



<b>Article Type</b>	Research Article	<i>Accepted / Makale Kabul</i>	28.01.2019
<i>Received / Makale Geliş</i>	18.11.2018	<i>Published / Yayınlanma</i>	29.01.2019

**ASSESSMENT ON OPTIMAL TAXATION  
OPTİMAL VERGİLEME ÜZERİNE DEĞERLENDİRMELER**

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**ÖZET**

It is evident that taxes applied to a society should be fair, decrease the management expenditures, and distort the economic behaviors at minimum level possible. According to the optimal taxation approach, these subject elements are merged into together optimally at the point of reaching social welfare and aims to find an answer how to achieve optimal tax structure. This study makes particular assessments on optimal taxation, optimal taxation principles necessitating optimal taxation, essential conditions for optimal taxation, optimal income taxation, and optimal excise taxation.

**Key Words:** Optimal taxation, optimal income taxation, optimal excise taxation, tax justice, tax efficiency

**ABSTRACT**

Bir toplumda uygulanan vergilerin; adil olması, yönetim maliyetlerini azaltması ve ekonomik davranışları mümkün olduğunca minimum düzeyde tahrif etmesi gerektiği açıktır. Optimal vergileme yaklaşımına göre, toplumsal refaha ulaşma noktasında, söz konusu bu üç unsur optimal olarak bir araya getirilmekte ve optimal bir vergi yapısına nasıl ulaşılır sorusuna yanıt bulmaya çalışılmaktadır. Çalışmada; optimal vergileme, optimal vergilemeyi gerekli kılan optimal vergileme ilkeleri, optimal vergilemede önem arz eden koşullar, optimal gelir vergilemesi ve optimal tüketim vergilemesi üzerine birtakım değerlendirmeler yapılmaktadır.

**Anahtar Kelimeler:** Optimal vergileme, optimal gelir vergilemesi, optimal tüketim vergilemesi, vergilemede adalet, vergilemede etkinlik

**1. INTRODUCTION**

Taxes are mostly the main financial source of the public expenditures. Each tax collected by state on the basis of its sovereignty power, can change the behavior of each decision maker in the economy. The impact of this tax system that finances the public expenditures creates an important condition on the economic process. Collected taxes bear multiple costs. One of them is the impacts of tax on welfare cost and its effect can be defined as notable. In this respect, while creating a tax system, the impacts of tax on the economic behaviors should be investigated in detail.

One of the main issues in public economy is how to constitute a convenient tax system. This kind of system requires the equilibration of various features such as equity, efficiency, and simplicity. Some of these features are analyzed in a field known as optimal taxation. Optimal taxation should be perceived as the best and the most suitable taxation system. From past to present, this kind of system has been searched for; however, it is pointed out that still a consensus on a such system has not been achieved completely.

**2. FOUNDATIONS OF OPTIMAL TAXATION APPROACH**

It is possible to state that taxes are collected for other reasons than to cover public expenditures alongside fiscal purposes providing economic source required for the expenses of public services (Oktar, 2018: 14-15). Depending on the economic structure and order of every country, numbers and the form of these purposes expected from taxation may vary, and it can produce certain effects on production, consumption, investment, and distribution of income.

One of the normative approaches improved on how to create a tax system to be valid in every country is optimal taxation. According to this approach, optimal taxation represents the maximization of individual utility function under the restrictions of individual behavior, technology, desired public income, and legitimate tax (Akkaya, 1988: 343).

The point that should be paid attention to in the discussion of the change between equity-efficiency is to compare the welfare earnings obtained by giving importance to the principle of efficiency and with the gain to be obtained from the redistribution of the income to be obtained by giving importance to the principle of equity. If the welfare gain acquired from an excise tax that gives importance to the principle of efficiency is more than the income to be derived from the redistribution of income by paying attention to the income tax, it would be more rational to prefer the excise tax. Otherwise, the income tax application should resume (Baysal, 2005: 55).

The approach to the optimal taxation is based on several assumptions. These can be listed as; states should collect a certain amount of taxes, their decisions in this regard should be consistent with optimization goals of the individuals and firms, and their preferences in this respect should ultimately be to maximize the welfare of the society. Within this context, optimal indirect and optimal direct taxation approaches are dwelled on (Özcan, 2007: 56). The issue of the change between equity and efficiency and the provision of optimum increased the importance of income and consumption taxes more in terms of optimal taxation.

The optimal tax system is essentially an approach that opposes the collection of vast number of and many types of taxes and criticizes the arbitration in tax management. In order to establish simplicity in the tax system, the optimal tax system suggests that tax subjects should be clearly stated in the constitution and that taxes should be included in the constitution with a proportional rate (Aktan, 2012: 25).

Ramsey's analysis on determining the rates of commodity taxes, which was developed in 1927, that will provide the efficiency on the distribution of them and on the demand and supply elasticities of goods was the theoretical starting point for the optimal taxation literature. Ramsey sought to find the optimal excise taxes that maximize the utility function of the representative individual; hence, he left the inter-individual inequalities completely out of his analysis. According to the Ramsey rule, which is also known as the "inverse elasticity rule", by collecting a higher rate of tax on goods with lower demand elasticity and lower rate of tax on goods with higher demand elasticity, it will result in an even decrease in demand from all goods; by this way, loss of activity can be minimized (Ramsey, 1927: 47-49).

The optimal taxation literature, which grew under the leadership of J.A.Mirrless, explores how to reach an optimal tax structure that causes minimum amount of deviations in the economy and at the same time establishes justice as much as possible in taxation. According to the Mirrless model, influencing the working hours of each worker constitutes the only dissuasive effect of taxation, and there are discrepancies among worker wages due to the differences between fixed efficiencies, for this reason, assumptions claiming that relative wages before tax are fixed are accepted (Heady, 1993: 25).

There is an impression that the Mirrleesian approach is less adopted than the Ramsey approach and that the Mirrleesian approach leads to exceedingly complex tax systems. However, when scrutinized carefully, some opinions claim that the Mirrleesian and Ramsey tax systems actually have simple structure (Kocherlakota, 2006).

In 1972, Dasgupta and Stiglitz showed that production efficiency was achieved under optimal goods / commodity tax when profit efficiency was zero. Therefore, if the turnover of the technologies exhibits a declining return relative to the scale, since it acts as a wedge between budget line of profit income and feasibility limitation, it shows that production efficiency is no longer desirable as long as the profit tax rate is not 100 percent (Dasgupta and Stiglitz, 1972: 87).

It is also essential to include Pareto-efficient taxation into the agenda, which is an approach undertaken by Stiglitz in 1987 and after 2007 by Werning. All in all, this approach proposes that most of the general prescriptions for optimal taxation models utilizing pragmatic social welfare functions continue their reconstruction under Pareto terms (Mankiw et al, 2009: 174).

## 2.1 Principles of Optimal Taxation

Undertaking the task of realizing various aims and objectives of the society by the state rises the issue of to what extent taxes are compatible with these aims and objectives. Political decision-making bodies should endeavor not to contradict the basic objectives of the society when selecting the taxes to be used and regulating the implementation of the selected taxes. According to the accepted objectives of the society, the basic qualities that the taxes and the tax system should bear have laid down the rules stating the principles of taxation (Uluatam, 2012: 321).

In order to create an optimal taxation system, some taxation principles should be addressed and a taxation system should be built within the framework of these principles (Karakoç, 2018: 178). These principles are comprised of equity / equality, universality, stability, impartiality, efficiency, and simplicity (Yurdakul, 2009: 324).

Tax equity refers to undertaking of a tax burden of taxpayers according to their condition, in other words, to bear the tax burden. Although equity cannot be construed as a notion that can be concretely defined and agreed on by everyone, implementation of tax laws to everyone in the same way and applicability of horizontal and vertical equity can bring us closer to equity.

The principle of universality states that regardless of gender, language, religion, race, and nationality, everyone should be a taxpayer if they are in connection with the tax subject declared in the constitution and tax laws. It is considerably difficult to implement this principle entirely. As states may exclude low-income individuals from taxation in order to realize some non-financial objectives of taxation and they may offer some tax privileges to various institutions and organizations for a number of social reasons. In this regard, tariff structure with progressive rate and the existence of exemptions and exceptions in the tax system causes deviations from this principle (Turhan, 1998: 206).

From the perspective of stability; the most important feature that differentiates the optimal tax reform from other traditional tax reform proposals is the adoption of the principle of predictability and stability, not the principle of flexibility in terms of rules in taxation. Stability principle embodies the requirement of altering the rules that ensuring taxation as minimum as possible (Akdoğan, 2009: 212). One of the main objectives of optimal tax reform is the principle of impartiality. Arrangement of the tax systems in a way that will not bring about any change in the economy is one of the requirements of the principle of impartiality. In order for a tax system to be impartial, identified tax rate should be low, tax rates should be flat, and certain individuals and institutions should not be granted tax privileges. Since indirect taxes are collected directly through the income, wealth and expenditure of persons and tax burden is felt more easily, this violates the principle of impartiality. It is also evident that the costs borne by taxpayers, as well as the costs during tax management, should be at minimum level in order to realize the effectiveness of the optimal tax reform (Yurdakul, 2009: 325; Aydın, 2007: 48).

An optimal tax system repeatedly emphasizes the need for an equilibrium among the basic principles of taxation. These principles include equality in taxation, efficiency in taxation, and simplicity in taxation (Aydın, 2007: 49). In addition to these principles, the design of an optimal tax system takes into account the compliance cost to tax legislation. Ultimately, there will be a low level of compliance with tax legislation in a non-optimal tax system (Özcan, 2007: 55). The highest level of compliance with tax legislation reveals the goal that an optimal tax system eventually aims to achieve.

As can be seen, optimal taxation comprises the principles and features required for an ideal taxation. These basic principles should be grounded on when creating the optimal taxation system.

## 2.2 Essential Conditions for Optimal Taxation

Alongside the above-mentioned principles, issues such as according to which subjects the taxes should be collected to implement optimal taxation, whether the tax tariff will be flat or progressive, the weight of the indirect or direct taxes in taxation, and according to which criteria tax burden should be distributed among payers are also essential to be taken into consideration (Yurdakul, 2009: 327).

In order to form an optimal tax system, the question that is crucial and to be fulfilled is that what resources or issues should tax be collected over? There is no consensus on from which resource should tax be collected. Some financiers adopt the idea that tax should be taken only on income and some on

consumption. Aside from the opinion that tax should be taken from a single source, there are also those who advocate that tax should be collected from multiple sources. While single taxation is an optimal tax in terms of simplicity in taxation, from today's perspective, there are serious hardships in the implementation of such a tax. Nowadays, multi tax application view, that is to say, tax should be collected over multiple resources is more adopted (Aktan, 2012: 34).

Concerning the question from which resources tax should be collected; taxes of income, wealth, and expenditure should be reviewed thoroughly and compared in terms of the principles of ideal taxation. Each type of tax has its weaknesses and advantages in various aspects. In terms of optimal taxation of taxes; it is a common view that when taxes are determined to be comprehensive by including income, wealth, and expenditures; tax rates would be identified as low (Aktan, 2012: 35).

From past to the present, different opinions have emerged whether taxes should be levied on income or expenditure for an optimal taxation. While there have been opinions defending or criticizing both these types of tax, no consensus could not be achieved in a common denominator. Accordingly, income taxes bear more subjective nature. Since this tax can comprehend the personal and family condition of the taxpayers better, they can act more appropriately to the taxation principle according to their ability to pay. Thus, they comply with the universality principle, which is one of the principles of optimal taxation. However, the ability to grasp the financial power leads to the fact that, in addition to the mentioned advantages, it has a very complex structure and it cannot be implemented effectively in the countries whose financial organization is not well organized. This leads income taxes to digress from the principle of simplicity (Yurdakul, 2009: 329). Income and wealth taxes actually mean that persons' contributions to the production process is taxed. However, it is stated that the taxation of the share taken from the end product rather than the contribution to production is more appropriate to social justice. Even if a person can avoid paying taxes for a while by saving money, the person will have to pay this tax in the future when he / she wants a share from what society produced. These reasons reveal the rationale behind a tax understanding leaning on consumption in a tax system (Uluatam, 2012: 426). While the income tax discourages the entrepreneurs from investing, the expenditure taxes have little effect. This is because the excise tax does not have such an effect as it does not tax the income earned.

In a tax system, the density of direct or indirect taxes will lead to the fact that the tax burden is not felt or felt better, and therefore paid tax to be realized or not. In an ideal taxation system, it is important that citizens should clearly know how much tax they pay. While indirect taxes are contradictory to the principle of predictability in this regard, direct taxes can be defined as appropriate to this principle. In terms of optimal taxation, these two types of taxes bear some advantages as well as disadvantages. Therefore, it would be appropriate to include both indirect taxes and direct taxes in tax systems.

Now, together with the emphasis on the principle of equity as well as the principle of efficiency; tax tariffs<sup>1</sup>, which are shaped according to the state and fiscal policies, are in the agenda to be reconstructed in a way that it would not have negative impact on the market economy. At this point, flat taxes, which are suggested to be levied on income or consumption and presented as an alternative to progressive taxes, have been adopted with regards to optimal taxation. In this case, it is necessary to predict and evaluate the possible consequences of the comparison of flat and progressive taxes and the implementation of the alternative (Aktan and Dileyici, 2012: 103).

Although no consensus has yet been reached on all of these issues, it can be stated that a better and ideal tax system can be achieved to the extent that it can give convincing answers to all these questions within the framework of the taxation economy.

### 3. OPTIMAL INCOME TAXATION

Fundamentals of income tax, which have a special importance due to its share in total tax revenues of many developed countries, are laid by neoclassical economists such as Edgeworth, Pigou, Dalton, and Simon. The first major criticism of the income tax they laid down and developed, came from Kaldor in

<sup>1</sup> It is concluded that factors affecting the tariff on the optimal income taxation depend on the flexibility of labor supply against tax changes, cost of inequality in the distribution of income, social welfare function discussed, and the distribution of production factors (Joel Selamrod, Do We Know How Progressive The Income Tax Should Be, National Tax Journal, Vol 36, No 3, 1998, p. 361).

1955, who proposed expenditure tax instead of income tax. Then, in the 1970s, supporters of optimal tax opened a new discussion area on income tax (Yılmaz, 2001: 78).

Some features of the income tax have made it an attractive source of income. Within this context, income tax provides a significant amount of revenue, it makes the tax system fairer in terms of income distribution by being designed to be progressive and does not cause any substitution effect in the market as it is a more uniform tax. The only deflecting effect of the income tax is that it generates a demand for the use of leisure time (Çekirdekoğlu, 2010).

At the center of the optimal income tax theory, the idea of ensuring the balance between efficiency<sup>2</sup> and equity<sup>3</sup> lie. If it were possible to implement the lump-sum tax that does not include any loss of efficiency, the problem would be reduced to the equity concern and the issue of balance would not be brought to the agenda. However, every attempt to redistribute income necessitates the utility of taxes with divergent effects such as income tax (Yılmaz, 2001: 78). According to the principle of efficiency in taxation, which have the least impact on the economy, in other words, being the least distorting one to economic decisions; the rate of the taxes levied on goods and services should be determined in a way that will lead to an equal change in the demands of all goods in the market generally (Özcan, 2007: 56).

Optimal income tax theory combines the consequences of taxation on efficiency and equity. The equity issue can also be taken into consideration within the scope of optimal consumption tax. However, by differentiating the excise tax rates considerably, the probability of achieving the goal of equality in taxation is not practically high. Within this respect, it can be put forward that income tax is the most appropriate policy tool for dealing with the concerns of efficiency and equity.

When the results of the optimal taxation theory are taken into account for income tax, labor supply decisions are required to be applied to those affected more by taxes in order to assure the principle of efficiency. For the provision of the principle of equity, people with higher income should be taxed at higher rate.

#### 4. OPTIMAL EXCISE TAXATION

Excise taxes have a complementary function in the financial system, as they comprehend the ability to pay taxes that appear only in the expenditure of revenue by excluding savings from taxes. Expenditure taxes are taxes levied on the consumption of income and wealth. In this regard, they are levied on goods and services that are produced, sold or consumed. As a rule, excise taxes are listed in indirect taxes and can be reflected more easily. They are objective taxes as a result of their nature. They do not include exemptions, exceptions, discounts, and progressive tax rates, as they do not regard the personal and family conditions of the consumers (Edizdoğan et al, 2012: 306). Taxes on consumption expenditures are regressive taxes, since they are applied to all persons at an equal rate regardless of the income level of the consumer. That is to say, as each individual pays the same amount of tax for the same commodity as opposed to the proportional income taxes, individuals of the higher income group pay taxes with a smaller portion of their income. As income decreases, the tax burden increases, as income increases, the amount to be paid as tax decreases relatively; as a result of this, tax equity cannot be provided in excise taxes.

Even though taxes levied on consumption expenditures are an unfair type of tax, the fact that they do not reduce the national income by creating additional burden and have no detrimental effect on social welfare is the main argument of those who advocate that such taxes should be collected. This approach, which was put forward by Fisher, is based on the view that excise tax is collected according to individual's share from national income while the income tax is collected based on the individual's addition to the national income and this situation is not fair (Hombung, 2004).

In developing countries, leaning on taxes on consumption expenditures rather than on taxes on income and wealth is widely observed situation. However, in the process of development, it is expected that the

<sup>2</sup> The concept of efficiency in taxation is related to burden that tax causes to individual. Since each tax transfers a part of the purchasing power of the individuals to the public sector, it is inevitable for the tax-payer to lower his/ her welfare state before tax period. In individual welfare, such kind of welfare loss related to income-wealth is in the nature of levying tax and as long as the state continues levying taxes, such kind of welfare reduction will resume.

<sup>3</sup> The concept of equity in taxation means that persons with same condition bears the same tax burden (horizontal equity) and persons with different condition bears different taxation (vertical equity).

weight of direct taxes will increase in the system while the weight of indirect taxes decrease. Yet, due to the fact that it is easier to manage excise taxes in comparison to income taxes, it provides significant revenue and it can be collected from a wide range of goods and services, expenditure taxes cannot be abandoned (Aksoy, 2011: 363).

In approach to optimal indirect taxes, while high tax rates should be determined for goods and services received by high-income citizens in accordance with the principle of equality, high tax rates for these goods and services should not be applied since they are hypersensitive to price changes pursuant to efficiency principle in taxation (Özcan, 2007: 59).

## 5. CONCLUSION

How to create an optimal tax system in the field of public finance is a fairly complex area. According to the optimal taxation approach, a tax combination that will ensure a balance in terms of both efficiency and equity in taxation should be identified. Naturally, it is very difficult to determine how to create this balance in efficiency and equity. For direct taxes, such a model stipulates that a certain proportion of the income will be exempted from tax, then the following proportion will be taxed at fixed rates rather than progressive rate to diminish the trend of tax evasion. It is observed that this proposed model could not find an area of application as unfair distribution of income is gradually rising in the world. As can be deduced, in the approach to optimal direct taxes, while the principle of equality necessitates the implementation of income tax at proportional rate, the principle of efficiency requires a flat taxation. At this point, optimal taxation models that monitors both of the principles to the maximum extent are needed.

At the point of achieving social welfare, to which of the principles of efficiency or equity should be focused on more heavily changes from society to society. Whereas the preferences for the efficiency are in question in the society structure where the need for economic growth and development is felt more heavily, social structures that focus more on common and social welfare than on the need for economic growth and development may be in favor of equity. At this juncture, as social and economic needs vary, the choices between efficiency and equity may differ.

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