to increase sources that could be directed to the war. Because of limited technology and production structure, results were hopeless. To sum up, it may well be argued that, Ottoman Empire with its fragile economy was not ready for a long-term war. (Pamuk, 2008, p.139-140).

6. Limitations and Implications for Future Research

The history of the Ottoman Empire is complicated. It doesn't include only the Ottoman Empire but also the societies of different minorities, which ruled and/or lived under its rule such as Kurds, Arabs, Serbians, Greeks, Armenians, Hebrews, Bulgarians, Hungarians, and Albanians etc. Ottomans history is also a history of various religious groups like, Muslims, Jewish and Christians. Due to this diversification within the borders of the Ottomans, sources are diversified in terms of languages, alphabet and different names of places, which bring difficulties in translation.

Although, the Ottoman history was frequently discussed in details, these discussions were written either from the European perspective or from Turkish. Therefore, most of the sources were written under the effects of European or Turkish prejudices. In the writing process of this paper, although the authors tried to reference both perspectives in order to provide a balance, there were still some limitations to keep this balance.

Considering the reliability of the data used, there are some limitations in terms of its quality. It is important to note that comparisons are fraught with uncertainty, for instance as a result of differing consumption patterns in different locations and across time related to consumer price indices presented. There might be problems with comparisons across time and across regions, and, thus, that the data presented should be understood with a certain amount of caution.

Besides, this paper looks events in an economic perspective and authors spent maximum effort in order not to include political and/or social perspectives. Thus, the probability of deviation in interpretation of the events shouldn't be ignored.

By referring to this study, comparisons with today's modern Turkey in terms of economic aspects could be offered as an implication for further research. This kind of research may help to understand the reasons of some economic problems, which today's Turkey is currently encountering. It may also lead to grasp if there are any overlapping economic situations with the Ottoman economic history.

7. Conclusions

Throughout its history, Ottoman Empire put a significant effort to maintain its traditional order, however due to various reasons Ottomans could not stop loosening its power. Most of the problems faced were not only related with domestic reasons but also global for most of the time by their nature. Developments around the empire created a turbulent environment and Ottomans could not catch up with the new situation emerged. Considering all internal and external factors, it is observed that almost all of the conditions were met for an empire to decline. In order to understand these factors and their results for the empire, it is preferred to highlight them while mentioning their both positive and negative effects to the empire.

To begin with, it is important to emphasize first, genuine Ottoman flexible, pragmatic and negotiating governing traditions. It is understood that the way Ottomans rule allowed them to restore order easily against any uprising. Being flexible instead of forcing strict rules gave Ottomans increased adaptability and enabled the empire to gather different talents from many different sources. However, on the other hand, the *millet* concept, which emanated from the same traditions, moved the minorities outside the framework of the Ottoman political system. The Ottoman *millet* system degraded with the continuous identification of the religious creed with ethnic nationality. Different *millets* in the Ottoman Empire became risk as non-loyal and non-patriotic social groups. Eventually being flexible instead of strict, allowing each *millet* to become increasingly independent inside the empire, prepared the ground for minorities to rise for their independence. Although the negative effect of nationalism movements after the French Revolution should not be denied, traditional way of governing of the Ottoman Empire caused more harm than its benefits.

Extremely wide borders of the empire is another factor that should be analyzed. Standing at a crossroads of intercontinental trade allowed the empire to control most of the important trade routes and contributed to empire's development. It is also a fact that the fertile lands of the empire especially in Anatolia contributed to empire's agricultural development. However, while Ottomans were expanding their lands, the difficulties of controlling and governing distant provinces became a real challenge

for central bureaucracy. Increasing population and ethnic diversity along with expanding borders could be considered as another burden for the empire. Moreover, while the empire was getting wider, the demand for protecting these lands was increasing and maintaining order was getting difficult. Authors speculate that this situation might lead Ottomans to allocate most of its resources to national security instead of economic growth and, thus, contributed to economical decline.

Around 1750, while most of the European countries were enjoying a long run economic growth during Industrial Revolution, Ottoman Empire were not fully aware of the fact that industrialization and international trade are the two most important engines for economic growth. Instead, Ottomans preferred to rely upon their traditional principles of governing and they stayed reluctant to transform these principles according to the new world. Although Ottomans' institutions and their policies had an important role on its longevity, the same structure of government started to become a reason for their decline up to a certain point in history. The advantages of Ottomans, which gave them unique competitiveness in the past, started to become obsolete one by one as the time passes. Ottomans did not follow any mercantilist policies, which may assist the local merchants and industries to develop. The institutional frameworks were insufficient in order to give necessary incentives to entrepreneurs to create new technologies, establish new industries, manufacturing factories, mining sites etc. to catch up with rapid western industrial growth. Up until the year 1839, there were a limited effort to change and Ottomans were not only unable to forecast the future but also reluctant to take corrective measures. The latter efforts of reforms and corrective measures taken during WWI were simply late and Ottoman Empire became already vulnerable to exploitation of European capitalism. European countries demanded Ottomans to open into the foreign markets as much as possible in return of a reward for military, political and financial support. Therefore, reform activities followed with concessions in foreign trade and foreign capital without any protectionist policies. Thus, these policies caused local premature industries of the empire to extinct before they develop. All of these accepted agreements and compromises with Europe in an effort of survival caused only to expedite the pace of decline instead of saving the empire. Efforts of generating income of the empire were ineffective and caused the empire became more dependent to the developed economies. Shortsighted thoughts and policies to

finance increased budget deficits gave rise to increasing difficulties to maintain price stability of the empire. This situation led lower saving rates and lower investments within the empire, which was burdening any possible economic improvement.

The importance of internal factors behind decline such as Ottoman policies, structure of its economical institutions etc. should not be underestimated as well. Traditional economic principles of the empire such as provisionism, traditionalism and fiscalism barred the process of economic growth and hindered the introduction of any new technology.

Under all these circumstances it is not a surprising fact that Ottoman Empire was defeated in WWI, and collapsed in the aftermath of the war. Authors concluded that beside all of the factors mentioned, the true reason behind the decline and collapse was the inability of the empire to adapt itself to the both internal and external changes and not being resilient to foreign threats, which resulted in significant economical trauma.

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Data Appendix

Figure 2, Figure 8:

Years	CPI in terms of Coins 1469=1,0	Quantity of gram silver in Coins	CPI (grams silver) 1469=1,0	Years	CPI in terms of Coins 1469=1,0	Quantity of gram silver in Coins	CPI (grams silver) 1469=1,0
1469-79	1,20	0,85	1,17	1720-29	6,98	0,13	1,06
1480-89	1,30	0,68	1,02	1730-39	7,62	0,12	1,10
1490-99	1,09	0,68	0,85	1740-49	9,93	0,12	1,39
1520-29	1,87	0,66	1,42	1750-59	10,1	0,11	1,30
1550-59	1,64	0,66	1,25	1760-69	11,1	0,10	1,23
1560-69	1,86	0,61	1,32	1770-79	17,8	0,093	1,93
1570-79	1,99	0,61	1,41	1780-89	17,2	0,080	1,58
1580-89	3,35	0,39	1,47	1790-99	24,5	0,053	1,50
1590-99	4,45	0,30	1,46	1800-09	34,7	0,048	1,91
1600-09	5,43	0,29	1,81	1810-19	49,5	0,032	1,86

1610-19	4,44	0,29	1,47	1820-29	62,8	0,018	1,26
1620-29	5,56	0,25	1,54	1830-39	130,1	0,0073	1,12
1630-39	5,49	0,20	1,24	1840-49	181,0	0,0081	1,70
1640-49	4,37	0,27	1,34	1850-59	240,5	0,0083	2,32
1650-59	4,92	0,27	1,56	1860-69	285,7	0,0083	2,76
1660-69	5,82	0,23	1,56	1870-79	265,6	0,0083	2,56
1670-79	7,06	0,21	1,69	1880-89	238,1	0,0083	2,30
1680-89	7,46	0,21	1,79	1890-99	235,6	0,0083	2,27
1690-99	7,96	0,13	1,21	1900-09	220,9	0,0083	2,13
1700-09	6,05	0,13	0,92	1910-14	294,2	0,0083	2,84
1710-19	6,87	0,13	1,03				

Figure 2: Summary of Price Index (ten years average) TFE: Consumer Price Index

Source: Pamuk, 2007, p.110

Years	Consumer Price Index (1469 = 1,0)		Nominal Daily Prices				Real Daily Prices (1489/1490 = 1,0)	
			Regular Worker		Skilled Worker		Regular	Skilled
	Coin	Silver	Coin	Silver	Coin	Silver		
1469-1479	1,20	1,17						
1480-1489	1,30	1,02	4,9	3,3	9,8	6,6	0,93	1,04
1490-1499	1,09	0,85	4,7	3,1	7,7	5,2	1,06	0,96
1540-1549	1,60	1,00	5,3	3,5	9,6	6,3	0,86	0,92
1550-1559	1,64	1,25	5,0	3,3	9,7	6,4	0,78	0,86
1560-1569	1,86	1,32	5,9	3,8	9,3	6,0	0,83	0,73
1570-1579	1,99	1,41	5,6	3,4	9,9	6,0	0,68	0,66
1580-1589	3,35	1,47	8,1	3,5	12,4	5,4	0,65	0,53
1590-1599	4,45	1,46	11,7	2,6	20,7	4,6	0,51	0,50
1600-1609	5,43	1,81	13,9	4,0	22,5	6,5	0,62	0,56
1610-1619	4,44	1,47	14,2	4,1	22,8	6,6	0,76	0,67
1620-1629	5,56	1,54	15,0	3,4	18,3	4,1	0,84	0,57
1640-1649	4,37	1,34	15,2	4,2	29,5	8,2	0,79	0,84
1660-1669	5,82	1,56	19,5	4,4	29,9	6,8	0,81	0,69
1670-1679	7,06	1,69	18,0	3,7	23,0	4,8	0,71	0,50
1680-1689	7,46	1,79	21,8	4,5	33,4	6,9	0,73	0,62
1690-1699	7,96	1,21	26,2	3,4	36,9	4,8	0,78	0,61
1700-1709	6,05	0,92	23,8	3,1	38,0	5,0	1,02	0,90
1710-1719	6,87	1,03	25,2	3,3	38,2	5,0	0,92	0,77
1720-1729	6,98	1,06	26,4	3,5	42,3	5,6	0,97	0,85
1730-1739	7,62	1,10	30,6	3,8	44,8	5,6	0,94	0,76
1740-1749	9,93	1,39	32,5	3,9	51,1	6,2	0,91	0,79
1750-1759	10,1	1,30	32,4	3,6	58,6	6,6	0,76	0,75
1760-1769	11,1	1,23	30,3	2,9	50,8	4,8	0,70	0,64
1770-1779	17,8	1,93	38,7	3,6	71,2	6,7	0,52	0,51
1780-1789	17,2	1,58	56,9	4,7	113,4	9,4	0,86	0,94

1790-1799	24,5	1,50	80,2	4,1	148,4	7,7	0,84	0,84
1800-1809	34,7	1,91	114,4	5,3	217,7	10,0	0,84	0,88
1810-1819	49,5	1,86	202,6	6,9	401,2	13,7	0,95	1,04
1820-1829	62,8	1,26	275,9	5,0	475,4	8,9	1,13	1,10
1830-1839	130,1	1,12	608,8	4,5	1.054	7,8	1,11	1,05
1840-1849	181,0	1,70	717,2	5,9	1.238	10,1	0,99	0,95
1850-1859	240,5	2,32	935,3	7,8	1.599	13,3	1,38	1,30
1860-1869	285,7	2,76	964,7	8,0	1.716	14,3	0,81	0,80
1870-1879	265,6	2,56	941,4	7,8	1.989	16,6	0,86	0,89
1880-1889	238,1	2,30	944,0	7,9	2.061	17,2	0,91	1,04
1890-1899	235,6	2,27	1.063	8,9	2.308	19,2	1,12	1,35
1900-1909	220,9	2,13	993,5	8,3	2.150	17,9	1,10	1,31
1910-1914	294,2	2,84	1.861	12,6	3.450	26,6	1,30	1,51

Figure 8: Wages and Prices in Istanbul, 1469-1911 (ten years average)
Source: Pamuk, 2007, p.166