THE REQUIREMENTS OF A GOOD TAXATION SYSTEM:
RECENT EVIDENCE FROM TURKEY

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ABSTRACT

THE REQUIREMENTS OF A GOOD TAXATION SYSTEM:

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This thesis describes a picture of taxation systems that is recently applied in developing and developed countries, centralizes Turkey and thus questions macroeconomic effects of taxation, provides evidence by using recent macroeconomic indicators, at the same time benefits from both empirical and theoretical studies dealing with the effects of taxation and asks how the taxation system of Turkey should be. Turkish taxation system has a complicated and a rapidly changing structure, therefore, it is unlikely to be fully understood and adopted by the tax-payers. Further, there is a long-lasting unfair taxation which can be observed in the percentage level of direct-indirect tax ratios as most developing countries do even though the situation is completely different in developed countries. There is clear evidence that taxes should be lowered to encourage production, consumption, and growth; and directed from indirect taxes to direct taxes which are collected depending on the income level of tax-payers, and therefore, assumed to be fairer.

Key Words: Taxation, Direct Taxes, Indirect Taxes, Growth, Turkey

ÖZET

İDEAL VERGİLENDİRME SİSTEMİ İÇİN GEREKLİ ŞARTLAR:

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Bu tez son zamanlarda gelişmekte olan ve gelişmiş ülkelerde uygulanmakta olan vergi sistemlerini incelemekte, Türkiye'yi baz alarak vergilendirmenin makroekonomik etkilerini sorgulamakta ve bu çalışmaları yaparken son dönemde Türkiye'ye ait makroekonomik göstergelerden ve aynı zamanda vergilendirmenin etkilerini inceleyen ampirik ve teorik çalışmalardan yararlanarak Türkiye'nin vergilendirme sistemi nasıl olmalıdır sorusuna cevap bulmaya çalışmaktadır. Türk vergi sistemi karmaşık ve hızlı değişen bir yapıya sahiptir. Bu nedenle vergi mükellefleri tarafından tam olarak anlaşılması ve benimsenmesi zordur. Bununla beraber, birçok gelişmekte olan ülkede olduğu gibi dolaysız dolaylı vergi oranlarından da görüleceği üzere uzun zamandır adil olmayan vergilendirme sistemi uygulanmaktadır. Oysa durum gelişmiş ülkelerde tamamen farklıdır. Vergi oranlarının üretim, tüketim ve büyümeyi teşvik amaçlı düşürülmesi ve dolaylı vergilerden vergi mükelleflerinin gelirleri ile doğru orantılı olarak tahsil edilen ve bu nedenle adil olduğu düşünülen dolaysız vergilere geçiş yapılması gerektiği yönünde kanıtlar bulunmaktadır.

Anahtar Sözcükler: Vergilendirme, Dolaysız Vergiler, Dolaylı Vergiler, Büyüme, Türkiye

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1. INTRODUCTION

There have been many arguments on the taxation systems as a fundamental source of revenue for governments. The role of taxation on the economy cannot be disregarded since taxation has both long-run and short-run effects on the economy, and is considered as one of the determinants of the development levels of a country. Besides, taxation systems vary depending on the economic, social and political structures of countries. Effect is two-sided that taxation system not only affects the mentioned structures but also is affected by them. Both developed and developing countries have common targets as economic growth and social justice but they are required to have different taxation systems since their fundamental economic, social and political structures are different from each other.

This thesis analyzes the differences in developing and developed countries, observes the causes and results of taxation within the framework of empirical and theoretical studies and recent macroeconomic indicators of a sample country, Turkey. Then, in the light of this analysis this thesis determines the desired taxation system for Turkey, whether there is a required shift in tax rates and indirect taxation or not.

As regards this information, in the second chapter, several studies on taxation, particularly studies on changes in tax rates, tax mixture of direct and indirect taxation, and the yield of different taxation systems from samples of several countries will be examined. In the third chapter, as a cornerstone of all political regimes, taxation and other ways of government finance will be studied. In the third chapter, tax mixture of developing and developed countries, the differences and similarities between their systems will be explained. In the subsequent chapter, the current Turkish taxation system will be investigated, and then, in the fifth chapter,

Turkish macroeconomic and fiscal position will be viewed numerically through the economic indicators for the sample years of 2000-2006. Finally, in the sixth chapter, there will be concluding remarks.

2. LITERATURE REVIEW

Burgess and Stern (1993) mentioned different sources of government finance as raising government revenue, internal and external borrowing, and printing money. However, they emphasized that raising government revenue through taxation cannot be substituted in the long run. Burgess and Stern worked on the practice of taxation in poor countries. According to their work, the objectives of taxation in developing and developed countries are similar. Taxes are imposed to increase government expenditures in a feasible, equitable and an efficient way. The differences of taxation have been lying in the constraints facing governments: The weakness of administration, limited experience with taxation, poor accounting, low level of monetization, high share of agriculture and few tax handles.[1] Furthermore, as emphasized by Tanzi (1989), there is another aspect of taxation largely ignored by literature: The impact of macroeconomic policies on tax revenue. These mentioned macroeconomic policies cover exchange rate and trade restrictions, financial markets and inflationary finance. The inflation rate and the real exchange rate are especially thought to be essential determinants of tax revenue from the side of macroeconomics. Taxes are the most important resources of revenue provided that there is a stable macroeconomic environment. Unless there is an improving macroeconomic environment, tax system should be insulated from the negative shocks probably caused by macroeconomic environment.[2]

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[1] Burgess, Robin and Nicholas Stern. 1993. "Taxation and Development". *Journal of Economic Literature.* Vol. XXXI, pp.762-830.
[2] Tanzi, Vito. 1989. "The Impact of Macroeconomic Policies on the Level of Taxation and the Fiscal Balance in Developing Countries". *International Monetary Fund Staff Papers.* Vol. 36, No. 3, pp. 633-656.

Kenny and Winer (2006) emphasized taxation as one of the cornerstones of all political regimes like Schumpeter (1991), Musgrave (1959), Brennan and Buchanan (1980), Levi (1988) and others previously did.[3] Even though there is not any detailed taxation package fit for universal prescription, indirect taxation reforms have generally been more successful than reforms of direct taxation.[4] However, Bovenberg (1987) emphasized the aim of indirect taxes to raise revenue in the short run. Bovernberg worked on the indirect taxes as taxes on goods and services and taxes on international trade for three reasons. Firstly, developing countries depend on indirect taxes. Secondly, their reforms deal with indirect tax structure, and lastly, since they aim to raise revenues in the short run, their stabilization tax packages include reforms dealing with indirect taxes.[5]

As Cremer, Pestieau and Rochet (2001) stated in their article -giving reference to Atkinson- dealing with direct versus indirect taxation, the choice between indirect and direct taxation is one of the oldest issues of history. Indirect taxes especially Value Addes Tax (VAT) compose an important part of revenues from taxes in European Union, while indirect tax revenues are insignificant in the United States. The significance of tax revenues even differ among EU member countries.[6] In 2006, Kenny and Winer worked on the structure of taxation in a sample of 100 democratic and nondemocratic regimes over three time periods. Their work had three results: The scale effect, base effect and administrative cost effect. In a detailed explanation,

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[3] Kenny, Lawrence and Stanley L. Winer. 2006. "Tax Systems in the World: An Empirical Investigation into the Importance of Tax Bases, Administration Costs, Scale and Political Regime". *International Tax and Public Finance*, pp 181-215.

[4] ibid, Burgess and Stern (1993)

[5] Bovenberg, A. Lans. 1987. "Indirect Taxation in Developing Countries: A General Equilibrium Approach". *International Monetary Fund Staff Papers.* Vol. 34, No. 2, pp. 333-373.

[6] Cremer, Helmut, Pierre Pestieau and Jean-Charles Rochet. 2001. "Direct versus Indirect Taxation: The Design of the Tax Structure Revisited". *International Economic Review.* Vol. 42, No. 3, pp. 781-799.

according to scale effect, utilization of tax sources increases when government expands; base effect means that tax systems rely more heavily on larger tax bases; and lastly, lowering administration cost results in increasing reliance on the revenue source as administrave cost effect puts it.[7] All around the world, tax laws have similar properties. Laws are frequently changed and these frequent changes make them more complicated and difficult to be understood. This complicated structure of both laws and structures of taxes causes increasing costs of not only tax-payers but also governments. The research of Shirazi and Shah (1991) emphasized the effect of the ability of the administration to collect revenue through fair and efficient enforcement on the success of tax policy changes.[8]

Considering the three purposes of taxation as to collect revenues to finance publicly-provided goods and services, to regulate social and economic behaviour, and to shape the distribution of economic resources, a very recent paper of Duff examined principles of tax fairness for each purpose of taxation. Traditional benefit and ability to pay approaches provided useful principles of tax fairness if taxes are collected for the finance of government expenditures. Benefit principle requires individuals and enterprises to pay only for those publicly-provided goods and services that they themselves enjoy, without having to pay for goods and services provided by the government to the others since they cannot afford those goods and services.The ability-to-pay approach is an alternative to benefit principle requiring an apportion according to each individual's taxable capacity or ability to pay. On the other hand, taxes have a regulatory purpose, the regulatory aim determines the fairness of the tax.

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[7] ibid, Kenny and Winer (2006)

[8] Khalilzadeh-Shirazi, Javad and Anwar Shah. 1991. "Introduction: Tax Policy Issues for the 1990s". *The World Bank Economic Review.* Vol. 5, No. 3, pp. 459-471.

Further, the distributive purposes are determined through the concept of distributive justice which determine the manner in which economic resources are fairly distributed and the respective roles of taxes and transfer payments to achieve this distributive goal. [9]

Waelde (2003) studied on the impact of taxation using the old and new growth theories in his research paper in the European Commission. Models by Solow (1956), Romer (1986) and Barro (1990) were examined in the study. As stated in the paper, according to the theoretical approach of the Solow model, provided that taxes are used to provide public goods that will be an input in the production, it possible to state an optimal level of taxation. From this perspective, a country having higher taxes has a higher level of GDP per worker. However, lower GDP per worker does not indicate that there is lower welfare. On the other hand, if taxes are assumed to provide public goods which does not have a productive effect, taxation of income will not have any distortions due to the fact that there is fixed labor supply. This theoretical approach indicates that since taxation does not affect long-run growth, it has an effect on the level of GDP only. On the other hand, Romer's study on growth indicates that taxation affects not only the level of GDP but also the growth rate of GDP. Differences in taxation results in different levels and growth rate of GDP of countries but different levels of growth rates do not necessarily mean differences in welfare of countries. Some countries need growing faster while some other countries do not require that kind of a growth level. Further, as mentioned in Waelde's study, Barro's research showed the required circumstances of the public sector for the economy to grow. He worked on the effects of fiscal policy, indirect taxation

[9] Duff, G. David. "Fairness and the Tax Mix". Faculty of Law University of Toronto.

particularly. Barro said that fiscal policy shows its effects through two channels. First, increase in indirect taxes decrease the growth rate of consumption. Second, increase in indirect taxes increase the growth rate of consumption since higher tax rate helps larger provision of public goods which in turn increases returns to capital accumulation. [10]

Mendoza, Milesi-Ferreti and Asea (1995) examined Harberger's conjecture on the superneutrality of tax policy within the help of modern endogenous growth theory. According to Harberger, growth effects of taxation are negligible even though tax mixture of direct and indirect taxes theoretically affects both investment and growth. There are two arguments of Harberger: One is that, changes in the tax mix do not have significant effects on the growth of labor supply or on labor's income share, and may have little effect on the "normal" of long-run rate of output growth. Second, tax changes like a shift from income to expenditures do have insignificant effects on saving and investment rates. As he puts in, tax changes cannot increase the growth rate of national income by more than 10% or can increase at a maximum of 20%. To sum up, changes in tax policy nth-best tax structure –economics assessing the state of the economy in its actual tax-distorted equilibrium and quantifying the effects of altering the tax structure in a particular direction- may have an effect in investment rates and social welfare, however, feasible changes of nth best economics as Harberger says, are unlikely to have significant effects on economic growth. Further, the results of the empirical work of Mendoza, Milesi-Ferreti and Asea which is based on cross-country regressions and numerical simulations showed the significant

[10] Waelde, Klaus. 2003. "Old and New Growth Theory: The Impact of Taxation". European Commission Directorate General Economic and Financial Affairs, Economic Studies and Research Topics in Economic Research.

effects of income and consumption taxes. The study supports Harberger in the way that, even though tax mixture of direct and indirect taxation is theoretically an important determinant of growth and investment, in practice changes in taxes of the nth best do not significantly affect growth.[11]

Bahl (1971) worked on the tax ratio analysis of several countries in his paper where tax ratio is the description of the ratio of tax revenues (excluding social security taxes) to gross national product (GNP). In his work, he stated that the agricultural share of income is in a significant and a negative relationship with tax ratio while mining share of income is in a significant and a positive relationship with the tax ratio which is the reflection of higher taxable capacity of countries achieving a higher stage of development through exportations of minerals and oil. The results of the paper indicates that countries achieving a higher level of development though import substitution and though growth of nonmining exports have greater taxable capacity than less-developed countries, but less taxable capacity than countries with large mining income shares.[12]

In the 1980s, Arthur Laffer stated the idea of Laffer Curve that, increases in tax rates do not increase revenues. The theory suggested that lower tax rates would increase tax revenues. According to the theory, increases in taxes rates cause marginal tax revenues to decrease at the rate up to optimal taxation revenues. After the tax rate of optimal taxation, economic activities start to reduce since most of the revenues of

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[11] Mendoza, Enrique G. Maria Milesi-Ferreti and Patrick Asea. 1995. "Do Taxes Matter for Long-Run Growth? Harberger's Superneutrality Conjecture". *Board of Governors of the Federal Reserve System International Finance Discussion Papers.* Number 511.

[12] Bahl, Roy W. 1971. "A Regression Approach to Tax Effort and Tax Ratio Analysis". *International Monetary Fund Staff Papers.* Vol. 18, No. 3, pp. 570-612.

citizens are collected by the government. Any rational person would not work at a tax rate of 100% because at that point, there would be no economic return. In fact, the elasticity level of a country with respect to tax rates would answer the question of the Laffer Curve.

Congressional Budget Office also analyzed the economic and budgetary effects of a 10% cut in income tax rates in 2005. First, it should be kept in mind that, tax cuts have two macroeconomic effects as long-lasting supply-side effects and short-run demand side effects. Supply-side effects are changes in economy's potential output level. Supply-side has long-lasting effects on the economy since they affect the economy's potential output. Marginal tax rates affect the quantity and quality of labor supplied, by the way affect the total economy as a whole. However, the reactions of labor may differ. As mentioned before, the elasticity level would help the country to measure the effects of tax reductions. Tax cuts result in less working hours since workers get more by working less. On the other hand, estimations of empirical studies indicate that marginal tax rates draw secondary earners to the economy. Furthermore, tax cuts may change people's future expectations, and they expect to pay more taxes in the future as a result of today's tax cuts. So, they may choose to work more to compensate future's expected tax burden. On the short-run demand side, people start to spend their earnings from tax cuts, and this would increase the level of output but demand-side shows its effect in the short-run since by the way, output level exceeds its potential which cannot be long-lasting.[13]

[13] Congressional Budget Office. 2005. "Analyzing the Economic and Budgetary Effects of a 10 Percent Cut in Income Tax Rates". Washington, D.C.: Technical Paper Series.

A more recent research made by Kenny and Winer in 2006 showed that major oil producing nations make most of their revenues from non-tax revenues and corporate taxes including profits from nationalized oil operations and taxes on oil corporations. Countries playing an important role in international trade depend heavily on trade taxes while countries where more people live in urban areas and more women work depend heavily on domestic trade. Increase in population in urban areas results in increases in land values and more dependence on property taxes.[14] The point that must be emphasized is that a sectoral characteristic of an economy is important for deciding the optimal taxation level of developing countries.

In 1972, Bahl made an application of a system, namely "representative (average) tax system approach" to a set of assumed tax bases for 49 developing countries involving an application of average effective rates to a standard set of tax bases. The representative tax system approach did not examine marginal effects, but did observe the yield of a representative tax system, namely taxable capacity –total amount of tax that would be collected if each country applied a set of effective rates to the selected tax bases. The important findings of the paper are that, taxable capacity which is the total tax amount would be collected as expressed before gives response to most sectoral changes, and further, if the yield of a representative system is accompanied by a change in total income, it is more responsive to a change in income generated in a particular sector.[15]

Widmalm (2001) made a research of tax structure effects on economic growth using pooled cross-sectional data from 23 OECD countries between the years 1965 and

[14] ibid, Kenny and Winer (2006)
[15] Bahl, Roy. W. 1972. "A Representative Tax System Approach to Measuring Tax Effort in Developing Countries". *International Monetary Fund Staff Papers.* Vol. 19, No. 1, pp. 87-124.

1990. According to the findings of the paper, tax structure of a country affects economic growth, more specifically; the proportion of tax revenue increased via the taxation of personal income is negatively correlated with economic growth of a country. The results of Widmalm's study supported that tax mix matters and progressive taxes and tax systems affect economic growth negatively.[16] On the other hand, Widmalm stated a number of authors studied how the total tax revenue's share of GDP, the average tax rate…etc. affects economic growth. Katz, Mahler, and Franz (1983), Koester and Kormendi (1989) and Agell, Lindh and Ohlsson (1996) found that the average tax rate does not have any effect on growth, however, Engen and Skinner (1992) reported a large negative coefficient. There is theoretical evidence that supports the idea that the tax structure has an effect on economic growth, but there is lack of empirical evidence as stated in the paper. Empirical evidence regarding the links between taxes and economic growth is from the World Bank Staff Papers of 1984. World Bank's evidence from 20 countries including Brazil, Japan, New Zealand, Spain, Sweden, United Kingdom and Zambia indicated that countries having lower tax rates had more rapid expansion of investment, productivity, employment, government services and growth rates. As noted in the article, tax policy has an effect in the economic policy through two mechanisms. First mechanism is that lower tax rates mean higher returns to savings, investment, work and innovation. Further, higher returns of tax policy help total output to rise within the stimulation of aggregate supply. Secondly, fiscal incentives of low-tax countries stimulated resources and help them shift to more productive sectors and as a result, the overall efficiency of resource utilization rose. The statistical results showed that there is a significant negative relationship between taxes and the growth of the GDP.

[16] Widmalm, Frida. 2001. "Tax structure and growth: Are some taxes better than others?". Kluwer Academic Publishers. Sweden Public Choice 107, pp. 199-219.

The point noted in the article is, provided that fiscal policy does focus on areas with high incremental income yields like exports, fiscal incentives become successful in rapid growth and increased level of revenues in the long run.[17]

As Garrison and Lee (1992) stated in their article, Koester and Kormendi (1989) used cross-country data to observe the effects of average and marginal tax rates on economic activity, and provided a method for giving an estimation of average and marginal tax rates of countries. Moreover, by using the above mentioned methods, they derived tax rates for sixty-three countries during the period of 1970-1979. According to the findings of Koester and Kormendi for sixty-three countries, an increase in marginal tax rates has a significant effect in the reduction of the level of per capita GDP. Garrison and Lee worked on Koester and Kormendi's method of estimating tax rates and furthermore, they benefited from the new income data of Summers and Heston (1989) in order to extend the study period from 1970-1979 to 1970-1984. Their research for the period 1970-1984 does not support the idea that increases in marginal tax rates have negative effects on the level of economic activity. Furthermore, according to the study of Garrison and Lee, the negative relation between marginal tax rates and the level of economic activity does not hold if sixty-three sample countries of the examination are separated as eighteen industrial countries and forty-five low-income countries. In conclusion, cross-country evidence provides little or no support for the supply-side hypothesis which claims the adverse effect of increases in tax rates on the level of economic activity.[18]

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[17] Marsden, Keith. "Links between Taxes and Economic Growth Some Empirical Evidence". The World Bank.
[18] Garrison, Charles B. and Feng-Yao Lee. 1992. "Taxation aggregate activity and economic growth; further cross-country evidence on some supply-side hypotheses". Economic Inquiry.

As Shirazi (1991) states giving a reference to his previous paper, developing countries started to make reforms for their tax systems to restructure their systems, to raise the revenue elasticity and improve the strength of the tax systems. However, these developing countries started to make reforms when there is a major fiscal crisis. Reforms would enable the tax system to meet the objectives of revenue, efficiency, equity, growth, and simplicity as mentioned in theories, but since the returns become visible in the medium or in the long term, it is generally impossible to view the positive effects of comprehensive tax reforms in practice.[19] Tax reforms should fairly increase tax revenue, remove additional costs for both tax-payers and tax-collectors and lower government interference.

Finally, there was a paper of OECD on the macroeconomic effects of a shift from direct to indirect taxation in which 15 European Union member states are chosen as samples. As mentioned in the paper, "One difficulty in evaluating the merits of a shift towards indirect taxes is that the economic research has not reached definite conclusions even on the wider issue of the effects of taxation overall on economic growth." Since EU countries face with difficulties in financing a cut in labor taxes through overall expenditure reduction policy, there are discussions regarding the shift in taxation from direct to indirect taxes. The question is whether that would be beneficial for the EU countries' employment and GDP levels or not. Some of the existing literature indicates that a shift in taxation may have the ability to make the economy stronger, and lead to economic growth and increase employment. Furthermore, a number of studies in the paper still supports the idea that shift in taxation strengthen economic growth. On the other hand, it should be kept in mind

[19] ibid,Khalilzadeh-Shirazi and Shah (1991)

that there is not any consensus on the usefullnes of tax shifts in the economic profession. In the short-term, the effects of changes in taxes depend on the tax being changed. The similar question appears in the side of direct taxes. A shift to indirect taxes decreases the taxation of future savings which in deed leads to the accumulation of greater capital and by the way results in changes on productivity. Rebalance of the fiscal policy towards indirect taxes is useful for economic growth through the decrease of fiscal burden in labor in some countries. However, the general idea of the paper does not view rebalance of the taxation system as a panacea.[20]

The recent paper of the OECD observed the share of major tax categories of OECD countries in the last 40 years. As for the indicators of the paper, taxes on consumption declined from 38,4% in 1965 to 31,9% in 2005. The decrease in the share of consumption taxes were substituted by the increase in the share of income taxes.The reason of the most increase is the social security contribution which increases from 17,6% in 1965 to 25,6% in 2005. On the other hand, there is a different story in some other OECD countries. Some as New Zealand, Luxembourg, and Mexico faced increasing consumption taxes during this 40-year period. It is mentioned in the paper that VAT, as a consumption tax collected at every stage of production and distribution played an important role in the development process of consumption taxes. According to the results of the OECD, most of the general consumption taxes over the OECD area were composed of retail sales taxes in 1965. VAT started to spread after 1965 and leaded to an increase in the revenue share of

[20] European Commission services (DG TAXUD). 2006. “Macroeconomic Effects of a Shift from Direct to Indirect Taxation: A Simulation for 15 EU Member States”. Paris: 72nd meeting of the OECD Working Party No. 2 on Tax Policy Analysis and Tax Statistics.

general consumption taxes. Having low revenue shares of consumption taxes does not always mean low total revenue shares from consumption taxes as Mexico and Turkey did with the highest shares from taxes on consumption in the OECD. Although they do not have high VAT revenue share, taxes on specific goods and services are mostly used. Further, as for the paper, "It is often claimed that taxes on consumption are better for growth than taxes on income." The paper strongly supports the approach that the rebalance of taxation towards consumption taxes would improve economic efficiency and increase growth. [21]

As mentioned in previous studies, taxation is one of the cornerstones of all political regimes. Its objectives do not differ from one country to another that all taxes are imposed to increase government expenditures in a feasible, equitable and an efficient way. Although there is not any package fit for universal prescription, indirect tax reforms are thought to be more successful than direct tax reforms. According to some recent researches, the rebalance of taxation to consumption taxes improves economic efficiency and increase growth. Increase in indirect taxes decreases the growth rate of consumption in one side but on the other hand, increase in indirect taxes increases the growth rate of consumption. The reason is that higher tax rates help larger provision of public goods which in turn increases returns to capital accumulation. Further, it is not possible to state an optimal level of taxation unless taxes are used to provide public goods that will be an input in the production. However, some economists believe that taxation does not affect long-run growth. The others claim that it has effects both on the level of GDP and growth. Tax structure of a country is generally believed to have effects on economic growth but there is lack of empirical

[21] OECD Policy Brief. 2007. "Consumption Taxes: the Way of the Future?".

evidence. Researches show that countries having lower tax rates had more rapid expansion of investment, productivity, employment, government services and growth rates. However, the recent research dealing with the last 40 years of OECD countries strongly supports the approach that the rebalance of taxation towards consumption taxes would improve economic efficiency and increase growth.

3. STRUCTURE OF THE GOVERNMENT

In this chapter, the complicated structure of the government budget, ways of government finance and the taxation as the most important source of government finance will be mentioned. In the last part of this chapter, the fairness of taxation systems of both developed and developing countries will be questioned since the fairness of taxation systems not only affects but also is affected from the development levels of countries.

3.1 GOVERNMENT BUDGET

Public finance is the field of economics dealing with the administration of governmental activities. Actually, the role of the government is the starting point of public finance. If we assume there is no government, and if all the necessary conditions are met, private markets would produce and allocate goods and services efficiently. Provided that private markets contribute to the efficient operation of economy, there would be no need for governments. However, in some cases, market conditions necessitate government intervention. Market failure of the private markets results in required governmental provision of goods and services. Some of the reasons of the market failure might be externalities, public goods and economies of scale. However, it should be kept in mind that government intervention may also cause government failure.

Any government has a complicated structure. Not only persons but also governments and institutions like the European Union have revenue and expenditure accounts. The main intention of these accounts is meeting expenditures by revenues. The amount, sources, and the effective usage of revenues is determined through budget that is an essential item of the public economy. According to Musgrave (1959), budget policy of

the government is the reallocation method of revenues.[22] In other words, budget policy is the removal of the unfair application caused by tax payment not being proportional to the level of income. If budget income is provided from high-level income citizens, and directed to low-income citizens, this indicates that income is reallocated effectively. In low-income countries like underdeveloped and developing countries, there is an unfair allocation of income, and governments work for such effective reallocation of income.

As expressed above, a government has both expenditures and revenues. Theoretically, there are three approaches for the finance of public expenditures. One approach deals with real effects, the other with nominal effects; however, the last approach is the irrelevance theory disapproving both real and nominal effects. Irrelevance theory states citizens' awareness of tax increases caused by increases in public expenditures.[23]

If government expenditures exceed revenues, there is a budget deficit; if government revenues exceed expenditures, there is a budget surplus. According to Keynes, if a country's output is under the level of its potential output, budget deficit may stimulate economic activity. However, budget deficit may result in inflation if country's output level is near or at its potential output level.

Previously mentioned government expenditures are classified into three main types as government consumption, government investment and transfer payments. Government consumption involves government purchases of goods and services, and

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[22] Musgrave, Richard A. 1959. *The Theory Of Public Finance*. Newyork Mc Graw-Hill.
[23] Bildirici, Melike and Nevin Coşar. 2005. "Budget Deficits and Indirect Taxes During The Political Instability Periods in Turkey: Cointegration Analysis and Model Estimation, 1985-2003". *International Journal of Applied Econometrics and Quantitative Studies.*Vol.2-1.

government investment involves purchases of goods and services that will create future benefits to the economy, while transfer payments only include transfers of money. The gradual increase in government expenditures requires the classification of expenses according to specified criteria as administrative, functional, and economic classification. In administrative classification, expenditures are classified in accordance with the framework of the administrative structures; in functional classification, expenditures are classified according to their goals; and in economic classification, expenditures are classified as real and transfer payments. The fundamental aim is to measure the productivity of expenditures. These government expenditures can be financed by government revenues-taxes, debt, asset sales or seigniorage. The ways of financing government expenditures will be mentioned in the following parts.

3.2 GOVERNMENT FINANCE

The first applications of taxation go back before Christ in Eygpt. The applications of taxation continued with a more complicated structure in Ancient Rome and Greek. There were taxes imposed on purchases, sales, and inheritance namely “portoria” in Rome. It is interesting that the establishment of the first tax heaven by Romans goes back before Christ. The name of the tax was “eisphora” in Ancient Greek. As for the stories, taxes were imposed without any exemptions unless there is enough income from wars. Within the Magna Carta Libertetum of England in 1215, authority of the king was restricted and taxation authority of the king was eliminated from that time. The king had only the right of spending the revenues coming from taxation.[24]

[24] Erdikler, Şaban. 12.09.2006. Referans.

Taxation had faced with many struggles over the previous years and is involved in its place today. As for the article 73 of the constitution of Turkey, to finance the public expenditures every citizen is obliged to pay his taxes depending on his income and it is the social aim of the governmemt to ensure the fair and balanced distribution of taxes. One of the subjects indicating a government's sovereignty is tax. Tax is a kind of an unreturned monetary value that the government collects from the national income by force. Schmölders (1976) states that persons have looked for ways to make members of society liable for taxes since political societies began to be formed.[25] Taxes started to appear during the conversion period of primitive organizations to modern political structures. The most frequently used financing method for government expenditures is the taxation. As a requirement of the constitution, tax base is determined according to the fiscal power. Taxes collected from expenditures have an important share in total taxes in Turkey. As Friedman (1978) puts it, taxes affect budget balance; however, increasing taxes raise budget deficits by lowering expenditures.[26] Tax policy is a significant part of a country's economic and fiscal policies, and deals with the collection way of the government revenue, the amount of government revenue that is collected, and the allocation of the collected government revenue. Taxes not only provide budget revenues but also give direction to economic lives of countries. Desired policies of governments and private firms are put into force via taxes. In fact, the relationship between expenditures and taxes differ according to government's structure. A country's taxation system is directly related with that country's economic structure. However, politicians may also form taxation systems in connection with their interests. These arbitrary impositions may result in democratical oppositions.

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[25] Schmölders, Günter. 1976. *Genel Vergi Teorisi* İstanbul: İstanbul University.
[26] Friedman, Milton. 1978. "The Limitations of Tax Limitation". Policy Review.

Taxation has two functions as fiscal and non-fiscal aims. Fiscal aims are governmental main activities that must be applied for the wealth of the citizens as health, justice..etc. Non-fiscal aims are actually governments' secondary activities accomplished indirectly and not required as fiscal aims of the governments. Avi-Yonah made a research on three goals of taxation in the modern era which are "(1) to raise revenue for government activities, (2) to mitigate unequal distributions of wealth in society, and (3) to regulate private economic activity." According to the results of this research, these three goals would help people understand why both taxes on income and taxes on consumption have a role in the modern era. This is an answer to the view stating that consumption taxes are superior to income taxes depending on the efficiency, equity and administrability.[27]

One other type of government financing is debt. Governments may obtain debt by taking out loans, issuing long-term government or short-term notes and bills like any other legal entity. Government debt is classified as internal and external debt. Internal debt is the debt of the government to lenders within the country, while external debt is the debt to foreign lenders. Governments make borrowing by issuing securities, especially securities as trustworthy government bonds and bills. Another way is borrowing from international monetary institutions like the International Monetary Fund or the World Bank, or borrowing from commercial banks.

The last way of financing government expenditures is the seigniorage. Seingniorage is the difference between the face value of money and the cost of producing, distributing and taking the money back from circulation of the economy. Seigniorage is an essential source of revenue for some banks. According to Cukierman, Edwards

[27] Avi-Yonah, Reuyen. 2006. "The Three Goals of Taxation". *Tax Law Rev.* 1-28.

and Tabellini (1989), unstable and polarized economies depend mostly on seigniorage.[28]

3.3 TAXATION AS A FUNDAMENTAL SOURCE OF REVENUE

Governments apply fiscal policies in finance of positions which laws give to them. Fiscal policy is the intervention of the government to the economic life by collecting tax and making expenditure for economic and social aims. In other words, it is a government policy that makes an influence in the direction of the economy through changes in government spending or taxation. The main items of the fiscal policy are government expenditures and government revenues as taxes, debt, asset sales or seigniorage. Public income of open market economies rely on tax income in today's world. Taxes are essential sources of revenue for governments as mentioned in the previous part. Changes in the level of government spending and taxation may result in changes on the variables in the economy (such as income distribution..etc.) There are three attitudes of fiscal policy - neutral, expansionary and contractionary. If government spending is equal to tax revenue, it means that government is fully funded by tax revenue and this revenue has a neutral effect on the level of economic activity. Expansionary fiscal policy refers to a net increase in government spending and causes a higher budget deficit, while contractionary fiscal policy refers to a net decrease in government spending and leads to a higher budget surplus.

As previously mentioned, whatever the stance of the fiscal policy is, government spending and taxation are the main items of the fiscal policy. The two main types of government spending are government investment and consumption. This investment

[28] Cukierman, Alex, Sebastian Edwards and Guido Tabellini . 1989. "Seignorace and Political Instability". NBER Working Paper Series.

and consumption can be financed by taxation. Toye (2000) states that taxation helps governments fulfill their objcetives and meet demands of their citizens, and determines government capacity.[29] Di John (2006) firmly points out that, taxation is a central component in the development of low and middle-income nations.[30] Government, as a developed organized society, collects the required sources of its functions by the name of tax. Tax is a kind of a monetary value that the government collects from the national income by force. Taxes are transferred to the government from the public according to the law. Tax is a liability from the payer's side and is an income for the government's side. It is regarded as a constitutional order to allocate this burden. Tax burden may cause tax avoidance and tax evasion which means a decrease in tax burden for tax dodger, and a decrease in income for government. Slemrod (1990) says that in general, since every tax-payer is in the need of eliminating or minimizing the tax obligations by wrongly transmitting the facilities that will possibly be the subject of a tax, any tax system cannot survive without the support of a mandatory mechanism.[31] In the beginning, taxation was a voluntary payment method. However, as Aksoy (1994) mentions, later within the central administrations, taxation method changed and turned out to be a mandatory mechanism.[32] Taxation structure may only become long-lasting if it is appropriate for the society both economically and pscychologically.

Government, while using taxes in finance of its positions, has also social and economics aims. Considering all these aims, a system is formed and policies are put into effect. According to Ejder (2000), the function of the tax system is providing

[29] Toye, John. 2000. "Fiscal Crisis and Reform in Developing Countries". *Cambridge Journal of Economics.* Vol 24, No.1
[30] Di John, Jonathan. 2006. "The political Economy of Taxation and Tax Reform in Developing Countries". *UNU WIDER Research Paper.*
[31] Slemrod, Joel. 1990. "Optimal Taxation and Optimal Tax Systems". *The Journal of Economic Perspectives*. Vol.4, No:l, pp.157-178
[32] Aksoy, Şerafettin. 1994. *Kamu Maliyesi.* İstanbul: Filiz K.

sources for the finance of the public services related to the economic development.[33] A good tax system should be transparent, easily applicable, efficient, fair and beneficial. In a transparent tax system, tax-payers understand how the tax system works; know what they are paying for, and what they will have in return. An easily applicable tax system is both beneficial for tax-payers and governments since it makes it easy to understand and get used to the tax system, and eliminates all the unnecessary procedures. This also lowers the collection cost of taxes which are required to be kept at an acceptable level relative to the total revenues received. An efficient tax system increases government revenues without any negative distortions for the economy. Allthough tax rates are high in a country, the revenues collected from taxation may be low because of negative distortions of taxation. In other words, high tax rates do not mean high tax revenues unless they are efficiently collected. A fair tax system requires the collection of taxes from tax-payers according to their income. Direct taxes are assumed to be fairer since they take tax-payers' ability to pay condition into consideration. Further, taxes should benefit tax-payers in the sense that they would get the returns of the taxes through governmental facilities. Beneficiality of taxes is important for the removal of tax evasion. Unless tax-payers have the return of the collected taxes, they will start looking for ways of tax evasion. As we know, there is a growing industry which provides information to tax-payers for the reduction of taxable activities. Government should provide awareness of the tax system and belief on its fair returns. This kind of an appropriate tax system makes an easier adaptation of the tax-payers to the tax and helps the protection of the social system. High efficient use of a country's tax potential without giving harm to

[33] Ejder, H. Lütfü. 2000. "Türkiye'de Vergi Politikaları". *Gazi University Faculty of Econ. and Adm.Sc.Review.* Vol. 2-4, pp.128.

economy is the economic limit of taxation. Going beyond this critical level may have both economic and political results.

3.4 A FAIR TAXATION SYSTEM

The first indicator to analyse whether the tax system is fair or not fair is the distribution of direct-indirect taxes. Direct taxes are accepted to be fairer since they consider the personel situation and collected on income while indirect taxes cannot be personalized and the same ratio is applied to every level of income. Remaining tax burden on the final consumer without taking the vitality into consideration is one of the important risks of indirect taxes. Payers of indirect taxes are not known, so that total income from indirect taxes cannot be perfectly determined. The reason of imperfectly determined total income from indirect taxes is that, bearers and payers of direct taxes are the same persons, while bearers and payers of indirect taxes are different persons. Burden of indirect taxes remains on the final consumer. Impositions of indirect taxes affect the consumption preferences of final consumers. However, final consumers do not actually notice that they have been paying taxes since taxes are hiding in the price of the goods and services. Indirect taxes are easy to be reflected and difficult to be avoided. There should be a direct-indirect tax balance in any tax system.

Recently, there have been some developments making these two kind of taxes closer to each other but there is still no doubt that indirect taxes are lack of justice. Indirect taxes are also thought to provide equalizations of competitive clauses of developing and developed countries. On the other hand, they are believed to be an obstacle for the effective work of domestic markets. When compared with direct taxes such as

income taxes, indirect taxes seem unlikely to make tax distortions in the sense that since they are collected on expenditures of goods and services, they do not affect people's decisions between work and leisure times. In other words, they seem unlikely to discourage or encourage people to work. Reduction in direct taxes is believed to be afforded provided that there is high indirect tax. On the other hand, indirect taxes are assumed to affect people's decision of consumption choices. Changes in indirect taxes result in people making attempts for avoiding expenditures because consumption of all goods and services are not necessities of life. For instance, consumption of luxury goods can be avoided. Decreasing demand of goods and services will cause a reduction in government revenues. However, this demand-side effect is believed to be beneficial for the economy in some arguments supporting indirect taxation.

Another point is that, in indirect taxes people have the chance to determine whether or not to consume while in direct taxes there is not any chance other than making payments for taxes since unless workers are included in the informal economy, it is a must to pay taxes before having the income. Since indirect taxes have effects on the demand-side, marginal propensity to save and consume differs according to the indirect taxes. Increase in indirect taxes causes tax evasion and encourages tax-payers to make purchases without taking any invoices. This results in increasing saving rate which may provide sufficient resources for investments in the future while on the other hand, indirect taxes may cause a reduction in income and by the way in savings because people will have to pay for increases in indirect taxes as they have necessary expenditures.

Moreover, system of indirect taxation makes people unaware of what they are paying for since indirect taxes are included in the total value of goods or services consumed. They are believed as if they are not being paid, however, direct taxes lower the value of revenues so that changes in direct taxes face with more reactions than indirect taxes do. This unawareness of indirect taxes helps governments be more flexible while applying fiscal policies. On the other hand, increase in indirect taxes may have a cost-push effect and by the way may lead to increases in inflation. When inflation increases, people start to make less expenditure, and as a result of this demand-side effect, less indirect taxes are collected.

Taxation structure all over the world has common properties appropriate for many countries. Different tax rate tariffs are applied for making the tax systems fairer. These tax tariffs are generally classified as flat-rate tax, progressive tax and digressive tax. In flat-rate taxes, whatever the basis of taxation is, tax rate stays the same. However, within the increase in tax base, tax rate increases in progressive tax. The tax tariff opposite to the progressive tax is the digressive tax whose tax rate reduces by an increase in the basis of taxation. Also, progressive tax tariffs have different classifications put into force by the initiative of political powers. Generally progressive tax tariffs are applied in the world since in this system, marginal tax rates increases according to the income of a person. Income taxes as a direct tax are examples of application of progressive tax tariffs.

There are many determinants of a tax system as mentioned previously. Administrative structure, economic growth and development level of a country are some of the determinants of any tax system. Economic development necessitates the tax revenue increase since public expenditures rise within development. As a result

of different economic development levels, developing and developed countries have different tax systems. In developing countries:[34]

A. Per capita income level is low.

B. Income distribution is unfair.

C. The ratio of wages and salaries to national income is so low.

D. The ratio of agricultural production and employment level to the total income is so high.

E. Phantom trade organizations, unimportant facilities and tax evasion are widespread while the numbers of large undertakings are low.

F. Foreign trade rates change negatively.

G. Literacy and education levels are low.

In economic literature, all industrialized and developing countries have common targets as economic growth and social justice. Even though they agree on basic aims, they are required to have different tax systems since developed and developing countries' economical sizes, industries, cost systems, political situations…etc. are different from each other. Therefore, taxation systems of countries vary depending on the changes in their economic, social and political structures. Reflection is two-sided that taxation system also affects the mentioned structures. There are also common principles rooted in the common international law. Further, "All taxes are increasingly under pressure from the more perfect markets resulting from increased globalization and reduced trade barriers, reduced transactions costs from e-

[34] Tanzi, Vito. 1980. Tax System and Policy Objectives in Developing Countries: General Principles and Diagnostic Tests". *The Economics of Taxation,* pp. 157-174.

commerce, more footloose intangible capital, increased competition from deregulation, and increased access to capital from financial innovations."[35]

In developing countries, the interference of the government is more necessary than developed countries. The main source of income in developing countries is tax. The tax systems of developing and developed countries are completely different from each other. In developed countries, most of the tax income is supplied from direct taxes whereas the source of the tax revenue in developing countries is indirect taxes as Table 5.1 also shows. In developed countries, personal income tax, corporate income tax and property tax have weight compared to taxes collected from expenditures. Since 1980s, there have been changes in tax systems of developing countries. The reforms of 1980s not only affected developing countries but also affected developed countries as well. The reforms include economic liberalization, elimination of trade barriers and imposing Value Added Tax. Taxes are collected on income and wealth in developed countries; however, developing countries mostly rely on indirect taxes such as foreign trade and consumption taxes.

In fact, replacing trade taxes with domestic consumption taxes in developing countries is the general advice of international institutions like IMF. There are many arguments on the the advices of these international institutions, both for using and against using indirect taxation. The aim of the advice is to reflect the beneficial effects of free trade to developing countries from developed countries.

[35] Poddar, Satya, Tom Neubig and Morley English. 2000. "Emerging Trends and Their Implications for the Tax Mix and the Taxation of Capital". Ernst & Young.

As Di John (2006) puts forward, the policy making developing countries being much more dependent on indirect taxes results in a decrease in the overall tax level.[36] On the other hand, Keen (2007) says, as a form of indirect tax VAT has been successful in increasing the revenue and reducing the cost of taxation in some countries, such as Turkey, Indonesia and Brazil.[37] Furthermore, Burgess and Stern (1993) state that, developing countries should have an indirect tax system based on VAT(with one of two rates and some exemptions), excises on alcohol, tobacco, and petroleum products and some luxury goods; and support for some groups like subsidies.[38] VAT is thought to benefit local consumers and producers since domestic producers have to be more efficient in competitive markets of domestic and foreign producers, and local consumers benefit from low prices of effective competitive markets including many producers and products.

Actually, setting up an efficient and a fair tax system is far from simple, especially for developing countries being integrated to the globalizing world. As Ağbal emphasizes in his article, the factors should be considered while evaluating a tax system's success are effects of taxation on economic development, investment and savings, attracting foreign capital, the degree of meeting public expenditures, the capability of covering tax base, the place of domestic firms in international competitive markets; and the justice of the tax system.[39] An efficient tax system should first provide resource for needs having priority, then after the priorities, it should provide finance for development, increase productivity level, fairly allocate tax burden, and provide reallocation of income and wealth from the rich to the poor.

[36] ibid, Di John (2006)
[37] Keen, Michael. 2007. " VAT Attacks!". *IMF Working Paper (WP/07/142).*
[38] ibid, Burgess and Stern (1993)
[39] Ağbal, Naci. 2001. "OECD Üyesi Ülkelerde Vergi Yükünün Gelişimi-II". *Yaklaşım, No:*104.

As Ayan (2006) states in his thesis, there are different approaches for a rational tax policy. First approach states that the main intention of a tax policy is providing finance for public services. For another approach, a tax policy should also observe non-financial instruments. The last approach emphasizes that, a tax policy should take both fiscal and non-fiscal instruments into consideration and provide justice and impartiality for taxation. [40]

In fact, tax policy is the art of possible rather than the optimal in developing countries. Recent data indicate that the tax level in industrialized countries is nearly double the tax level in developing countries. Furthermore, the ratio of income to consumption taxes in industrialized countries has remained more than the double. [41]

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[40] Ayan, Engin. 2006. "Türk Vergi Sistemi ve Vergi Sistemimizin Etkinlik Açısından Değerlendirilmesi". Master Thesis, Marmara University.
[41] Tanzi, Vito and Howell Zee. 2001. "Tax Policy for Developing Countries". International Monetay Fund.

4. TURKISH TAX SYSTEM

The tax system of every country is different from the other; however, the excessive growth of tax and public expenses to the national income starting from the World War II is the common remarkable principle.[42]

The continuous increase in tax rates resulted in increasing dissatisfaction regarding the tax system in the late 1970s and in 1980s. A rapid increase in tax reforms was observed. The decisions made in 24 January 1980 and the policies applied after these decisions aimed to stimulate the open market economy, minimize the intervention of the government to the market and integrate the economy to the international markets. In 1980s, there were fundamental changes in the tax system to adapt the economy to changing economic conditions of the world. The applications made in this context are summarized as follows (DPT,1990):[43]

A. Amount limitations applied as part of the foreign trade regime were gradually removed, and import tax and fund charges were substituted. These applications intended to minimize government intervention to the economy and leaded to integration of the economy to the globalizing world.

B. Direct taxes were replaced by indirect taxes, the ratio of the income tax to the tax income was reduced, and corporation tax ratio lowered. Starting from 1 January 1985, VAT was put into effect. This policy aimed to lower the tax burden over the capital. Lowering the tax burden for increasing the inflow of foreign capital or for

[42] Turgay, Timur (Buchananj M.). 2001. "Vergilemenin Sınırları". *Yeni Türkiye.* No: 42, pp. 1331-1340.
[43] DPT. 1990. “1980'den 1990'a Makroekonomik Politikalar Türkiye Ekonomisindeki Gelişmelerin Analizi ve Bazı Değerlendirmeler”.

preventing the evasion of the foreign capital caused a reduction in government revenues, and resulted in increasing budget deficits, and external borrowing. This situation in developing countries indicated that taxation of external borrowing – the biggest source of finance – has been removed, and social resources are transferred abroad through principal and interest payments of developing countries.

Furthermore, in 1993, existing several funds and duties were put into force in the name of one tax. Later in 1996, at the time of Turkey's the entrance to the Customs Union, Turkey eliminated all Customs Duty and other similar taxes applied to the European Union (EU). These eliminations of some taxes resulted in big losses of the budget revenue. Later in 2002, an important decision-a reform regarding indirect taxes- was made, and tax losses caused by adaptation to the EU as removal of Customs Duty and other similar taxes were substituted. Through the imposition of the Special Consumption Tax, 16 other taxes and similar applications were eliminated. The most important reason of the imposition of the SCT –the most important application made after Value Added Tax- is an adaptation to the EU. In EU, most of the rules of the tax issue deal with indirect taxes since free circulation of goods and services is related with indirect taxes-VAT and SCT. VAT was first put into force in France in the 18th century, and then, spread over the other EU members.

Turkish tax system has a complicated structure. After the establishment of the Turkish Republic, tax system of our country is formed by taking the EU as a benchmark. Taxation is made according to the economic approach principle, and tax is collected from income, expenditues and wealth. Taxes on expenditures are taken through the addition of taxes to the value of goods and services when they are sold, in other words, expenditures are made. Turkish taxation system mainly consists of

two taxation systems as direct taxation system and indirect taxation system. In other words, multiple tax-system is applied in Turkey. Multiple tax-system can be classified under three main headings as income taxes, taxes on expenditure and taxes on wealth. There are also liabilities by the name of tax, fund and fee. Main taxes are expressed below:

1- Income Taxes: Personal Income Taxes and Corporate Income Taxes
2- Taxes on Expenditure: Value Added Tax, Special Consumption Tax, Special Communication Tax, Banking and Insurance Transaction Taxes, Stamp Tax and Tax on Customs
3- Taxes on Wealth: Inheritance and Gift Taxes, Motor Vehicle Tax and Property Tax

Income taxes are taxes of Turkish direct taxation system, while taxes on expenditure and taxes on wealth are taxes of indirect taxation system.

4.1 DIRECT TAXATION SYSTEM

4.1.1 PERSONAL INCOME TAX

Direct taxation system is mainly composed of personal income tax and corporate income tax. Individuals are subject to income tax while companies are subject to corporate tax on their income and earnings.

Personal income tax is levied on income of natural persons. Tax liability of individuals covers business profits, agricultural profits, salaries and wages, independent professional service income, securities income, rental income and capital gains.

Residents in Turkey are full tax-payers, so they are obliged to pay personal income tax on their income all over the world. However, non-residents are subject to personal income tax on the income derived from Turkish sources. Personal income tax rate vary between 15 % and 35 % as shown in the table below.

Table 4.1 Income Tax Rates in Turkey

Income Tax	
Tax rates	Income levels (TL)
15%	0-8.700
20%	8.700-22.000
27%	22.000-50.000
35%	50.000-10.000.000

4.1.2 CORPORATE INCOME TAX

Income and earnings of corporations are subject to corporate income tax. Taxable corporations are capital companies and similar foreign companies, cooperatives, public enterprises, joint ventures and enterprises owned by foundations, societies and associations.

Fully liable tax-payers are resident companies whose headquarters are situated in Turkey or whose place of effective management is Turkey while limited liable tax-payer companies' legal head offices are situated abroad, so they are subject to corporate income tax only if their income is generated from Turkey. Both fully liable and limited liable tax-payers pay corporate income tax at a rate of 20%.

4.2 INDIRECT TAXATION SYSTEM

The most important indirect taxes are Value Added Tax and Special Consumption Tax. As a supply of income, VAT is the second largest source of revenue.

4.2.1 VAT (VALUE ADDED TAX)

Value Added Tax liability arises if commercial, industrial, agricultural or independent professional activities are performed in Turkey or if goods or services are imported into Turkey. VAT is applied at all stages of distribution and production, however, the real burden remains on the final consumer. The VAT is also computed on credit charges, interest charges, premiums, shipping, loading, packing charges, insurance, commission fees and similar transactions.

Tax-credit method is used to compute VAT. In this method, both the input and output VAT is calculated, and then, the input VAT paid for goods and services purchased can be offset by output VAT computed on deliveries of goods and services. If the output VAT is greater than the input VAT, the difference between the input and output VAT is paid. If output VAT is smaller, the difference is carried forward to the following months and offset against future VAT.

In some cases, VAT may not be carried forward and credited from the VAT calculated. VAT should be shown separately on an invoice or a similar document to be deductible. VAT computed on purchases of cars, VAT on non-deductible expenses according to the Income and Corporate Tax Law, VAT on goods that have been lost, VAT on certain exemptions in the Article 17 of VAT Law will not be credited from the VAT calculated. For example, in VAT computed on purchases of

cars, there is an opportunity of declaring it as an expense or involving the VAT in the cost of acquisition. Also, it is impossible to deduct VAT of non-deductable expenses according the law.

Multiple tax rates are applied to a variety of goods and services in Turkish VAT system. General VAT rate was 10% in the VAT Law, but it was raised to 18% in 15 May 2001, however, special reduced rates are applied for a number of deliveries. Here are some of the examples of applied VAT rates.

Table 4.2 Value Added Tax Rates in Turkey

General tax rate	18%	Goods outside the list I and II
Reduced rates	1%	For the goods and services in List No.I (agricultural products like raw cotton and wheat and dried foods)
	8%	For the goods and services in List No.II (basic food items like milk and oil, books and similar publications)

The people or entities engaged in taxable transactions irrespective of their legal status or nature and their position are subject to VAT. If the taxpayer is not a resident in Turkey or his business is not located in Turkey, only one of the persons engaged in taxable transactions is responsible for tax payment.

Furthermore, if there is a transaction exempt from the tax, such as exportation of goods and services and transit transportation, the input VAT calculated and shown on invoices may be deducted from the output VAT of the tax-payer. Provided that there is no transaction subject to VAT, the input VAT which cannot be deducted is refunded according to the principles.

Here are some examples of VAT exemption:

- Goods and service exports

- Certain imported goods

- Goods purchased by tourists

- Marine, air and rail conveyance deliveries and services rendered for their maintenance and repair

- Services rendered at marines and airports for marine and air conveyances

- Goods and services purchased by those engaged in petroleum, good, silver or platinum exploration

- International transportation services

- Deliveries made and services provided to diplomatic representatives and consulates of foreign countries in Turkey as well as to their members who possess diplomatic rights on condition of reciprocity

- Banking and insurance transactions

- Certain deliveries realized for cultural, educational and social purposes

- Deliveries made and services provided by military factories and shipyards that are in accordance with the purposes for which they were established

- Deliveries of gold, silver, precious metals, foreign exchange, cash, stamps, stocks, bonds and scraps

- Services rendered in the free zones

4.2.2 OTHER INDIRECT TAXES

Special Consumption Tax

In order to simplify the indirect tax system of Turkey, several special funds and indirect taxes were removed, and Special Consumption Tax was put into force in 2002. The primary purpose was to constitute a simple consumption tax structure.

Special Consumption Tax is levied on specific goods such as petroleum products, vehicles, luxury products… etc. Consumption tax is imposed on the delivery, acquisition or the importation of specific goods expressed above. The goods are specified in 4 different kinds of lists which are subject to special consumption tax at different tax rates.

The first list is related to the petroleum products, natural gas, lubricating oil, solvents and derivatives of solvents. Importers and the manufacturers of the goods are subject to tax. The tax rate varies depending on the kinds of goods and it is fixed per measurement unit. The second list is related to automobiles and other vehicles. Initial acquisition of motor vehicles. Merchants of motor vehicles, exporters for using motor vhicles and sellers of motor vehicles via auctions are subject to tax. The tax rate is between 0, 5% and 84%. The third list is related to the alcoholic beverages, cola and tobacco products. Manufacturers, exporters and sellers of the goods are subject to tax. The tax rate is 58% for tobacco, is between 25% and 275, 6% for beverages.The fourth and the last list is related to the luxury products. Manufacturers, exporters and sellers of luxury products are subject to tax. The tax rate is between 6, 7% and 20%.

In certain conditions specified in the legislation, some deliveries, imports or acquisitions are exempt from the special consumption tax. Export deliveries, deliveries of goods in List 1 and List 4 to specified public institutions, and initial acquisition of planes by TAA (Turkish Aeronautical Association) are some examples of Special Consumption Tax exemptions.

Special Communication Tax

Telecommunication services are subject to Special Communication Tax. Telecommunication services include all types of installation, transfer and telecommunication services given by mobile phone operators and other administrators. The tax rate varies between 15% and 25%. For mobile telecommunication services, the tax rate is 25%, and for other telecommunication services, the tax rate is 15%. The tax base of the Speecial Communication Tax and the Value Added Tax is the same. Special Communication Tax is paid monthly and considered as a non-deductible expense.

Banking and Insurance Transaction Taxes (BITT)

All transactions and services produced by banks, bankers and insurance companies under the name of interest, commission and expenditure are subject to Banking and Insurance Transaction Taxes (BITT). Banks and insurance companies are exempt from VAT, however, they are subject to BITT that is imposed on the gains of banks and insurance companies from their transactions. General tax rate is 5% in Turkey, however, the tax rate on foreign exchange transactions is 0,1%. BITT is collected monthly.

Stamp Tax

Documents expressed in the Stamp Tax Code including contracts, agreements, letters of undertaking, deeds of settlement, letters of cancellation, letters of guarantee, financial statements, returns and payrolls are subject to Stamp Tax. The tax-payers are the ones who sign the documents; however, all parties who sign the documents are jointly liable for the payment of the Stamp Tax. The base of the Stamp Tax is the value stated on the document and is levied as a percentage of the value stated on the document at rates ranging from 0,15% to 0,75%. General tax rate is 0,75%. The tax rate is 0,15% for rental agreements and letters of cancellation, 0,75% for letters of guarantee and deeds of settlement, and 0,6% for payrolls. Also, each document is separately subject to Stamp Tax.

Tax on Customs

The subject of the tax is the goods imported from abroad. Free circulation of goods, registration of customs declaration and temporary importation in case of partial exemption are the taxable events which take place during the importation of the goods from abroad. The person making the declaration to the customs office is the tax-payer. Tax on Customs is paid within 10 days after the communication with the customs office.

Inheritance and Gift Taxes

An inheritance and gift tax is the tax paid on items acquired as gifts or through inheritance. These kinds of items are subject to a progressive tax rate ranging from 10% to 30% and 1% to 10%, respectively, of the item's appraised value. Over a period of 3 years Inheritance and Gift Tax is paid twice in a year. It is possible to

deduct the tax paid in a foreign country on inherited property from the taxable value of the asset.

Motor Vehicle Tax

Motor Vehicle Tax is the tax paid on registration of the motor vehicles in the traffic, municipality and docks. There is no constant rate of motor vehicle tax. The amount of motor vehicle tax can be computed according to vehicle's weight, age, cylinder capacity and the fuel used. The motor vehicle taxes are payable in every year as biannual installments. There are four lists of the tax. List 1 includes cars, special utility vehicles and motorcycles; list 2 minibuses, panel vans, motorized caravans, busses, pickups, trucks; list 3 yacht-cutter and all sorts of motor ships; and finally list 4 planes and helicopters.

Property Tax

Property tax is paid on taxable amounts of land and buildings. Rate of the tax varies between 0,1% to 0,3%. A 1% levy is paid by both the buyer and the seller at the time of the sale of a property. Annual property taxes are paid twice in a year as two equal installments. [44]

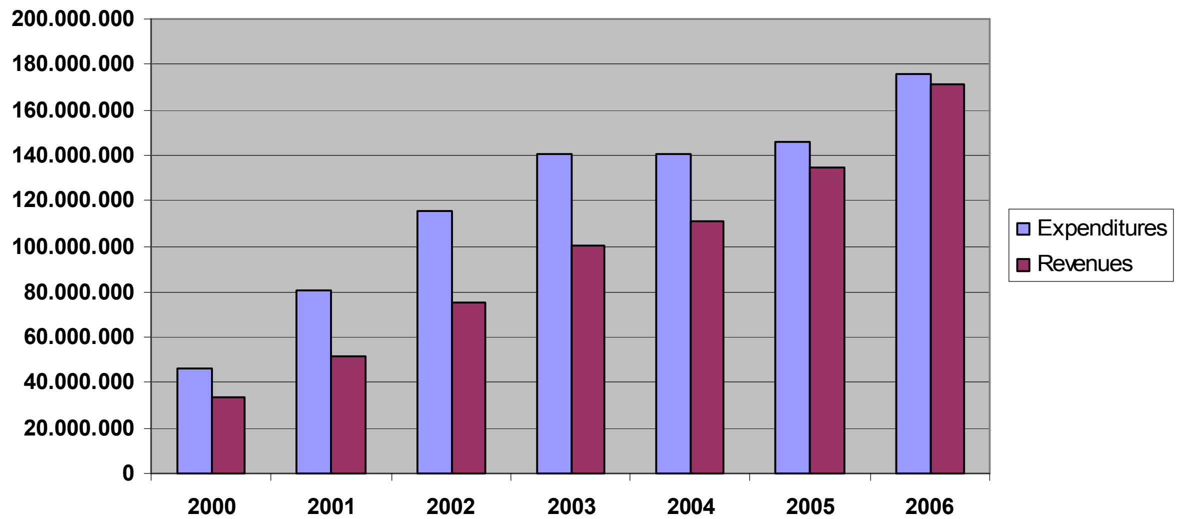
[44] Ernst&Young. 2008. *Concise Tax Guide for 2008*. (Data used in this chapter are included in this guide.)

5. RECENT FISCAL AND ECONOMIC INDICATORS OF TURKEY

In this chapter, recent fiscal and economic indicators of Turkey are used to describe Turkey's existing situation. The indicators from 2000 to 2006 are chosen as samples since those years are the parts of the crises and recovery period of our country. Recovery period would be able to perform rapid changes and might show the effect of rapidly changing fiscal and economic indicators in a more easy way.

Figure 1 explains the revenue-expenditure balance of Turkish government budget between 2000-2006. The actual place of the public economy in the total economy can be observed through expenditures and revenues. The revenue-expenditure balance is actually the most important problem of the public economy. Expenditures include personnel expenditures, government premium of social security institution, purchases of goods and services, current transfers, capital expenditures, capital transfers, lending, primary expenditures, and interest paymets. Revenues include general budget income, income of private budget administrations, and income of other institutions. Budget balance is the difference between total budgetary revenues and expenditures. In Turkey, after 2000-2001 crises, economic recovery period started, and new economic policies started to be applied. However, since consolidated budget income is inadequate to offset expenditures, there is a regular budget deficit in our country. As seen in the figure, there is a continuous budget deficit in Turkey but it has recently been decreasing.

Figure 5.1 Revenue-Expenditure Balance

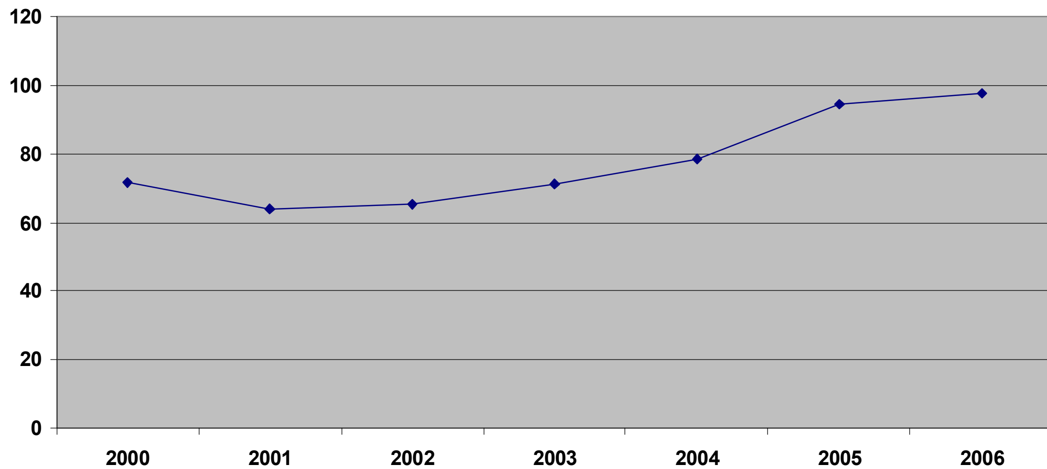


Source: http://www.muhasebat.gov.tr/[45]

Figure 2 shows the ratio of budgetary revenues to budgetary expenditures which indicates how much budgetary revenues meet budgetary expenditures. After the crises period of 2000-2001, the ratio increases continuosly until 2006, and in 2006, there is little deficit as the level of budgetary revenues and that of the expenditures are almost the same. This result from the policies applied during the economic recovery period. In 2006, the ratio is in its maximum level of 2000-2006 periods.

[45] General Directorate of Public Accounts. 2008. Ministry of Finance. Ankara.

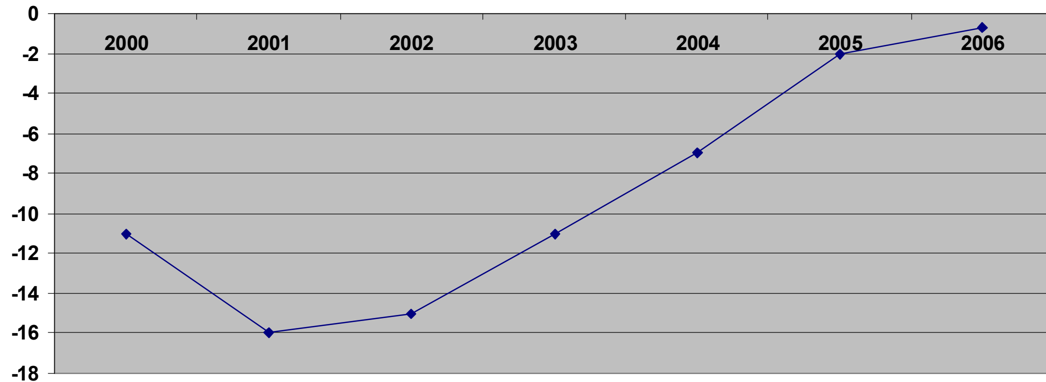
Figure 5.2 Budgetary Revenues/Budgetary Expenditures(%)



Source: http://www.muhasebat.gov.tr/

The figure below shows the ratio of the budgetary balance to Gross National Product (GNP). Another method to observe the place of the public economy in the total economy is to calculate this ratio. As known, GNP is the total value of goods and services that are produced by country's citizens in a certain year. According to the Maastricht Criteria of the EU, budget deficit should not to be more than 3% of the GNP. However, as seen in the figure, budget deficit raises to 16% during the crises period of 2001 as the Turkish economy decreased by 9,5% in this period. Budget deficit increases during the 2000-2001 crises period, and later, within the economic recovery period, budget deficit decreases once again and gets closer to zero in 2006.

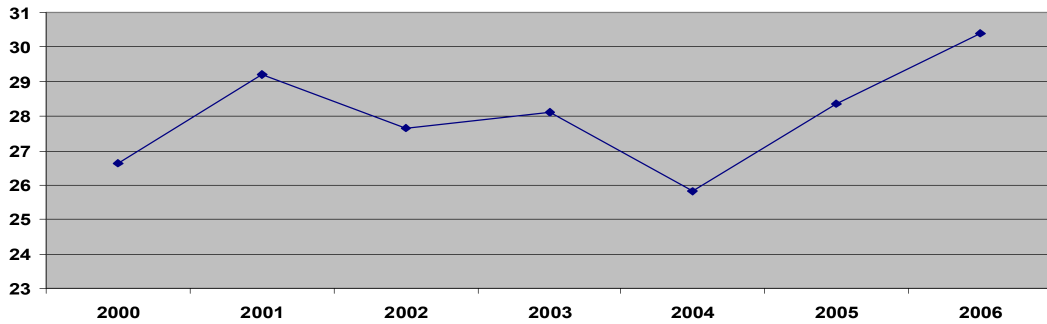
Figure 5.3 Budgetary Balance/GNP (%)



Source: http://www.muhasebat.gov.tr/

The following figure tells the ratio of budgetary revenues to GNP. The ratio of budgetary revenues to GNP indicates how much income is allocated to the private public sector. The relative weight of the public economy and private economy can be observed through this ratio. As may be noticed, the ratio ranges from 26% and 30% in the observation period. Starting from the crises period to 2004, public economy shows a diminishing trend, and after 2004, it has an increasing trend. Even though there is not a visible change in the ratio of budgetary revenues to GNP, it is possible to see the impact of public finance by numbers in the graph.

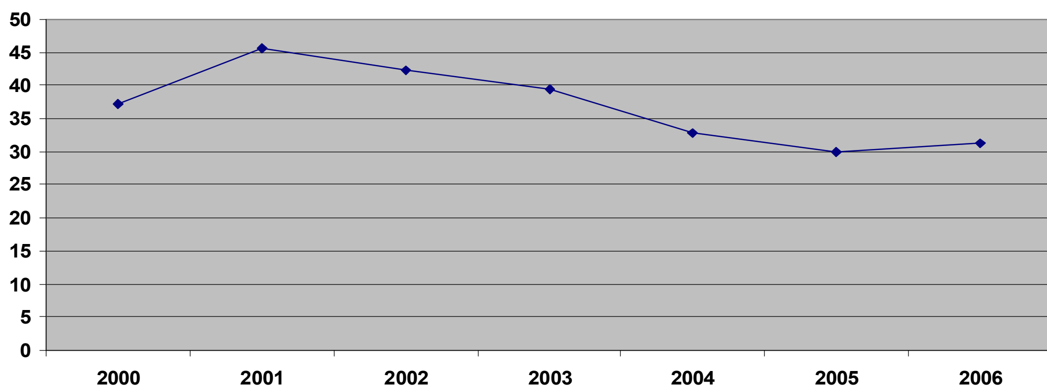
Figure 5.4 Budgetary Revenues/GNP(%)



Source: http://www.muhasebat.gov.tr/

The following figure explains the ratio budgetary expenditures to GNP which is another indicator of the magnitude of the public economy and private economy. The ratio of budgetary revenues to GNP and budgetary expenditures to GNP ratios indicate similar trends though small differences may be observed. Since borrowing costs increase during economic crisis periods, budgetary expenditures rise to approximately 45% by the end of 2001. Later, it shows a decreasing trend until 2005, and rises only by nearly 1,5% at the end of the year 2006.

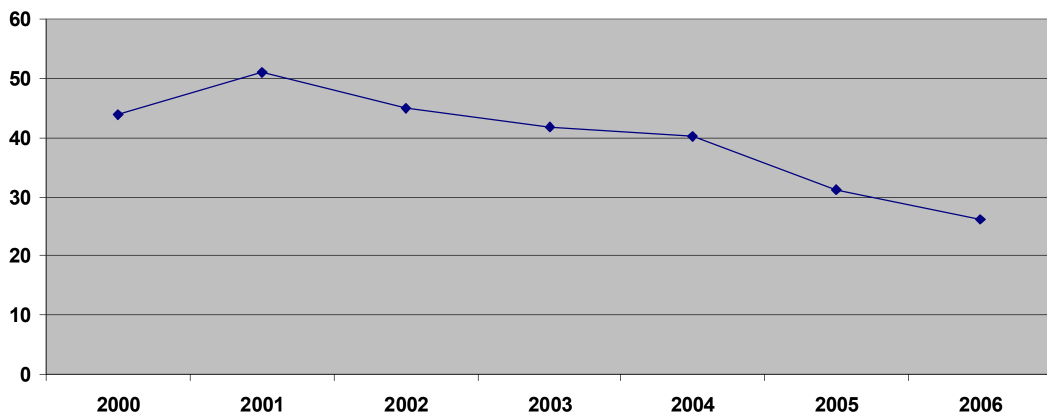
Figure 5.5 Budgetary Expenditures /GNP(%)



Source: http://www.muhasebat.gov.tr/

The ratio of interest expenditures to budgetary expenditures which is shown in the next figure marks the share of interest payments in the budgetary expenditures. Interest expenditures include payments which cannot take goods and services or make investments in return. The trend is similar to the trend of the budgetary expenditures to GNP ratio. When the ratio of interest expenditures to budgetary expenditures decreases, the ratio of budgetary expenditures to GNP decreases as well. Interest payments are considerably material in budgetary expenditures, so that both trends go parallel with each other during the whole 2000-2006 period. However, starting from 2006, because of the elections, the decrease in interest payments are said to be directed to current transfers. This indicates that revenues are not allocated efficiently.

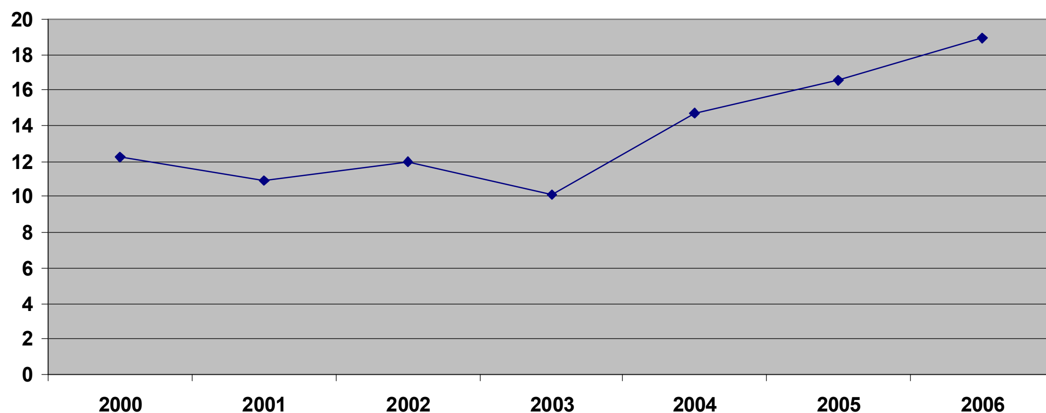
Figure 5.6 Interest Expenditures/Budgetary Expenditures(%)



Source: http://www.muhasebat.gov.tr/

Contrary to interest expenditures, real expenditures show payments which take goods and services or make investments in return. Real expenditures include consumption expenditures as goods and services expenditures and investment expenditures as capital expenditures. The ratio of real expenditures to budgetary expenditures shows the effect of the government on domestic demand through the budget. It is seen in the figure that real expenditures has a continuously increasing period after a nearly stable period starting from 2000 and ending in 2003. Between 2000 and 2003, real expenditures to budgetary expenditures ratio moves between 12% and 10%; however, the ratio increases to its maximum level again in 2006 by 19%.

Figure 5.7 Real Expenditures/Budgetary Expenditures(%)

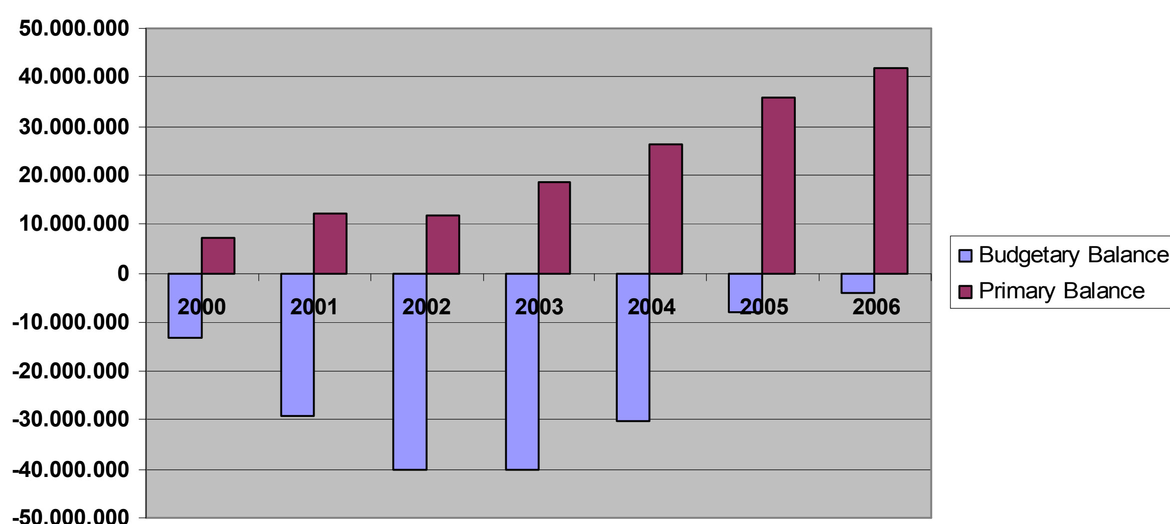


Source: http://www.muhasebat.gov.tr/

The next figure indicates the budgetary and primary balance values of 2000-2006 period. Primary balance is the difference between total budget and expenditures except interest payments. It indicates how much budget income overcomes budget expenditures when interest payments are excluded from the total expenditures of the government. In other words, primary balance shows the budget balance even if

Turkey did not have any interest payments. If there is a positive difference, then, there is a positive primary surplus. An increase in primary surplus has the meaning of interest payments of debts being made without taking on a new debt. As mentioned above, budgetary balance is the difference between total budget income and total expenditures. After the 2000-2001 economic crises, primary balance stays nearly the same in the year 2002 while budget balance continuously increases. Within the economic recovery period after the crises, budget balance starts to reduce and primary surplus starts to increase continuously. In 2006, budget balance and primary balance has their best levels of the 2000-2006 periods.

Figure 5.8 Budgetary-Primary Balance

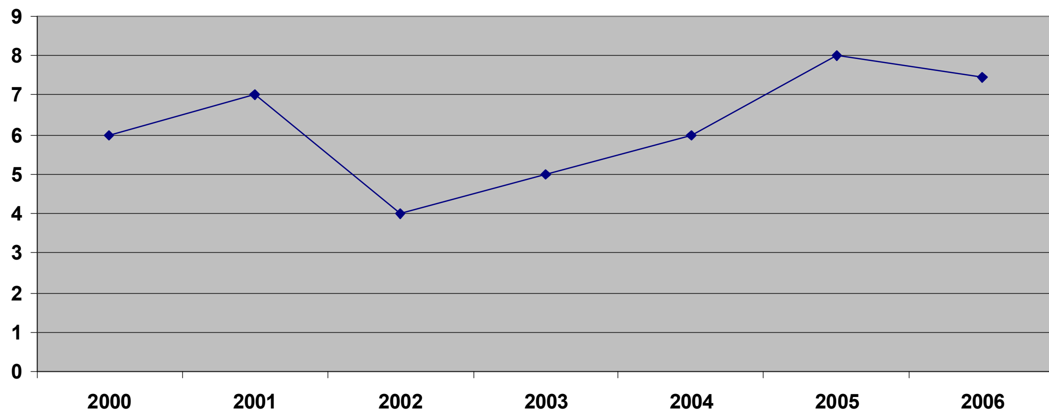


Source: http://www.muhasebat.gov.tr/

The following figure indicates the ratio of primary balance to the GNP -the share of positive primary surplus or negative primary surplus in the GNP. A 6,5% share of the positive primary surplus to the GNP is assumed to be the anchor of fiscal policy. The target of 6,5% is the fundamental axis of the program of International Monetary Fund (IMF) starting from the year 2000. In fact, this is the reason why public

economy approaches a balance in the end of 2006. If a country does not have a positive primary surplus in high ratios, debt burden will not reduce, and this situation will necessitate to take on new debt to make the interest payments. As a result, existing debt burden will increase much more. There will be no flow of capital to a country having an increasing debt burden. Moreover, there will be no opportunity to lower interest rates and inflation. Increasing interest rates means increasing cost of borrowing. As seen, the situation of Turkey is like a pileup. Increasing inflow of capital requires increasing positive primary surplus. After the 2000-2001 crisis, primary balance decreases to its minimum level of 2000-2006 periods; however, later via the IMF program, it clutches a continuous increase.

Figure 5.9 Primary Balance/GNP(%)

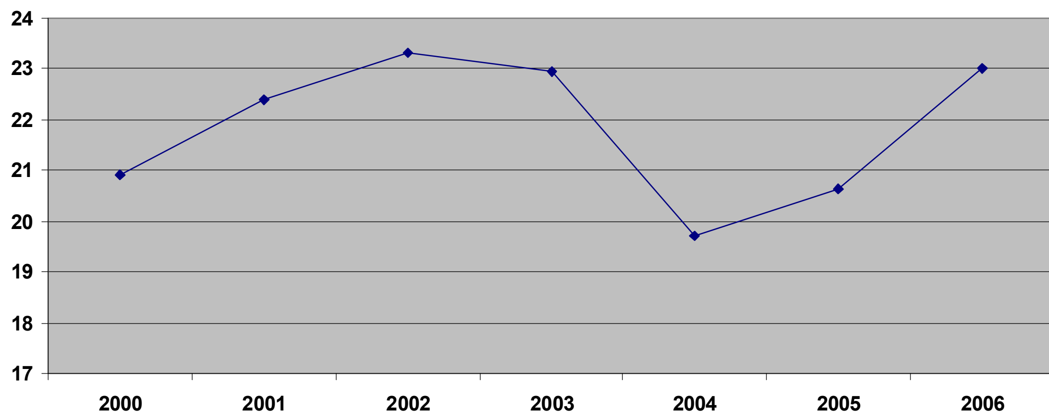


Source: http://www.muhasebat.gov.tr/

The ratio of primary expenditures to GNP shows the share of primary payments in the GNP. In other words, it is an indicator of the level of efficient usage of government revenues. Therefore, the required optimum condition is an increasing trend in this ratio. As seen on the graph, starting from 2000 to 2002, primary expenditures to GNP ratio has an increasing trend. It starts to decrease from 2002 to

2004, and once again begins to increase until the end of the year 2006. In 2006, it is nearly in the same ratio as it is in 2002. The primary expenditures to GNP ratio has a volatile period which indicates the income level earned from production and directed to new invesments and sales of goods and services.

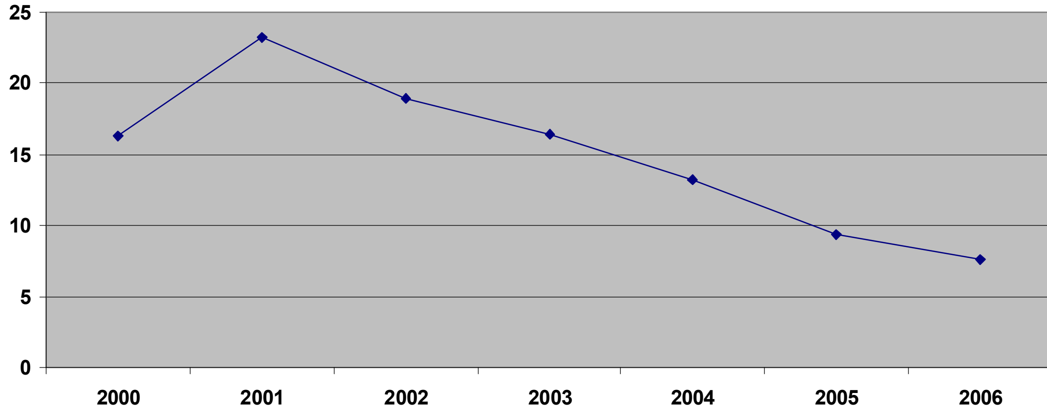
Figure 5.10 Primary Expenditures/GNP(%)



Source: http://www.muhasebat.gov.tr/

The following figure explains the share of interest payments to GNP. As seen in the graph, the ratio increases to a level of approximately 24% during 2000-2001 crises period because of increasing borrowing level and cost of borrowing. In the crises period, not only borrowing level but also the cost of borrowing increase since the reliability level of government decreases during crises. After crises, recovery period begins and helps interest expenditures decrease to approximately 7,5% in 2006.

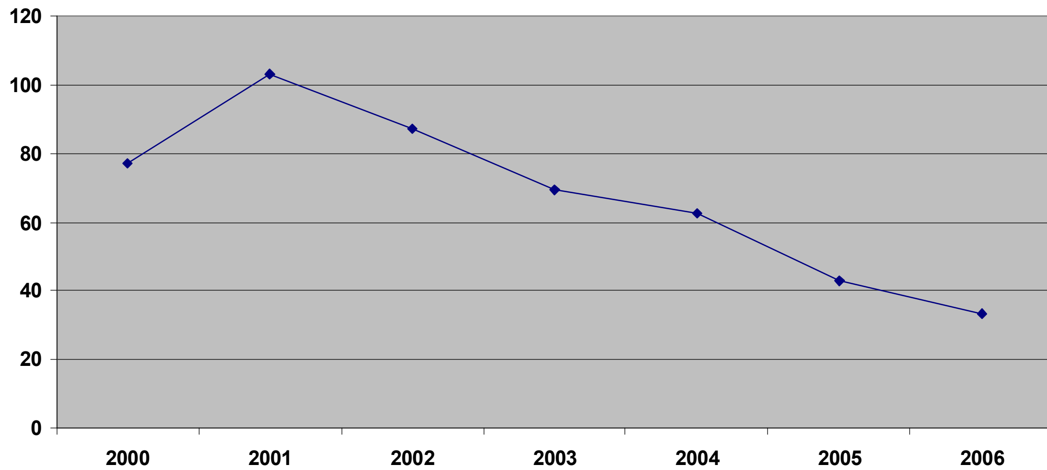
Figure 5.11 Interest Expenditures/GNP(%)



Source: http://www.muhasebat.gov.tr/

Interest expenditures to tax revenues figure is similar to the interest expenditures to GNP figure as observed below. The share of interest expenditures in tax revenues has an increasing trend until 2001-its maximum level of more than 100% level. In 2001, total tax revenues cannot afford interest expenses, so that another source of funding interests is required. Both graphs show that government's revenue is mostly used for meeting interest payments, in other words, sources of revenues are not used efficiently. Instead of making investments or making purchases of goods and services, sources are used for interest payments which will not be taken back in return, and help economic development. However, it must be considered that the level of interest payments have been decreasing since 2001.

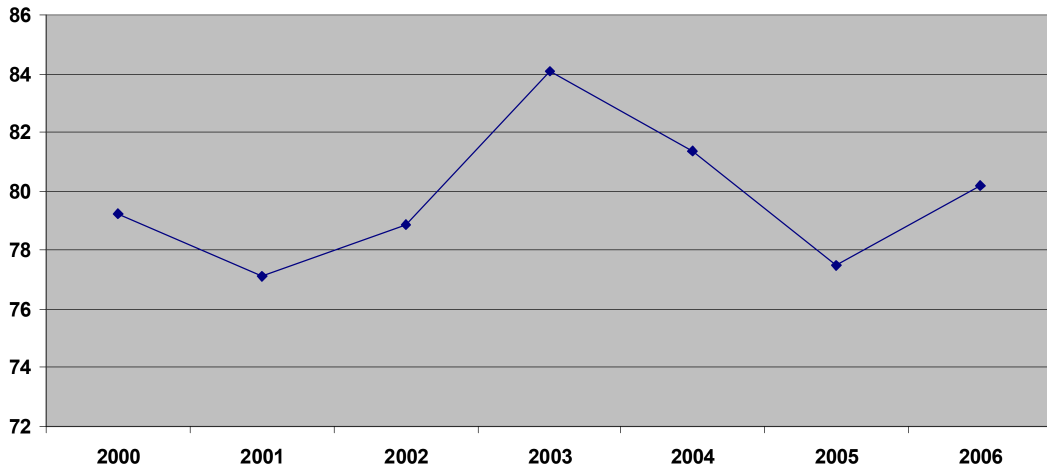
Figure 5.12 Interest Expenditures/Tax Revenues (%)



Source: http://www.muhasebat.gov.tr/

Tax Revenues/Budgetary Revenues is shown in the next figure which is an indicator of the share of total tax revenues in the total budgetary revenues. The ratio moves between approximately 77% and 84% in the 2000-2006 periods. It is in its maximum level of 84% percent in 2003, in its minimum level of 77% in the years 2002 and 2005. A decreasing tax revenues to budgetary revenues ratio means that other sources of income such as debts are started to be used, therefore, the pressure on citizens decrease. Furthermore, decrease in the level of tax encourage production and consumption, so it cannot be said that decrease in tax ratios results in decrease of total tax revenues of a country.

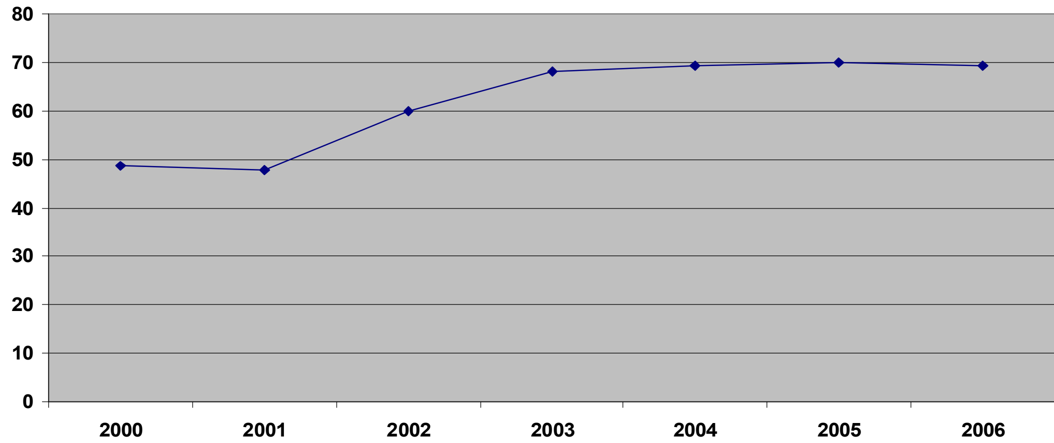
Figure 5.13 Tax Revenues/Budgetary Revenues(%)



Source: http://www.muhasebat.gov.tr/

The figure below shows the ratio of indirect tax revenues to total tax revenues. As mentioned previously, total tax revenues to total budgetary revenues ratio is volatile in the 2000-2006 periods; however, indirect tax to tax revenues ratio is not proportional to that ratio. Indirect tax to total tax ratio increases after crises and it nearly becomes steady after 2004. Even though indirect tax ratio is nearly 50 % in 2000, it rises to its maximum level of 70% in 2005, and does not have a visible change in 2006. In developed countries, most of the tax revenues are supplied from direct taxes whereas the source of the tax revenues in developing countries is indirect taxes as seen. Indirect taxes are assumed not to be fair since they are collected without considering a person's income as direct taxes do. A fair tax system requires low level of indirect taxes.

Figure 5.14 Indirect Tax Revenues/ Tax Revenues (%)



Source: http://www.muhasebat.gov.tr/

As Erdikler says, when the ratio of direct and indirect taxes in OECD countries and in Turkey are compared, it is possible to have ideas about the development level of our country, the income distribution appearing according to the development level of our country, and the situation of OECD countries. The ratio of direct and indirect taxes to total tax revenues were regularly 76,3% and 23,7% in USA, 62,2% and 36,1% in Belgium, 68,4% and 31,6% in Canada, 65,5% and 34,2% in Denmark, 50,3% and 48,5% in Netherlands, 50,7% and 48,9% in Germany, 53,7% and 46% in France, 53,2% and 46,5% in Ireland, 53,3% and 46,3% in Italy, 59,4% and 40,6% in Norway, 55,2% and 44,2% in Spain, 61,6 and 38% in Sweden, 69,6% and 30,4% in Switzerland, 60% and 39,4% in England, 55,5% and 44,1% in Austria, and finally an average of 55,4% and 44,6% in OECD countries. However, in Turkey, while the ratio of indirect and direct taxes were 60% and 40% in 2002, the ratio moved to a level of 70% and 30% in 2004 respectively. As seen from the sample ratios of several countries, the ratio of direct taxes to total revenues in developed countries are approximately 60% while the ratio of direct taxes in our country have been

decreasing recently. The reason why our country has high indirect tax rates is the existing tax structure mostly imposing taxes on expenditures instead of taxes on income. In other words, taxes are mostly collected on consumption instead of production. As a sign of improvement level of a country, many countries have decreasing ratios of indirect tax revenues to total tax revenues, however, Turkey faces with a reverse taxation structure-increasing indirect tax revenues to total tax revenues ratio- because of the direct taxes which cannot be collected by the government. A government disable to collect taxes through income and inheritance directs its system to indirect taxes and imposes increasing tax rates on expenditures in order to reduce the budget deficits. This increasing trend which makes the economy much more dependent on indirect taxes causes distortions in both economies and distribution of income. The worsening scene of taxation is not only the result but also the cause of the informal economy. As accepted all around the world, there is a direct relationship between informal economy and indirect taxes. [46]

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[46] Erdikler, Şaban. 2005. Dolaylı vergiler ve OECD ülkeleriyle karşılaştırma. Mali Haber.

Table 5.1 The Percentage of Direct Indirect Taxes (without social security contributions) in OECD Members

2006	Direct taxes	Indirect taxes
Austria	56,1	43,9
Australia	72,9	27,1
Belgium	62,5	37,5
Canada	71,2	28,8
Czech Republic	46,0	54,0
Denmark	65,9	34,1
Finland	56,5	43,5
France	55,3	44,7
Germany	53,7	46,3
Greece	44,0	56,0
Hungary	42,0	58,0
Iceland	53,7	46,3
Ireland	57,6	42,4
Italy	54,8	45,2
Japan	70,2	29,8
Korea	54,5	45,5
Luxembourg	61,2	38,8
Mexico	32,8	67,2
Netherlands	50,8	49,2
New Zealand	67,3	32,7
Norway	65,9	34,1
Poland	39,9	60,1
Portugal	39,6	60,4
Slovak Republic	35,1	64,9
Spain	59,2	40,8
Sweden	64,7	35,3
Switzerland	70,0	30,0
Turkey	32,4	67,6
United Kingdom	64,2	35,8
United States	77,9	22,1

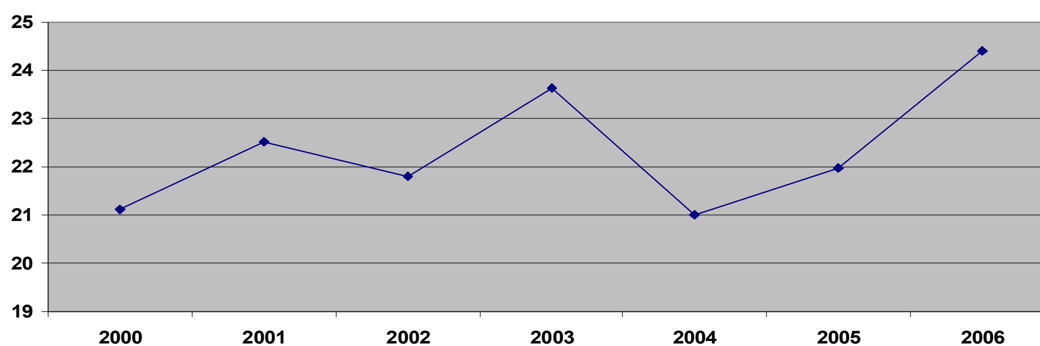
Source: OECD[47]

Next figure gives an idea of the tax burden in Turkey between the years 2000 and 2006. Tax burden which equals to income as tax and similar revenues to GNP ratio shows the monetary impact of taxes on persons. Generally, changes in tax burden are inversely proportional to the ability to pay of persons, so a decrease in this ratio is

[47] OECD. 2008. "Revenue Statistics of OECD Member Countries 1965-2007". Paris.

thought to be a positive development in an economy. The graph indicates a volatile tax burden of Turkey which changes between 21% and approximately 24,5%. Tax burden level has been increasing since 2004.

Figure 5.15 Tax Burden



Source: http://www.muhasebat.gov.tr/

OECD made a research on the total tax revenue as a percentage of GDP in a sample of countries including 15 EU and OECD countries in 2004. Sweden is the country having maximum total revenue as a percentage of GDP by approximately 50%. After Sweden, Denmark, Belgium, Finland, Norway, France, Austria, Italy and 15 EU countries come regularly. Sweden and Denmark are the two countries above the 45% of total tax revenues in 2004. 15 EU countries are nearly at the 40% average. OECD average is nearly 35%, however Turkey is above but has approximately 30% ratio. United States and Japan have similar ratios by 25%. Mexico is the only country of observation sample which has total tax revenue percentage below 20%.

Further in OECD Factbook, taxation systems of sample of countries are compared for the same year 2004. As mentioned previously, taxes on income and profits as a percentage of GDP is an indicator of fairness level of a country. The most visible thing is the gap between the ratio of Denmark and other countries of sample.

Denmark is the only country having a ratio of nearly 30% for the year 2004. Further, together with Denmark, Norway and New Zealand are the other countries having taxes on income and profits above the level of 20%. Both OECD and EU countries' average ratios are approximately 13%, while Turkey has a ratio of 7% as Greece does. This time United States has a ratio above 10% while the ratio of Japan is below the 10% level.

Another way to observe a country's fairness level of taxation system is the ratio of taxes on goods and services as a percentage of GDP. Taxes on goods and services are classified as indirect taxes which are taken without taking income level of citizens into consideration as more detailly explained in the previous parts. For the taxes on expenditures, there is not much existing gap between sample countries including OECD and EU 15 countries' average levels. The ratio of taxes on goods and services vary especially between 16% and 10%. Countries having a ratio below the 10% are United States, Japan, Switzerland, Canada, Australia and Korea. Turkey is one of the five countries having the maximum level of percentage by 15% while the average level of OECD is 11% and EU 15 is approximately 12% .[48]

The following table shows the comparison of VAT rates in OECD members between the years 2003 and 2007. Turkey's VAT rate is above the OECD average and has one of the highest rates of VAT.

[48] OECD. 2007. "Factbook - Economic, Environmental and Social Statistics".

Table 5.2 The Comparison of VAT/Sales Taxes in OECD Members

	2003	2005	2006	2007
Australia	10	10	10	10
Austria	20	20	20	20
Belgium	21	21	21	21
Canada	7	7	7	6
Czech Republic	22	19	19	19
Denmark	25	25	25	25
Finland	22	22	22	22
France	19,6	19,6	19,6	19,6
Germany	16	16	16	19
Greece	18	18	19	19
Hungary	25	25	20	20
Iceland	24,5	24,5	24,5	24,5
Ireland	21	21	21	21
Italy	20	20	20	20
Japan	5	5	5	5
Korea	10	10	10	10
Luxembourg	15	15	15	15
Mexico	15	15	15	15
Netherlands	19	19	21	21
New Zealand	12,5	12,5	12,5	12,5
Norway	24	25	25	25
Poland	22	22	22	22
Portugal	19	19	19	19
Slovak Republic	20	19	19	19
Spain	16	16	16	16
Sweden	25	25	25	25
Switzerland	7,6	7,6	7,6	7,6
Turkey	18	18	18	18
United Kingdom	17,5	17,5	17,5	17,5
Average	17,8	17,7	17,6	17,7

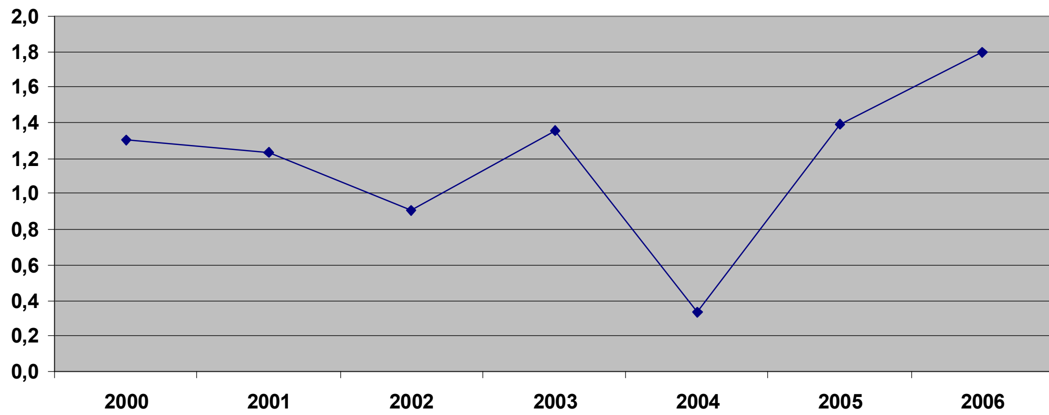
Source: OECD[49]

The following figure explains tax elasticity ratio of Turkey which is found through the ratio of tax revenue increase percentage to GNP increase percentage. The ratio bigger than 1% indicates that taxation helps economy have a stable period; however,

[49] Ministry of Finance. 2008. Kayıtdışı Ekonomiyle Mücadele Stratejisi Eylem Planı-2008. Ankara.

as graph shows, in 2000-2006 period tax elasticity is generally below the level of 1%. The ratio was 1,4% in 2005, and 1,8% in 2006. This indicates that in recent years, tax income is used efficiently and helped economic improvement.

Figure 5.16 Tax Elasticity (%)



Source: http://www.muhasebat.gov.tr/

Summary of the Results

The results show that there is a regular but decreasing budget deficit in our country. The ratio of budgetary revenues to expenditures which has been getting closer to 100% is a certain evidence of the decreasing budget deficit of our country. Furthermore, budgetary balance to GNP ratio was -16% in 2001 and was closer to the zero level in 2006. According to the Maastricht Criteria of the EU, budget deficit should not exceed 3% of the GNP. The economic recovery program aiming to adapt the EU levels was successful on these indicators. However, the target of decreasing budget deficit has another disadvantage both on the economy and citizens. Another indicator is the ratio of budgetary revenues to GNP which indicates how much

income is allocated to the private and the public sectors. The magnitude of the private and the public economy can be observed through this ratio. During the 2000-2006 periods, it was between 26% and 30%. On the other side, the ratio of budgetary revenues to GNP also shows the magnitude of the public economy and private economy. Increasing budget expenditures in 2001 was not because of the growth of the public sector but because of the increasing costs of borrowing. Budgetary expenditures to GNP and interest expenditures to GNP ratios show similar trends during 2000-2006. Interest expenditures include payments which cannot take goods and services or make investments in return, and they are considerably material in budget expenses so that both trends go along with each other. If interest payments are made without taking on a new debt, there will be an increase in primary surplus. The target of 6,5% primary surplus is the fundamental axis of the program of International Monetary Fund (IMF) starting from 2000. However, some economists claim that this ratio is more than the economy necessitates. A country having a negative surplus means that there is continuously increasing debt burden that there are not enough sources for making investments and increasing production level. In other words, revenues earned from production cannot be directed to the new investments and purchases of goods and services. Moreover, there will be no flow of capital to a country having an increasing debt burden, and further, no opportunity to lower interest rates and inflation. The situation of Turkey is like a pileup. As interest payments increased so much because of the crisis, the share of interest payments to GNP ratio rose to a level of approximately 24% within 2000-2001 crises period.

One of the most important points related with budget structure is the ratio of tax revenues to budgetary revenues. This ratio shows the share of tax revenues in the

budgetary revenues. Tax revenues compose a large share in the budgetary revenues which ranges between 77% and 84% in the 2000-2006 period in Turkey. Although Turkey had a volatile period, the thing that must be kept in mind is the high ratio of tax revenues by an average of 80%. A decreasing ratio means that the tax burden on citizens decreases. This may encourage production and consumption, so it cannot be said that decrease in tax ratios results in decrease of total revenues of a country.

Another thing that affects the growth level of a country is the tax mix of direct and indirect taxes. In Turkey, there had been a reduction in the indirect tax to total tax ratio since the crises of 2001. However, the ratio increased within the crises and nearly became steady after 2004. Even though indirect tax ratio was 50% in 2000, it rose to its maximum of the chosen period by 70% in 2005, and did not have a visible change in 2006. As in Turkey, developing countries provide most of the tax revenues from indirect taxes whereas developed countries provide from direct taxes. The ratio of direct taxes to total revenues in developed countries is approximately 60% but Turkey has an indirect ratio of approximately 70%. In other words, it means that Turkey mostly imposes taxes on consumption instead of production. Developing countries have lower production levels when compared to industrialized countries. This makes developing countries dependent on other industrialized countries and make decisions according to other productive and so that powerful countries' benefits. The production level of a country determines its power and development level. The higher the productivity, the higher the development level is. A government disable to collect taxes through income directs its system to consumption taxes which make it more dependent on indirect taxes. This causes economic deficiencies and unfair distribution of income. One of the results of the worsening scene of taxation is

the informal economy.In fact; it is not only the result but also the cause. As accepted all around the world, there is a direct relationship between informal economy and indirect taxes.

6. CONCLUSION

To sum up, in economic literature, all industrialized and developing countries have common targets as economic growth and social justice. Even though they agree on basic aims, they are required to have different tax systems since there are differences between the economical sizes, industries, cost systems, political situations of developing and developed countries. Tax structure of a country is generally believed to have effects on economic growth but there is lack of empirical evidence. Researches show that countries having lower tax rates have more rapid expansion of investment, productivity, employment, government services and growth rates. Actually, setting up an efficient and a fair tax system is far from simple, especially for developing countries which are going through the process of integration to the globalizing world. In fact, tax policy is the art of possible rather than the optimal in developing countries. Recent data indicate that tax level in industrialized countries is nearly double the tax level in developing countries. Furthermore, the ratio of income to consumption taxes in industrialized countries has remained more than the double. Indeed, replacing trade taxes with domestic consumption taxes in developing countries is the general advice of international institutions like IMF. There are many arguments on the advices of these international institutions, both for using and against using indirect taxation. In developed countries, most of the tax income is supplied from direct taxes whereas the source of the tax revenue in developing countries is indirect taxes. In developed countries, personal income tax, corporate income tax and property tax have weight compared with taxes collected from expenditures. If Turkey as a developing country is observed, the point that must be emphasized is the high ratio of tax revenues by an average of 80% in the government budget. The ratio of direct taxes to total revenues in developed countries is

approximately 60% but Turkey has an indirect ratio of approximately 70%. In other words, it means that Turkey mostly imposes taxes on consumption instead of production. Developing countries have lower production levels when compared to industrialized countries. This makes developing countries dependent on other industrialized countries and make decisions according to other productive and so that powerful countries' benefits. The production level of a country determines its power and development level; the higher the productivity, the higher the development. A government disable to collect taxes through income directs its system to consumption taxes which make it more dependent on indirect taxes.

This thesis depicts a picture of taxation systems of developing and developed countries, observes the causes and results of taxation within the framework of several empirical and theoretical studies and recent macroeconomic indicators by questioning macroeconomic effects of taxation and using the current data of Turkey in 2000-2006 period- the economic recovery period after the 2000-2001 crises- to provide evidence for macroeconomic effects. The primary aim of this thesis is to determine the desired taxation system for Turkey, whether a shift is required in tax rates and indirect taxation or not.

According to the results of the thesis, theoretically tax structure of a country is believed to have effects on economic growth but there is lack of empirical evidence. Countries in which lower tax rates are imposed have more rapid expansion of investment, productivity, employment, government services and growth rates. Industrialized countries make impositions of lower tax rates; however, the level of tax collection is approximately the double of the tax level in developing countries. If the types of taxes are compared among industrialized countries, it will be noticed that

the ratio of income to consumption taxes in industrialized countries is more than the double. In fact, setting up an efficient and a fair tax system is far from simple but there is certain evidence that the situation in Turkey as a sample of developing countries is different from the industrialized countries.

In Turkey, there is high level of tax rates and mostly indirect taxes from expenditures are collected. The data of 2000-2006 indicates that there is a decreasing trend in the budget deficit within the help of the economic recovery period. Since indirect taxes show their effects in the short-run and rapidly affect macroeconomic and fiscal situation of a country, the ratio of indirect taxes increases to 70% in 2004 and remains steady until 2006 from its level by 50% in 2000. When governments are disable to collect taxes directly, they make use of indirect taxes since indirect taxes are included in the sales price and people do not generally recognize what they are paying for. Even though indirect taxation increases, the ratio of budget revenues to GNP does not increase within indirect taxes. Decreasing budget deficit mostly occurs as a result of the decreasing interest expenditures which constitute a large amount in the budget. The ratio of interest payments to GNP and tax revenues both decrease within the recovery period. Increase in indirect taxation does not result in an increasing trend in tax revenues to budget revenues in 2000-2006. These data and results indicate that there should be another precaution for a positive change in macroeconomic situation. Turkey should direct its system to direct taxes as most developed countries do and lower tax rates to stimulate production, consumption and economic growth. Decrease in tax rates does not lead to a decrease in tax revenues.

Findings of the thesis constitute clear evidence that developing countries like Turkey in the stage of integration to the changing world conditions are required to form

taxation systems based on direct taxes other than indirect taxes since direct taxes can provide long-lasting economic improvement. However, indirect taxes have short-run effects over the economy. Further, another result is that, tax rates should be lowered to stimulate production, consumption and economic growth. There are still some economists believing that taxation does not affect long-run growth. Actually, tax structure of a country is generally believed to have effects on economic growth but there is lack of empirical evidence. This thesis provided support through the results of the recent macroeconomic and fiscal indicators of Turkey chosen as a case study for developing countries.

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