THE ROLE OF TAXATION
IN EUROPEAN UNION SOVEREIGN DEBT CRISIS

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ABSTRACT

THE ROLE OF TAXATION
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This thesis analyzes the tax systems in the EU and role of taxation in the build-up of the EU sovereign debt crisis. According to the assessment made for tax systems in the EU, countries in general have flexible tax systems which can generate revenue. In terms of fairness and equality there are opposite opinions for tax systems of EU countries according to different point of views. As for efficiency there are evidence that tax policies contains inefficient features.

Two tax treatments in the EU may have an effect on the build-up of the crisis. These are debt bias taxation of corporations and taxation favoring housing market. These tax treatments made companies and housing market more vulnerable to financial imbalances. On the other hand, some elements and weaknesses of the tax systems in the EU are considered to have adverse effects on the economy prior to the crisis. As a consequence of this examination it is considered that although taxation can not be deemed as one of the causes of the crisis, some tax policies pursued during the pre-crisis period may have contributed to the causes of the crisis.

Keywords: Taxation, EU sovereign debt crisis

ÖZ

VERGİLENDİRMENİN AVRUPA BİRLİĞİ KAMU BORÇLARI KRİZİ ÜZERİNDEKİ ETKİSİ

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Bu tezde Avrupa Birliği ülkelerinin vergi sistemlerinin özellikleri ve vergilendirmenin krizin oluşumundaki etkisi analiz edilmiştir. Yapılan değerlendirmeye göre Avrupa Birliği ülkeleri genellikle vergi hasılatı yaratabilen esnek vergi sistemlerine sahiptir. Adalet ve eşitlik açısından farklı bakış açılarına göre zıt görüşler vardır. Etkinlik açısından bakıldığında ise vergi sistemlerinin etkin olmadığını gösteren bazı deliller mevcuttur.

Avrupa Birliğinde, iki vergi uygulamasının krizin oluşumunda etkisi olmuş olabilir. Bunlar kurumsal finansmanda borçlanma yanlısı vergilendirme ve konut piyasasını kayırıcı vergi uygulamalardır. Bu uygulamalar şirketleri ve ev piyasasını olası mali dengesizliklere karşı dayanıksız hale getirmiştir. Diğer taraftan Avrupa Birliğindeki vergilendirmeye ilişkin bazı unsurlar ve vergi sistemlerindeki zayıflıkların kriz öncesi dönemde ekonomiye olumsuz etkilerinin olduğu değerlendirilmiştir. Yapılan analiz ile vergilendirmenin krizin oluşumuna yol açan sebeplerden biri olmadığı ancak kriz öncesi güdülen politikaların krize sebep olan faktörlere katkısı olduğu sonucuna varılmıştır.

Anahtar Kelimeler: Vergilendirme, Avrupa Birliği kamu borçları krizi

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CHAPTER 1

INTRODUCTION

Taxation has always been a controversial topic for the EU agenda and its importance has been growing more and more in recent decades. Taxation is not an area of EU integration but it is only coordinated among the Member States. Establishing a common tax policy in the EU is not envisaged in the founding treaties of the EU. However, the common market necessitated some arrangements in the widely different tax systems of the Member States. Therefore, tax policy coordination attempts have been carried out in the EU to avoid the adverse effects stemming from the existence of different tax policies of the Member States on economic activities of the Internal Market.

Taxation policy run by a Member State has considerable effects not only on its own economy but also on the economies of other Member States. From this point of view, taxation measures taken by a Member State have impact on the other Member States' economic interests. The other factor that makes the tax policy important in the EU is the loss of monetary policy control of the Euro Area countries due to single monetary policy run centrally by the European Central Bank. For this reason, tax policy remains as one of the most important economic tools for governments to influence the economy.

The 2008 global financial crisis which has attracted attention to fiscal policies in the EU, has put tax policy in the limelight. Debates on taxation arisen in the wake of the crisis are focused on the role of taxation in the EU sovereign debt crisis. Taxation is not deemed as one of the causes of the crisis in the EU. However, by many economists, it is claimed that the tax policies pursued during the pre-crisis period have contributed to the emergence of the crisis. Within this context, the main aim of this thesis is to analyze the tax systems in the EU and show the role of taxation in build-up of the crisis. For this purpose, this study tries to scrutinize the tax structures in the EU, and effects of tax policies in the build-up of the crisis. Followingly, general information about the tax policy measures taken in response to crisis by the individual Member States as well as at the EU level is provided.

In Chapter 2 background information regarding the tax structure, legal basis of taxation and developments of taxation is provided in order to comprehend the reasons behind the tax policies pursued in the EU. Afterwards, the structure of the tax system based on factors such as tax competition, the principle of subsidiarity and tax harmonization level in the EU is presented. Subsequently, the EU tax system is assessed to see its weaknesses and strengths. It is thought that this assessment provides a general view whether these weaknesses and strengths affect the process leading to the crisis or not. At the end of this chapter diversities of Member States' tax structures are analyzed to understand specific characteristics and diverse structures of Member States' tax system also. In this part, diversities of the Member States' tax structures especially for the taxes levied on labour, consumption and capital will be focused. According to definitions of European Commission, labour taxes comprised of taxes on income, taxes on payroll and workforce, social security contributions paid by employees and employers. Capital tax refers to the total amount of corporate income tax, personal income tax paid on dividend, interest and entrepreneurial activity including other taxes on holding gains and taxes on wealth. Consumption taxes includes VAT, other taxes and duties on import, products and production and other type of consumption current taxes in a country (European Commission, 2018a).

Chapter 3 initially gives brief information about the causes and progression of the financial crisis in the EU. Afterward, the role of taxation in build-up of the EU sovereign debt crisis is tried to be explored. Although solely taxation is not considered as one of the causes of the crisis, some defects of the tax systems in the EU and tax policy run by the Member States may have contributed to the build-up of the crisis. The adverse effects of debt bias taxation for corporate financing and taxation favouring the housing market are explained as contributing factors to the emergence of the crisis. Besides, the weaknesses of the EU tax policy are examined in terms of their roles in the build-up of the crisis.

In Chapter 4, firstly the EU tax measures taken by the individual Member States at the EU level as a response to the crisis are scrutinized in general. At the EU level, several initiatives and joint interventions have been adopted to coordinate the Member States' measures. One of them is the adoption of European Semester aiming to coordinate economic policies of the Member States and ensure sound public finances, to prevent excessive macroeconomic imbalances, to support structural reforms and to boost investment throughout the EU. Taxation is one of the key policies analyzed and monitored by the EC in the context of it. The other remarkable initiative is the introduction of the Financial Transactions Tax proposed in order to reduce speculative transactions and volatility and stabilize the financial markets are the most remarkable measures.

In addition to the measures at the EU level, each Member States individually has taken diverse measures in accordance with their different tax structures. It is obvious that the Member States, generally have preferred discretionary tax cuts. Some Member States have lowered Personal Income Tax (PIT) rates to support household spending power while others have preferred to increase PIT rates in varied scales. It is also seen that in general, the States have decreased Corporate Income Tax (CIT) rates and increased Value Added Tax (VAT) rates in the aftermath of the crisis.

In Chapter 5, the concluding remarks of the thesis are provided.

CHAPTER 2

TAX SYSTEMS AND TAX POLICY IN THE EU COUNTRIES

In this chapter, firstly the legal basis and developments of the EU taxation is explained within a historical frame. The notions of tax competition, tax harmonization, subsidiarity and tax competitions which are directly related with the taxation in the EU are described. Following these, the EU tax system is tried to be assessed according to the widely accepted criteria.

2.1. The Structure of the Tax System and the Extent of Tax Harmonization

The European Union (EU) has been founded on political objectives. However it has been prospered through economical means. Although economic integration has been attained to a considerable degree in the EU, fiscal union is not seen even as an area of integration. Therefore, fiscal policy remains as a national responsibility for the Member States in line with the principle of subsidiarity[1]. Currently, the Member States are free to run their own tax systems.

In the EU, 'non-political' issues are dominated by supranational actors such as the European Commission (EC), the European Court of Justice (ECJ) and the European Central Bank (ECB) while decision-making on 'political' issues is carried out via intergovernmental conferences. Although taxation has an economic dimension, it is

[1]In Article 5 of Lisbon Treaty (2007, p. 12), principle of subsidiarity is defined as

> "… in areas which do not fall within its exclusive competence, the Union shall act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States, either at central level or at regional and local level, but can rather, by reason of the scale or effects of the proposed action, be better achieved at Union level."

subject to political decision-making as it is a policy area directly linked to the sovereignty of the states. In line with that, decisions on taxation have still been taken unanimously via intergovernmental negotiations. Introducing qualified majority voting instead of unanimity has been proposed by the EC and has been discussed in many intergovernmental conferences in tax matters since the Treaty on European Union (1992). These attempts for avoiding intergovernmental gridlock and ensuring more efficient decision-making procedure on taxation arise from an approach towards strengthening the political dimension of the integration. However, many proposals on this have been declined until today at many intergovernmental conferences due to the unwillingness of the Member States to waive their right on implementing their own tax policy, which has a direct link with the sovereignty of states. Therefore, the unanimity requirement still exists for the tax decision-making procedure (Wasserfallen, 2014, p. 422).

A great number of studies by the EC claim that unanimity procedure used in the European Council for taxation decisions poses a challenge to achieve tax coordination on the operation of the single market, fight against fraud and even on the protection of the environment. Tax harmonization does not seem to be achieved duly as long as the unanimity rule on decision-making is being retained in the European Council for taxation matters because it is barely possible to get the approval of each Member State for any tax decision. As a solution to the difficulties encountered by the EC in taking binding legislations due to the requirement of unanimity rule, the EC has come up with introducing non-binding legislative approaches more, instead of binding legislative proposals. This is because non-binding legislations do not require unanimity procedure. Although non-binding legislations are not forcible as binding ones, the EC has been aiming to progress in tax matters by adopting this way (European Commission, 2006, p. 4).

2.1.1. Legal Basis of Taxation in the EU

The EU law consists of primary and secondary legislations. The Treaties, their Annexes and Protocols constitute the primary sources of law. The secondary legislation includes Regulations, Directives and Decisions which are derived from principles and objectives in the Treaties. Moreover, Recommendations and Opinions are non-binding legal acts with which institutions announce their views without imposing legal obligations.

As being one of the primary sources of the EU law, Treaty on the Functioning of the European Union (TFEU) sets out the main organizational and functional structure of the EU. The Articles 110 to 113 of the TFEU (2012) are about taxation. These articles include provisions on harmonization of taxation especially for well-functioning of the internal market. The Article 113 of TFEU authorizes the European Council to adopt provisions for harmonization of indirect taxes which is necessary to ensure the establishment and the functioning of the single market and avoid distortion of tax competition. It maintains the European Council's unanimity decision-making principle for harmonization of taxation legislation concerning turnover taxes, excise duties and other forms of indirect taxation. Under the Chapter of ‘Approximation of Rules’, Article 115 authorizes the European Council to issue ‘Directives’ for the approximation of laws, regulations or administrative provisions of the Member States which directly affect the establishment or functioning of the internal market. This article is applicable for taxation as well.

In TFEU indirect taxes are addressed directly for well-functioning of the internal market while there are some general rules which can be linked to direct taxation. Below the TFEU articles regarding the indirect and direct taxes will be specified.

The Articles 46-66 in the TFEU under the title of Free Movement of Persons, Services and Capital are relevant especially for direct taxation in the EU. Since Article 45 stipulates, “abolition of any discrimination based on nationality between workers of the Member States as regards to employment, remuneration and other conditions of work and employment", it basically deals with direct taxes which are imposed on both personal or capital income and wealth (European Parliament, 2017b). The prohibition of all restrictions on freedom to provide services and free movement of capital in the following articles is also in relevance with taxation.

The Article 65 of the TFEU deviates from the previous provisions and gives an autonomy to Member States on free movement of capital by entitling them to distinguish "between taxpayers who are not in the same situation with regard to their place of residence or with regard to the place where their capital is invested" and applying relevant provisions of their tax legislation.

The other provisions which can be linked to the taxation are Articles 107-109 on competition, Articles 191-192 on the environment, and Articles 326-334 under the chapter of enhanced cooperation (Remeur, 2015, p. 5).

The decisions on taxation have been usually taken via Directives as one of the secondary sources of the EU law. Directives are legal instruments used for harmonizing national laws and the EU law. They are flexible instruments that each country can choose its own method for adopting them with the aim of achieving the goals and results set out in the Directives. The Directives become applicable when the individual Member State transposes them to its own internal legislation. As the EU countries have a room for choosing their transposition process, they are allowed to consider their specific national characteristic on the matters related to the content of the Directive. Therefore, it can be claimed that issuing Directives for the matters about tax harmonization shows that taxation is not seen as one of the highly integrated policy areas in the EU. On the contrary, as being another type of the second source of the EU law, Regulations are rules directly applicable across the EU countries. Regulations' adoption is obligatory for the Member States immediately after their entrance into force by the EU.

In EU legislation there are so many Directives and Decisions on indirect taxes such as VAT and excise duties. However, direct taxes are not directly ruled by the EU legislation. Regarding direct taxation, only few Directives have been introduced aiming to prevent tax avoidance and double taxation.

As one type of direct taxes, CIT is the most harmonized one in the EU compared to others. Since the CIT may have distortionary effects on the free movement of capital as one of the fundamental freedoms set out in the TFEU, special importance is given to harmonization of CIT. Harmonization efforts in the EU for CIT aim to prevent harmful tax competition, tax evasion and tax fraud and to combat tax avoidance and tax fraud. PIT, another type of direct taxes, is not ruled with specific legislation but with bilateral tax treaties and developed to some degree by the case law of the European Court of Justice (ECJ).

While the attempts for harmonization of indirect taxes are for enabling the well-functioning of the Customs Union, the aim for the harmonization of the direct taxes is to guarantee the four freedoms (movement of goods, labour, capital, services) as they mainly affect them (Keuschnigg, et al. 2015, p. 4).

2.1.2. Developments of Taxation in the EU

Establishing a common tax policy in the EU is not envisaged in the founding treaties of the EU but the common market necessitates some arrangements in the widely different tax systems of the Member States. From the beginning of the integration process, taxes are under consideration since they may pose an impediment to trade within the Union. The developments for the harmonization of the indirect taxes and the direct taxes have followed paths independent from each other. Therefore, they will be examined in separate sections.

2.1.2.1. Indirect Taxes

The Tinbergen Committee is the first group established in 1953 to address the unsolved tax matters during the time of the European Coal and Steel Community[2] (ECSC). The Committee focused on the taxation principles and the economic outcomes of these principles which are explained below.

“Destination principle” and “origin principle” are two principles used for sales taxation on the trade within the ECSC. Under the destination principle, a commodity is taxed in the country where it is consumed, while under the origin principle it is taxed in the country where it is produced. In the latter, tax revenue is distributed among countries according to the amount of value added generated in each country.

The Tinbergen Committee did not favor any of the principles over the other and recommended continuity of the destination principle given the circumstances of the Community at that time. However, the Neumark Committee constituted in 1963 after the establishment of the European Economic Community (ECC), recommended origin principle and introduced VAT instead of gross turnover tax. After the completion of the Single European Market, it was seen that using destination principle was not feasible for the internal market. Nonetheless, the Commission’s attempts to introduce origin principle failed (Keuschnigg, Loretz and Winner, 2015, p. 5).

The origin principle requires a considerable change in revenue distribution among the Member States and in a sense, it means losing control in taxation powers, which is barely preferred by the Member States. Instead of adopting origin principle, in 1993 Member States accepted "transitional scheme" according to which, exports are free of VAT for intra-EU sales but a recipient is responsible for paying VAT in line with the destination principle. As for the domestic trade, the supplier is charged VAT so the

[2] European Coal and Steel Community was an organization established by six European Countries in 1952 in order to integrate the coal and steel industries in the Western Europe. It is the first integration step towards establishing the EU.

origin principle is being followed. Non-registered traders and consumers are also taxed according to the origin principle. Transitional System was introduced to last for four years and after four years it was planned to adopt origin principle. However the permanent origin principle has not been accepted politically until now. Therefore, the provisions of the Transitional System are still being applied for the trade in the EU (European Commission, 2011a). Within this system, the destination principle is operative for transactions involving VAT for registered traders.

Meanwhile, VAT was introduced in line with the recommendations of the Neumark Report with the First and Second Directives in 1967 (Council Directive 67/227/EEC and Council Directive 67/228/EEC). These Directives did not set the coverage and the rate of VAT. ECC's adoption of the Sixth VAT Directive in 1977 is a milestone for the harmonization of taxation in the EU. The Council Directive 92/77/EEC (1992) amended this Directive later stipulated a minimum standard rate of VAT as 15% and 5% for the reduced rate[3] for the Member States. The Directive was recast and improved by subsequent Directives. At the moment, VAT Directive 2006/112 is the core legislation applicable for VAT issues.

Beside many Directives on VAT, in 2008 European Council Regulation No 37/2009 and in 2011 European Union Regulation No 282/2011 was adopted. The first one laid the basis for more uniform application of the EU rules and the second one was on administrative cooperation in VAT matters to combat tax evasion in the Union (European Parliament, 2017c). The adoption of Regulations whose provisions must be directly implemented in the Member States unlike Directives can be seen as a sign of the willingness of Member States for more cooperation on VAT issues.

As another type of indirect taxes, excise duties levied on alcohol, tobacco products and energy vary among the Member States. In the context of the establishment of Single

[3] In particular situations ordinary tax rates may be reduced by tax laws within a tax system of a country.

European Market, several Directives were adopted for a uniform system of the excise duties. These Directives address the structure of the tax, minimum rates of duty and general provisions for the product categories (European Commission, 2006) The general rules for excise duties are covered by the Directive 2008/118/EC with the aim of avoiding obstacles for the proper functioning of the internal market.

2.1.2.2. Direct Taxes

As the harmonization of direct taxation relates to the free movement of capital, services and labour, it has been contemplated since the 1970s apart from the harmonization of the indirect taxes. Among several proposals of the Commission on this matter, only a few Directives were adopted such as European Council Directive No 90/434/EEC known as Merger Directive and European Council Directive No 90/434/EEC known as Parent Companies and Subsidiaries Directive aiming to avoid internal double taxation of dividends, interest, and royalties and to facilitate cross-border business developments. Moreover, non-binding Code of Conduct for business taxation was introduced as a conclusion of the ECOFIN Council Meeting (1998) in order to prevent unfair business tax implementations that discriminate firms in a country (Keen, de Mooij 2008 p.231). The Code of Conduct includes political commitments by the Member States regarding business taxation. In line with the purpose of the Code of Conduct, a Code of Conduct Group was also set up to evaluate the business tax measures taken by the Member States.

According to the reports of the Group, the main problem is the adoption of different national legislation on business taxation in the internal market (European Parliament, 2017a). One of the solutions suggested by the Group is to introduce Common Consolidated Corporate Tax Base (CCCTB) which means that companies would be able to submit their tax refund claims to a central contact point in order to avoid paying excess business taxes and also consolidate all their profit and losses made in the EU (European Parliament, 2017a).

Meanwhile, following the release of several research papers such as Van den Tempel Report (Tempel, 1970) and Ruding Report (Commission of European Communities, 1992) on harmonization of the corporate taxes by approximation of the rates, Bolkestein Report (European Commission, 2001) suggested aligning corporate tax base rather than tax rates in line with the proposed CCCTB. As an outcome of all these attempts, EC's proposal of CCCTB in March 2011 was not thoroughly taken into consideration as in that time economic concerns were under the spotlight due to the financial crises prevailed across Europe. However, the CCCTB is still on the EU's agenda as a key for the harmonization of the direct taxes (Keuschnigg et al., 2015, p. 8).

Being another type of a direct tax, PIT is one of the least harmonized taxes in the EU. The general manner in the EU is to leave the PIT to the competence of the Member States. For the matters about the PIT, the norms have been shaped mostly by the case-law of the ECJ (European Commission, 2006, p. 3). Even so, EU coordination is needed to a certain extent for ensuring the four treaty freedoms which are free movement of goods, services, capital and persons within the EU, eliminating tax obstacles for cross-border transactions and prevent double taxation and tax evasion.

The most common problem about PIT is double taxation, which can be solved by bilateral agreements. However, bilateral agreements do not cover all taxation matters. The equal treatment for both the residents and employed non-residents from the other Member States should be guaranteed in every aspect of taxation such as tax reliefs, tax exemptions etc. This is one of the conditions to ensure freedom of movement. However, as an attempt on this, Commission Proposal for Council Directive No COM 79/737 concerning the harmonization of income taxation provisions with respect to freedom of movement for workers within the ECC was rejected by the Council in 1979. Thereafter in 1993 for the Case C-279/93, ECJ ruled that a Member State cannot treat non-residents from other Member States less favorably in levying taxes compared to its own nationals. It is one of the examples in the area of PIT that ECJ rulings have improved the harmonization (European Parliament, 2017a).

The EC responded to the rejection of the Directive proposal COM 79/737 on PIT by issuing a Recommendation No 94/79/EC including its views in line with the provisions of the rejected Directive. Recommendations are non-binding pieces of legislation setting out views and suggestions of the Commission. Although they do not have legal force, they have political importance in terms of representing EC's standpoint about an issue.

The other important taxation development in the EU is the adoption of the Directive 2003/48/EC on the taxation of savings income in 2003. Cooperation on interest income tax is considered necessary as the increase in the interest income tax rate in one country may cause capital movements to the country that levies less interest income tax rate. Later, the Directive was recast and the Directive 2011/16/EU covering further exchange of information among tax authorities in the EU was adopted.

2.1.3. Tax Competition, Subsidiarity and Tax Harmonization

Tax competition, principle of subsidiarity and tax harmonization are the notions which have utmost effect on taxation matters in the EU. These notions are explained in detail below.

2.1.3.1. Tax Competition

Tax competition is the tax reduction attitude of the states to attract capital, investment, labour and tax revenue to their own country from other countries. As the base of CIT is more mobile than other taxes, earlier the term was used for the competition on corporate taxation. Since recently other tax subjects have become mobile as well, the term also covers other taxes in the related literature. The tax competition issue is of great importance within the EU, as in the borderless internal market, tax competition among the states is expected to be more severe.

Whether tax competition is desirable or not is a controversial issue. To classical economists, taxes have a negative effect on economic growth so they should be held at minimum level. In line with that, tax competition may be an occasion for lowering taxes and enhancing growth. According to the proponents of tax competition, lowering tax rates increases foreign investments and employment level, respectively. Besides, government expenditure efficiency is ensured due to governments' tendency to reduce expenditures because of less tax revenue. Tax competition also may pave the way for finding an optimal level of tax rate and thus improve the tax system or inventing new tax system to conduct government services with less tax revenue (Boss, 1999, p. 10).

According to OECD report of "Harmful Tax Competition" (OECD, 1998) tax competition is detrimental if it has a distorting effect on financial and real investment flows, negatively affects tax compliance, lowers the desired level of taxes, changes the composition of taxes and government expenditures, shifts the tax burden to less mobile tax base such as labour, consumption and property and increases the compliance and administrative costs.

The strongest argument of tax competition opponents is its inducement to a *race to the bottom* which refers to decrease in tax rates resulting in tax revenue decrease and cuts in public spending. This constitutes a risk for financing the government expenditures and under-provision of public goods and services. From this point of view, it threatens the welfare of societies. However, according to Halkos and Kyriazis (2006 p. 170), this is a controversial issue as the true preferences of consumers are unknown and whether the initial spending of the government is at the optimum level or not. Firstly, consumers may prefer private consumption instead of public consumption so the tendency to increase private spending by lowering taxes may contribute to the increase in the welfare of consumers. Secondly, in case of the absence of tax competition, public goods and services may be over-provided. As we can not presume whether the public goods are provided at the optimum level or not, we can not say that lowering taxes negatively affects welfare states.

Being part of the single market limits the national room for maneuvering in the field of taxation as the customs taxes are already abolished and some tax adjustments are adopted by the countries in the single market. Moreover, after accession to the

European Monetary Union (EMU), the countries within the Euro Area are not independent in their monetary policy. Therefore, for the Euro Area countries, fiscal policy remains as the only tool to manipulate the economy. In addition to them, tax competition also constrains national tax policy, since the Member States have to take into account tax competition in the EU while taking tax decisions. Being another factor that constraints national tax autonomy, tax competition has gained importance along with the integration steps taken in the EU.

The other reason that makes tax competition a topic of concern is the tax structure in the EU. One of the most criticized taxation issues in the EU is high tax rates on labour. As stated above tax competition also shifts the tax burden from mobile factors to immobile factors one of which is labour. After the 1990s, the EU's efforts to lower taxes on wages to avoid negative effects of high labour taxes on growth might have been hindered by tax competition. The EU could only lower labour tax by moving the tax burden from labour to other tax bases without decreasing tax revenue. However, increasing CIT in order to lower the labour tax may not be preferred by the Member States due to high tax competition. Therefore, this attitude may pose a constraint for lowering labour taxes.

On the other hand, globalization and digitalization caused an increase in mobility of the capital and CIT base accordingly. New information and communication technologies make physical location of firms unimportant. The firms can choose their locations easily taking into account tax advantages in a country to minimize their tax obligations. Therefore increase in capital mobilization by technological developments also accelerates tax competition among countries (Remeur, 2015, p. 14).

According to Genschel, Kemmerling and Seils (2011, p. 586), four factors affect tax competition in the EU. First two of them have an increasing effect on tax competition which are market integration and enlargement. Single market facilitates tax arbitrage among the Member States due to the reduced barriers. Accordingly, diversifications of tax rates are narrowing among the Member States by means of tax arbitrage. As a result, market integration makes tax competition more common as minimization of capital controls, exchange rate fluctuations and political risks lead to more tax arbitrage.

Secondly, enlargement also tends to increase tax competition. Enlargement means a growing number of countries within the single market in the play of tax competition with different size and affluence. Generally, newly accessed poor and peripheral countries are more likely to lower tax rates in order to attract investment and capital into their country. This manner escalates tax competition in the EU. This is why tax competition is expected to be more due to the enlargement of the EU (Genschel, et al. 2011).

The latter two factors are intergovernmental tax coordination and ECJ tax jurisprudence. Tax coordination attempts aim to avoid harmful effects of the tax competition and to curb tax competition in the EU. Therefore, devising common tax implementations and harmonizing tax rates can mitigate tax competition among the Member States (Genschel, et al. 2011).

Lastly, the ECJ tax jurisprudence may increase or decrease tax competition depending on its decisions. If the ECJ rules in favor of taxpayers' rights of free movement this strengthens the market integration effect and increase tax competition. On the contrary, if the ECJ rules in favour of national interests, this may cause a decrease in tax competition. In the article by Genschel et al. (2011), after analyzing the ECJ tax jurisprudence and its cases concerning national tax restrictions, it is concluded that the net effect of this opposed mechanism is to raise tax competition since the ECJ has usually not accepted justifications on tax restrictions.

To be able to make a global comparison, Figure 1 shows CIT rate tendencies in three country groups for the period 2003-2017. As seen in Figure 1, CIT rates have fallen globally in this period. However, CIT rate decrease in the EU is more apparent. This may indicate that tax competition is more in the EU compared to other country groups in line with the conclusion of the above-mentioned article.

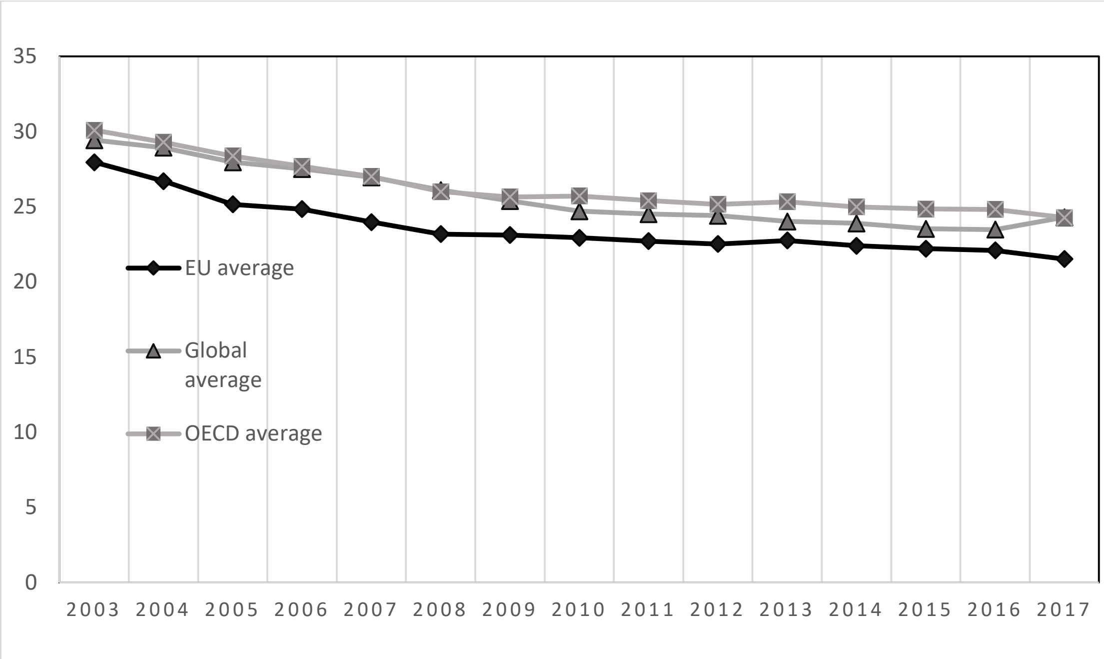

Figure 1: The development of CIT rates, 2003-2017 (own drawing based on data retrieved from KPMG, 2018a)

2.1.3.2. Tax Harmonization and Subsidiarity

To avoid negative outcomes of tax competition, the EU took so many steps. Intergovernmental tax coordination is seen as a mechanism to abate the effects of the tax competition by harmonizing tax rates. The other major reason behind the efforts of tax coordination is to prevent *race to the bottom* due to increased tax competition (Keuschnigg, et al. 2015, p. 3).

Although tax harmonization is thought to be a measure to avoid the harmful effects of tax competition, Baldwin and Krugman (2002) argue whether the economic integration necessitates tax harmonization or not. Their argument in the article is that the *race to the bottom* is not the ultimate result of the tax competition as the other things are not equal. Due to the agglomeration forces, industrial firms know that they earn more in core countries than in peripheral countries. Therefore, core governments do not lower their tax rates below the rates of the peripheral governments, as they know that the firms are enjoying advantages of the agglomeration in the core counties. Let alone, they keep their tax rates higher than the rates of the peripheral governments but they limit the rates sufficiently low enough not to make the peripheral countries eager to engage in tax competition. Therefore, the competition is not at play in an expected level and the tax harmonization should not be considered as a tool to prevent tax competition whose determinants are not clear.

One of the principles guiding the tax policy of the EU is subsidiarity. In the EU the presumption is that the local authorities are competent to know the needs of the communities and to run their own tailor cut tax policies according to the needs of the communities. Moreover, decentralized taxes can be collected accountably and managed easily instead of central taxation. However, in some cases, a centralized tax system may be advantageous. By means of economies of scale, centralized tax administration may decrease the tax collection costs or the centralized tax system can be used to avoid tax competition (Pippin & Tosun, 2016, p. 441). For example centralized taxation may generate economies of scales by avoiding tax evasion of VAT levied on intra-Union exports, preventing lack of information about the foreign source of income and sustaining a common tax base to lower the compliance cost of CIT (Keen & De Mooij, 2008, p. 227).

In this vein, fiscal externalities come into play. A country might not take into account the welfare effect of its rate reduction in an attempt to attract the capital or investment into the country. As stated above, such reductions may end up with too low tax revenues to provide public goods and services. In order to avoid under-provision of the public goods and services, the EU can take measures centrally.

The other decentralization taxation failure can emerge from distortions in production efficiency. According to the optimal tax design theory of Diamond and Mirrlees

(1971), if profits can be fully taxed, production decisions remain undistorted with the assumptions of absence of the externalities and the non-competitive behaviour. Production efficiency can be sustained by means of equalizing marginal productivity of capital across countries. This means that production efficiency could be obtained if harmonization of capital income tax is ensured across countries (Keen & De Mooij, 2008, p. 225).

If there are decentralization failures, the EU intervenes to ensure tax harmonization in line with the principle of subsidiarity. As stated in the explanation of the principle of subsidiarity, the EU takes action where objectives can best be attained by actions at the EU level instead of national level.

The interventions of the EU on taxation matters explained above is the outcome of this perspective. These interventions aim to avoid failures of decentralized taxation in the internal market. Where decentralized taxation has a negative effect on the market the EU interferes in line with the subsidiarity principle.

The forms of coordination actions regarding taxation are tax cooperation, tax coordination, and harmonization. In tax cooperation, countries jointly determine the tax base and rates while tax coordination refers to countries' commitment to a specific manner with respect to taxation. On the other hand, harmonization means equalization of tax rates and tax bases. We can say that for different types of taxes the EU have adopted different forms of coordination compatible with what is necessary for each field. We can say that common external tariff is an example of tax cooperation; the above-mentioned code of conduct about CIT is an example of coordination and setting a minimum standard rate of VAT is an example of harmonization (Benassy-Quéré, Trannoy, & Wolff, 2014, p. 2).

The extent of tax coordination is based on another principle of the EU law. The principle of proportionality limits the taxation powers of the EU. The extent of actions at EU level should be commensurate with what is necessary in order to obtain the objectives set in the Treaties. There can be many forms of tax coordination. The EU exercise its powers on taxation in different ways for each tax type.

The other determinant of the degree of tax coordination is, of course, the votes of the Member States. As taxation decisions are taken unanimously, sustaining cooperation on tax issues is challenging since there are both supporters and opponents of it within the EU. Knowing many adopted and declined attempts of it, the EC is in favor of tax harmonization. However, different countries expect to experience different effects as a result of tax harmonization and this is why there are contradictory views on this issue. The Member States determine a tax policy according to the characteristics of the countries and their economies. Their decision on a tax issue in the European Council is in line with their own tax policy. Therefore, their position towards tax competition differs.

In the EU while some countries enjoy tax competition, some countries are affected negatively by it. Country size is important for the countries' positions on tax competition. A cut of tax rates in a small country attracts a substantial amount of tax base given that small countries have narrow tax bases. However, this flow is not high for a large country taking into account a broad tax base of those countries (Keen & De Mooij, 2008, p. 222). In a small country, in case of a tax rate cut, revenue loss will be smaller than the revenue gain arising from the tax base inflow into the country and vice versa. Therefore, the small states in the EU are pro-competitive on taxation and they are not in favor of tax harmonization (Genschel et al., 2011, p. 588).

Compatibly, according to data collected concerning the Maastricht and Nice Intergovernmental Conferences on whether a Member State supports the introduction of qualified majority voting on taxation or not. Wasserfallen (2014) suggests that tax harmonization is desired by countries that are losing tax revenue due to tax competition since tax harmonization mitigates tax competition.

Considering the difficulties of taking decisions on tax issues in the EU due to the different preferences of each Member State, Halkos and Kyriazis (2006) introduce the concept of 'Optimal Tax Area'. According to their proposal, countries with similar characteristics regarding taxation can participate in the Optimal Tax Area. A Member State can join in the Optimal Tax Area if only it satisfies the criteria set for it. These criteria should cover similar economic characteristics, tax culture, fiscal stance and effectiveness of tax administration. To summarize, it can be claimed that tax harmonization can be possible for the countries to participate in the Optimal Tax Area.

2.2. Assessment of the EU Tax System: Common Features, Challenges and Diversities

Designing a tax system, devising a tax policy and taking tax decisions are controversial issues. There are many different views on how a good tax system should be. The optimal tax policy may differ from country to country according to its historical, political and socioeconomic characteristics (Nikola, 2015, p. 97). Therefore, there is no "one size fits all" tax system or tax policy for all countries. However, there are generally desired characteristics of a tax system in the tax literature. These characteristics are compiled and addressed below taking into consideration the relativity of them with the needs and challenges of the EU countries' tax system. After defining how efficient tax policy should be, the EU's tax policy will be assessed below.

2.2.1. Revenue Generation and Flexibility

The main function of taxes and raison d'être of them is to generate revenue for funding public goods and services. An efficient tax policy generates adequate tax revenue to finance required public goods and services.

As presented in the Figure 2 tax revenues as a percentage of GDP of most of the first accessed fifteen countries in the EU[4] is generally higher compared to the other countries like the USA, Korea and the OECD average. Therefore, it can be claimed

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[4] Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom.

that there is not a problem with the EU's tax system in terms of revenue generation. If anything, the high ratio of tax revenue to GDP is mostly criticized due to high public sector commitments of welfare states (Joumard, 2001, p. 5).

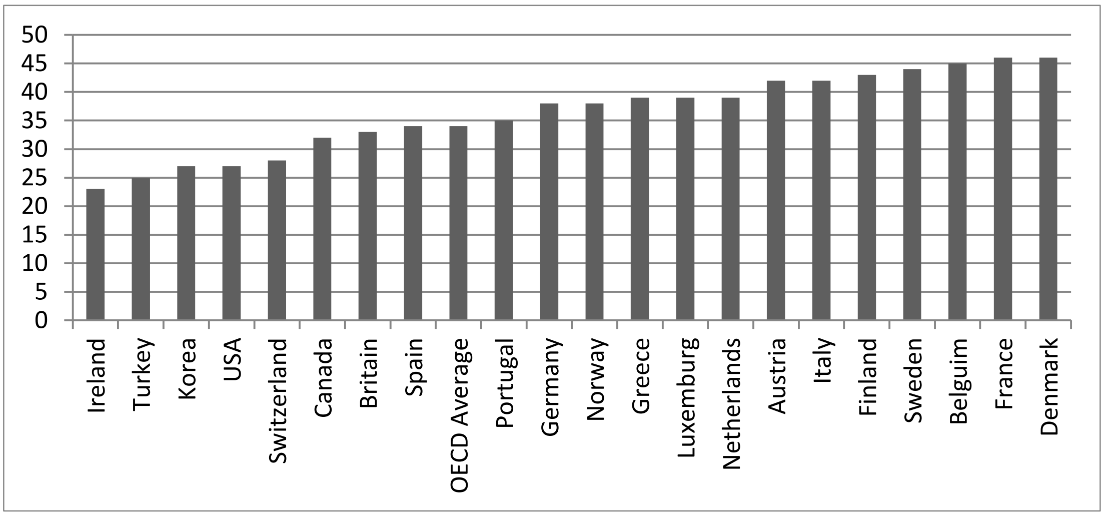

Figure 2: Total tax revenue as % of GDP for selected countries in 2016 (own drawing based on data retrived from OECD, 2019)

The high tax to GDP ratio for the fifteen countries first accessed in the EU stemmed from the upward trend in the tax burden between the 1970s and the early 1990s. This trend was a result of the growing share of the public sector. In those years, taxes were increased to provide a source for government expenditures. Although some of the countries take advantage of the economic boom in the late 1990s as an opportunity to cut taxes, the ratio is still high (European Commission, 2010a, p. 14).

It is also seen that total tax revenue ratios of the EU countries are similar to each other except a few. Although there are diversities for different taxes, we can say that the high revenue to GDP ratio is a common feature for the tax systems of the EU countries.

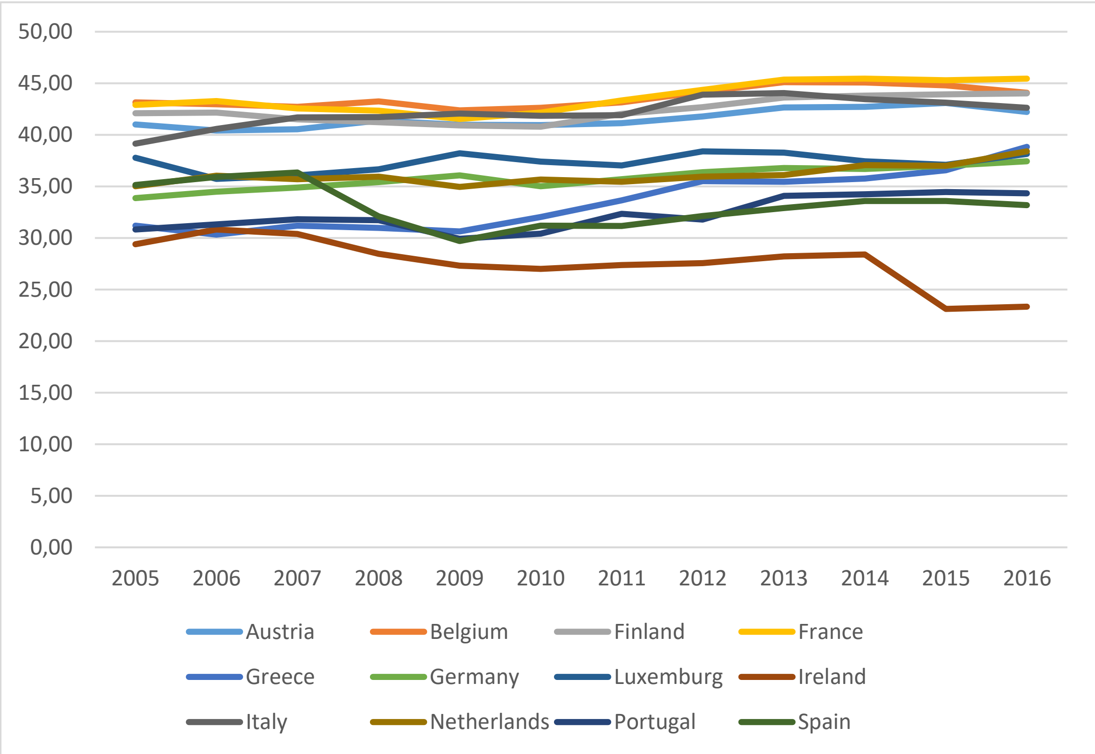

Figure 3: Tax revenue as a percentage of GDP in the EU, 2005-2017 (own drawing based on data retrieved from OECD, 2019)

When we look at the developments in tax revenue to GDP ratio of some EU countries since 2005 demonsated in Figure 3, there is no evidence that the tax revenues have been decreasing except for Ireland. Therefore it can be concluded that although this high tax revenue to GDP ratio was criticized in the 2000s for a long time, it even gets worse compared to 2000s at present (Joumard, 2001). It could be claimed that the high revenue to GDP ratio may not imply an efficient revenue generating tax policy in the EU; because this may also be caused by a high tax burden on the tax base. The revenue generating feature of a tax system is best understood by looking at the tax elasticity of a country (Bird & Wilkie, 2013, p. 289).

The tax elasticity is the ratio of percentage change in tax revenues to the percentage change in GDP (or tax base). This rate shows the tax revenues' responsiveness to GDP. Elasticity being more than one means tax revenue growth rate is more than economic growth rate and it refers to an elastic tax. The elastic tax revenue may be preferable as it contributes to ensure stability in the economy (Akar, 2013, p. 28).

In the same vein, a flexible tax system refers to the ability to change tax revenues in response to economic changes. Tax changes may occur automatically without any intervention by governments. This is called the automatic stabilization role of the taxes. Automatic stabilization refers to tax revenue changes following the change of economic circumstances and this serves for the stabilization of the economy in a country. When the economy is in a recession, a decrease in tax revenues may have a stimulating effect on the economy. Tax changes may also take place by making adjustments in the tax codes taking into account new economic circumstances. However political difficulties in adjusting the tax codes and lags in implementing the new tax codes may hinder stabilization of the economy efficiently and in a timely manner (Stiglitz, 2000, p. 466).

While calculating the tax elasticities, it is important to remove the effect of the tax policy changes on tax revenue change since tax elasticity aims to measure changes in tax revenue only in response to the change in GDP. Therefore, the tax elasticity should be calculated ceteris paribus. For this purpose, in calculations there should be corrections to remove the impact of the tax policy changes and to focus on responsiveness of the tax revenues to economic conditions.

In the European Commission Report (Mourre & Princen, 2015) the elasticity for each type of tax is calculated using the data between the years 2001-2013 for both short-term and long-term. In the analysis an adjustment method is used to show the tax revenue changes in response to GDP growth by removing the impact of changes in tax rules. Besides, to estimate long-term and short-term elasticities error correction model is employed in the study. These models aims to allow a variable to be dynamic in the short-run, while remaining at equilibrium in the long-run. Table 1 shows the result of this estimation.

Table 1: Average tax elasticities in the EU, 2001-2013 (Mourre & Princen, 2015, p. 16)

	Consumption taxes	PIT	CIT
Long-term elasticity	1.08	1.03	1.43
Short-term elasticity	1.31	1.30	1.10

Although countries have different elasticities, Table 1 shows average tax revenue elasticities in the EU for 2001-2013 period based on European Commission Report (Mourre & Princen, 2015) . According to Table 1 in the long run corporate income tax is the most elastic tax type. For other tax types the elasticities are close to one. In the short run elasticities of consumption and PIT is very close to each other and higher than the elasticity of CIT. Both in short run and long run the elasticity ratios seems to be more than one which refers to generally responsive characteristic of taxes to the economic changes.

To conclude, when all of these assessments regarding the revenue generation and flexibility of the tax systems in the EU are taken into account, in general, one can say that the taxation in the EU is flexible and can generate required revenue for the public spending.

2.2.2. Fairness and Equity

The fairness and equity of tax systems have always been a topic of concern for most of the countries. This stems from different understandings of fairness and equity in taxation. Someone's understanding on fairness and equity may be considered as incorrect by others. Therefore, it can be claimed that there are no precisely defined requirements of fairness and equity.

In many studies[5], fairness is explained using the terms of horizontal and vertical equity. Horizontal equity is ensured when taxpayers with similar circumstances pay the same amount of tax. Vertical equity is a condition that occurs when taxpayers with different circumstances pay different amount of taxes. These definitions complement each other. Ensuring both of them is thought to enable fairness of the tax system.

However, ensuring horizontal and vertical equity in a tax system is not a realistic objective taking into account the fact that so many taxpayers with many different features, activities, properties, preferences etc. induce tax. However, in general terms, it is expected that tax systems should comprehend all taxpayers and distribute tax burden among taxpayers in a balanced manner (Akdoğan, 2007, p. 196).

[5] Among others one can cite Mirrlees et al. (2011), Bird & Wilkie (2013), Nadaroğlu (2000) and Stiglitz (2000).

Governments' choice of tax base for the purpose of obtaining a fair tax system is a contradictive issue. Income tax proponents claim that earnings of individuals are a good measurement of ability to pay. According to them income should be taken as the tax base. By means of income taxes the personal situation of the taxpayer can be taken into account best. Moreoever, progressivity[6] is applicable for the income taxes most. Thus, the vertical and horizontal equity can be achieved as much as possible by taxing income as a tax base. On the other hand, consumption tax proponents argue that consumption indicates what an individual takes away from the society and their ability to pay while income is what the individual contributes to the society. Therefore, it is thought that to levy a tax on income is not fair. For this reason, it is claimed that using consumption as a tax base contributes to society's growth and prosperity (Mirrlees et al., 2011, p. 294).

Governments levy taxes on both labour and consumption in real life. The tax system of each country reflects governments' choices of the tax base and which tax revenue they mainly rely on. The rate differentiation among different types of taxes and the effects of them have been a research subject of many studies[7].

Figure 4 shows the share of labour, capital and consumption tax revenue in total tax revenue for the EU countries for the period of 2004-2016. It is seen from the figure that the capital tax revenue has the lowest share while consumption tax revenue shares are higher compared to capital tax revenue shares. It is apparent that labour tax revenue has the highest share.

As it is seen, the distribution of the tax burden among different tax bases is not balanced and the tax systems of the EU countries mostly rely on labour taxes.

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[6] Progressive taxation means increasing ratio of taxes as thetax base increases.

[7] The cause and effects of different taxation of different tax bases are out of the scope of this thesis.

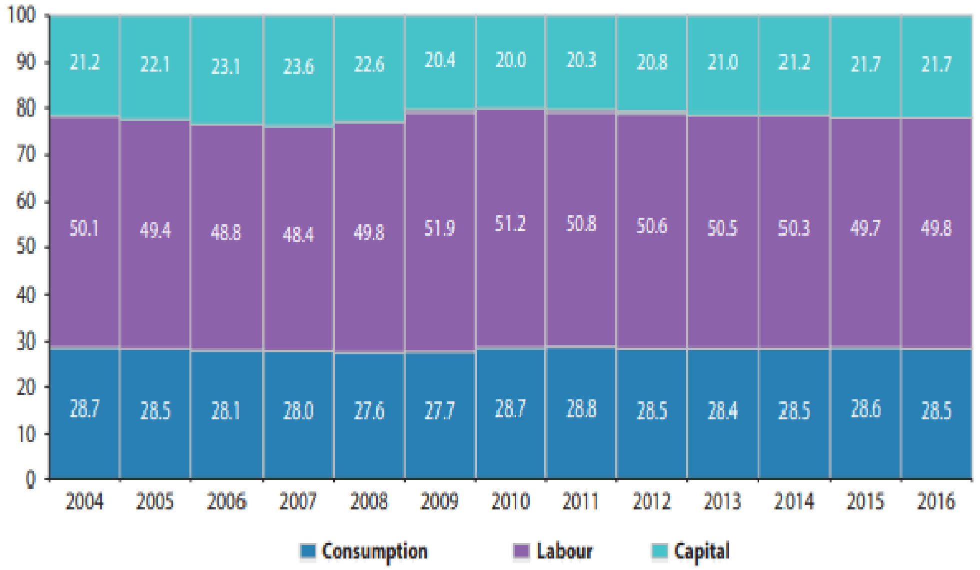

Figure 4: Share of labour, consumption and capital tax revenue in total tax revenue in the EU, 2004-2016 (European Commission, 2018a, p. 20)

In Figure 5, ratios of implicit labour tax and implicit consumption tax are compared between the years 2004 and 2016. The implicit tax ratios[8] which are used as indicators to measure effective tax burden also show that the highest implicit tax ratio belongs to labour tax among others. The ratio of implicit labour tax is by far higher than the implicit consumption tax in every EU country for the year 2016.

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[8]Implicit tax rate is calculated as the ratio of total revenue from taxes of an economic factor to a potential tax base of that factor. Implicit tax rate measures the average tax burden on different types of economic income or activities, i.e. on labour, consumption and capital. It expresses aggregate tax measures as a percentage of the potential tax base for each field.

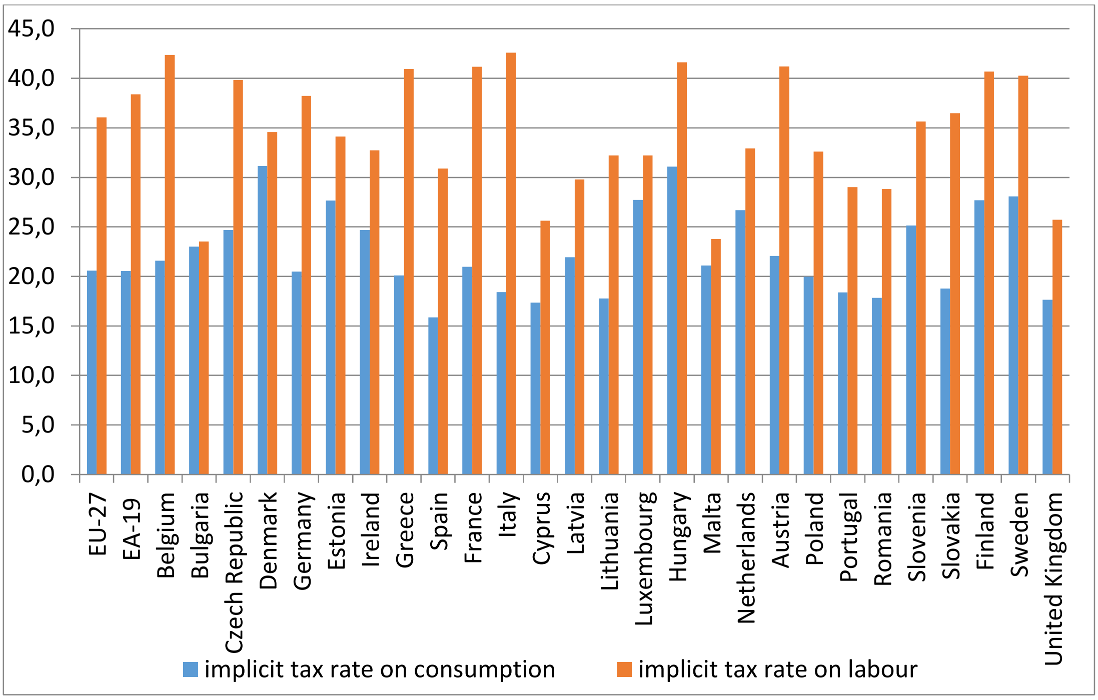

Figure 5: Comparison of implicit tax rates on consumption and labour in 2016 in the EU (own drawing based on data retrieved from European Commission, 2018b).

This graph may be regarded as a representation of the unfairness and the inequality in tax systems in the EU. It is evident that all Member States' tax systems heavily depend on labour taxes. From consumption tax proponents' point of view, income refers to what the individual contributes to society, therefore, taxation of income is considered to be inappropriate from equity and fairness aspect, as mentioned above. Therefore depending heavily on labour taxes in the EU tax system is questioned in terms of fairness and equity.

On the other hand, to the income tax proponents to levy tax on income rather than consumption is more fair due to the fact that it can be adjusted more appropriately according to the situation of a taxpayer. By means of adjustability of income taxes to the situation of taxpayer, vertical equity can be achieved.

Imposition of high tax rates on labour income stems from the perception that income is a good indicator to show the ability to pay. Besides, by applying progressivity for labour taxes the equality of the system is tried to be ensured.

Figure 6 presents PIT revenue shares as percentage of GDP for selected countries for 2017. As one of the components of the labour tax revenue, the PIT revenue as a percentage of GDP is also high for the non-EU countries. However, the high ratio of the PIT revenues is more significant in most of the EU countries as seen in Figure 6. Although PIT revenue as a percentage of GDP is the highest in Denmark among the countries in the Figure 6, it is seen than in the Figure 5 the implicit taxe rate on labour in Denmark is not that high. This is the result of exeptional situation in Denmark where welfare spending is financed from general taxation but not from social security contributions. The absence of social security payments in Denmark is the reason behind that it does not have high level of implicit labour tax revenue one of the components of which is social security contributions. However, it has high ratio of PIT as percentage of GDP.

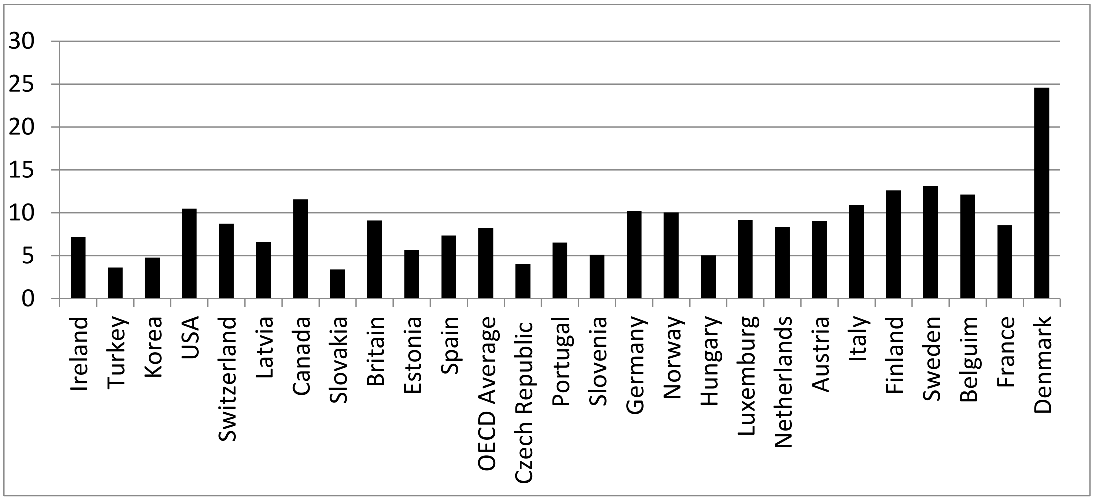

Figure 6: PIT revenue as % of GDP for selected countries in 2017 (own drawing based on data retrived from OECD, 2018).

To conclude, when all of these assessments regarding the fairness and equity of the tax systems in the EU are taken into account, one can say that fairness of tax system in the EU is ambigous. Since there is not any absolute definition of these notions the system may be considered as fair and equal from one point of view or unfair and unequal from another point of view (Stiglitz, 2000, p. 468).

2.2.3. Efficiency

Theoretically, in an economy, prices are deemed to be signals for decisions of consumers and producers. However, taxes distort these signals and generally cause increases in prices and decreases in quantities. This leads to deadweight losses for both consumers and producers (Mirrlees et al., 2011, p. 28). The allocation of resources is modified by imposition of taxes. Taxes, in essence, change the relative prices of labour, goods, services etc. Therefore, a tax with the least effect on the allocation of resources and if possible which enhances economic efficiency is desirable. A desired tax system should not affect the behaviour of economic agents. Therefore the more efficient tax system the less distortionary effects on the decision of work, saving, consumption and production (Stiglitz, 2000, p. 458).

However, according to Stiglitz (2000, p.463) in case of existence of market failures due to externalities, taxes can be used to correct these failures. These kind of taxes called collective taxes can improve the efficient use of taxation while raising tax revenue.

The conflict between the two objectives of a tax system should also be mentioned here. The efforts for ensuring a fair tax system may adversely affect the efficiency of the tax system and vice versa. Therefore, there is a trade-off between the objectives of fairness and efficiency for the governments. "Optimal tax theory" introduced by Diamond and Mirrlees (1971) is about the choices of governments taking into account the constraints of tax policies to achive a balance between efficiency and fairness (Mirrlees et al., 2011, p. 35). Though in depth analysis of this theory is out of the scope of this study, it is mentioned here because this trade off may be a reason for the explanation of high labour taxes in the EU at the expense of their adverse effects on the efficiency. Labour taxes are used to ensure fairness of taxation as explained above. Therefore, the governments in the EU may prefer to set aside their efficiency concerns in order to ensure fairness of their tax system.

A greater importance has been attributed especially to labour taxes as they are believed to have negative impacts on the economic performance of a country. According to the Deutsche Bank Report (Zipfel & Heinrichs, 2012, p. 2) labour taxation affects the decisions of economic agents in three ways. Firstly, it may have an effect in terms of distorting the decision of engaging in the labour market. Secondly, strongly progressive taxation on income may lower the enrollment at higher levels of education. Since higher level of education is seen as a way for an individual to earn more, high taxation on high level of incomes due to progressive taxation may dampen the desire to study more and earn more. Finally, progressive taxation may cause less entrepreneurship and fewer innovations. Individuals' decisions about working is affected by two factors: income effect and substitution effect. In case of a reduction in the labour tax rate, the workers' income will increase and the reduction may lead workers to work fewer hours since they can earn the same amount although they work less. This is the result of the income effect. On the contrary, this reduction may encourage workers to work more as they can buy more with what they earned. This is the result of the substitution effect (Mirrlees et al., 2011).

Rosen and Gayer (2008, p. 415) explain these effects taking into account the cost of leisure. According to them as the taxes decreases wage after tax, opportunity cost of leisure decreases and this induces a tendency to substitute leisure to work for individuals. This is substitution effect. On the other hand, when individuals' income decreases due to tax consumption of leisure reduces given that leisure is a normal good. This cause a reduction in leisure and increase in work. This is income effect. These effects are opposite to each other and which effect will dominate depends on empirical studies where many factors may have an impact on the result[9]..

As it is explained above and seen from Figure 4, 5 and 6, labour taxes and revenue shares in GDP are relatively high compared to non-EU countries and they are the largest source of revenue in the EU. Taking into account this structure, one can stress that the high share of labour taxes in tax components may have a reducing effect on the efficiency of the tax system.

In a similar vein, taxation of capital has an influence on investment and savings decisions and distorts the allocation of savings. The taxes on capital made up 8.6% of GDP in the EU for the year 2017 (European Commission, 2019c). This percentage can be deemed to be low enough to say that the capital tax rates may not distort the capital market significantly.

[9] The inquiry on these factors is out of the scope of this thesis

Consumption taxation is thought to have less distortive effects on the economy (Zipfel & Heinrichs, 2012, p. 2). Similar to the increase in income taxation, a person can buy less with his income because of the increased prices of goods and services due to consumption taxation. In the EU, consumption tax revenue was 11,1 % of the GDP in 2016. Compared to the labour tax share in 2016 which was 19.3% of GDP, the share of consumption taxes is lower (European Commission, 2018a). It is argued that in terms of efficiency, consumption taxes are preferable because labour taxes distort the market more as they directly affect the income of the workers (Zipfel & Heinrichs, 2012, p. 2). However, the labour taxes also have social repercussions as they also include social security contributions and they are a good tool for ensuring fairness in taxation. These also may have a role in the higher share of the labour taxes.

Bird and Wilkie (2013, p. 292), suggest three rules to minimize the effective cost and to increase efficiency of a tax system. Firstly, broad-based tax system should be ensured; because distortion effect of broad-based taxes would be less than taxes that do not encompass wide range of goods and services. A broad tax base with low tax rates is desirable for more efficient tax systems. The shape known as Laffer curve in the eceonomic literature explains the relationship between tax rates and tax revenue amounts. According to it, increase in tax rates increases amount of tax revenue until a certain level. Tax rate increase above this level induces reduction in tax revenues. This theory justifies cutting taxes in order to ensure tax efficiency as well.

However, in the EU narrowness of the tax base has always been criticized.Tax bases of many types of taxes in the EU are narrow due to extensive use of exemption and deductions (Joumard, 2002). The narrowness of tax bases especially for the VAT is seen as a revenue decreasing factor and tax - broadening efforts should be put in place in the EU to settle this challenge (European Commission, 2015).

Tax compliance level is an indicator of broadness of a tax base and the efficiency of a tax system accordingly. Tax compliance refers to the willingness to comply with tax laws, declare the correct income, claim the correct deductions, relief and rebates and pay all tax on time (Remeur, 2015, p. 19). Tax evasion, tax fraud, and tax avoidance reduce tax collections and so the tax compliance level. Tax evasion and tax fraud mean not to pay or to underpay tax liability intentionally and illegally. On the other hand, tax avoidance is the minimization of tax liabilities by using legal methods and exploitation of loopholes in the tax system and tax legislation. The reduced collected taxes due to tax evasion may cause a higher tax burden on taxpayers if a certain amount of tax revenue is to be collected. The higher rates of taxes may have an adverse effect on efficiency of a tax system. The tax systems are efficient only if they comprehend all taxpayers. If the tax base is broad in a tax system, the needed revenue can be obtained with lower tax rates which is also indicated by Laffer curve explained above.

Estimating tax evasion and tax avoidance amounts is a complex issue and the results are not certain due to the extensive limitations of the estimation methods. However, they are of great importance in terms of illuminating the significance and effects of the tax gap. The tax gap is defined as the difference between the tax amounts which taxpayers should have paid and the actual collected tax within a specific period. In the report prepared by Murphy (2012) for the Group of the Progressive Alliance of Socialists and Democrats in the European Parliament, tax gap is estimated by quantifying the size of shadow economy[10] with the effective tax rates. Therefore, the outcome refers to the total taxation loss from tax evasion. The result of the calculations in the report suggests that 22 percent of tax income is lost due to the tax evasion and tax loss in the EU. In the report, tax loss is considered as an item of government spending. As a proportion of government spending, this loss corresponds to 17.6 percentage of total government spending in the EU Member States for the year of 2009. Moreover, an estimation of tax avoidance in line with the recent research results takes place in the report. It is calculated that tax avoidance is as high as 150 billion Euros per annum and this makes the EU tax gap 1 trillion Euros for a year.

[10] Shadow economy refers to the economy that is not recorded within which illicit financial operations are conducted.

The tax gap is a common problem for all tax systems and it is not peculiar to the EU countries. Although it is impossible to eliminate it completely, countries take measures to reduce it.

The research by Raczkowski and Mroz (2018) compares tax gaps among the selected 35 countries including the EU countries. In this research, authors make calculations similar to Murphy (2012). By utilizing similar methods to Murphy's (2012), the authors also use shadow economy and multiply the amount found for shadow economy by an appropriate tax rate to find out the tax gap. It is also stressed that this approach poses problems in determining the size of a shadow economy and the appropriate tax rate. In Figure 7, it is seen that the tax gap calculated for most of the EU countries is higher than most of the non-EU countries. While average tax gap for the EU countries is 7.7 percent of GDP; for the US, Australia, Japan, Canada and Switzerland the percentages are 3.8, 4.9, 4.3, 2.2 and 2.3, respectively. This is also a strong indicator that the tax gap which debilitates the effectiveness of tax systems is a common problem for the EU countries.

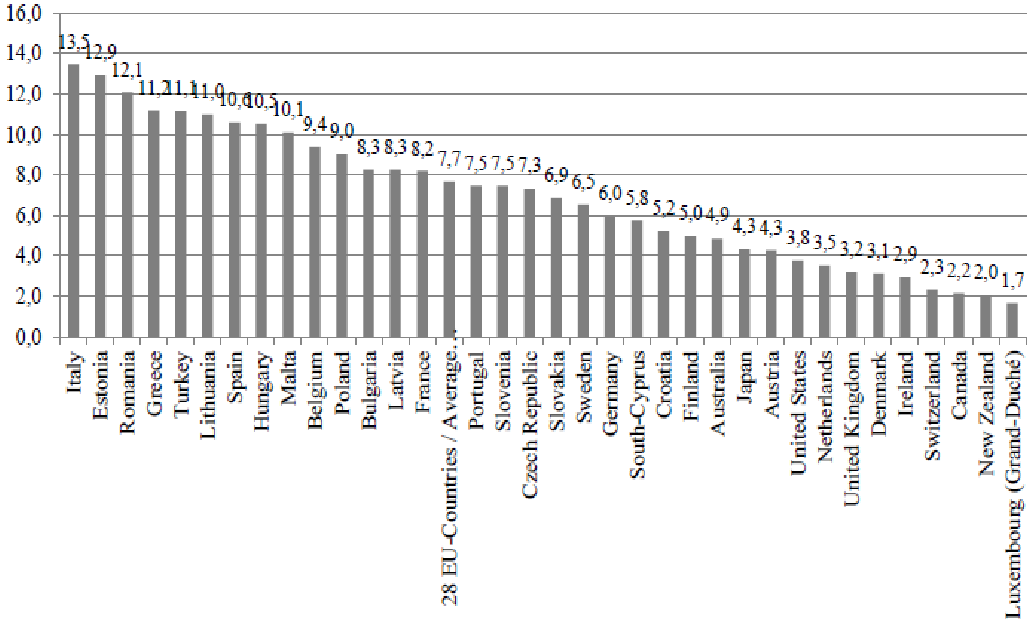

Figure 7: The level of the tax gap as % of GDP for selected countries in 2015 (Raczkowski & Mroz, 2018, p.570)

In the above-mentioned study by Raczkowski and Mroz (2016) the factors contributed to the emergence and widening of the tax gap are laid down. Contradictory interest of nations within the integration blocs such as the EU, deemed as one of the contributing factors to the tax gap. Unfair tax competition and lack of consensus on determining the tax liability according to place rather than the residence of an activity is considered as other causes of the tax gap emanating from the integration.

The origin principle which implies taxation of goods and services in place of production has an advantage compared to the destination principle in terms of avoiding the tax gap. Under the origin principle exports are taxed in the country of origin and travel tax-free to their destinations. In this way, the tax evasion possibility is reduced. However, the EU's transitional dual system for VAT, within which business sector is subject to destination principle while cross border purchases of individuals are subject to origin principle, bears risks in terms of generating tax evasion. This structure paved the way for tax evasion due to lack of uniformity on VAT procedures among countries, administrative complication and legal uncertainty. The facts that the VAT is not collected at the moment of importation but at later steps and the collection of VAT is based on tax declarations make the system vulnerable to tax fraud. (Joumard, 2001).

According to Bird and Wilkie (2013, p.292) secondly, effective cost of a tax system can be minimized by setting tax rates at the lowest level taking into account the needed revenue of governments since higher tax rates have a more distortion effect on the economy. Thirdly, substantial attention should be paid to taxes of production due to their effect on the decision of business location and forms in which business is conducted.

Another indicator of an efficient tax system is low administrative costs induced in the tax systems. The administrative costs, namely the costs incurred by public authorities in order to operate the tax system, should be kept at a minimum level. In other words, an effective tax system requires keeping administrative expenses as low as possible.

According to the OECD report (OECD, 2013, p. 180) cost of collection ratio, calculated by division of administrative costs to net tax revenue (after refunds), is highest (greater than 0.3%) for Belgium, Hungary and the Netherlands while lowest (less than 0.12%) for the United States, Korea, India, Chile and Singapore.

Having an average of 0.97 % of the tax revenue for the year of 2013 as a cost of collection ratio, the EU is required to lessen the administrative costs incurred by a collection of taxes (European Commission, 2015, p. 77). It can be concluded that the high cost of collection ratio in the EU compared to other countries does not fit to the requirements of the efficient tax system.

Theorically, efficient tax system requires minumum levels of tax rates and administrative cost with maximum tax compliance level. However, in practical terms, tax systems do not meet all these requirements. The term of efficient tax system refers to a tax system with low tax rates and administrative cost and high compliance level as much as possible.

To conclude, when all of these assessments regarding the effectiveness of the tax systems in the EU are taken into account, in general, one can not say that the taxation in the EU countries is efficient. While assessing the efficiency of a tax system the concerns of governments regarding fairness should also be taken into account.

2.2.4. Diversities of Tax Systems in the EU

The EU tax system is assessed according to the average rates under respective topics above. However, the tax structures of the Member States are considerably different from each other. Hence, the general features of the EU tax system stated above is not relevant for the tax system of every Member States.

Almost in every report of the EU institutions on taxes, diversities of the tax systems among the Member States are emphasized. In the Taxation Trends Reports published yearly by the EC, following the information about the general developments in the related year, there are explanations about diverse structures of tax systems in the Member States. These diversities may mainly stem from different governing structures or inclusion of the social security system to the central government in some Member States (European Commission, 2017).

On the other hand, there are significant differences among the EU countries in their tax structures considering collected taxes to GDP ratio for every tax category. To see clearly the differences in the tax rates, radar graphs are used below for each type of tax collected in the EU. In a radar graph, if there are similar volumes for each country, the line of the diagram seems like a circle. In the graphs, the deviations from circle shape denote the differences in tax structure among countries. In the graphs, the mountain shapes show that there are differences in the volumes.

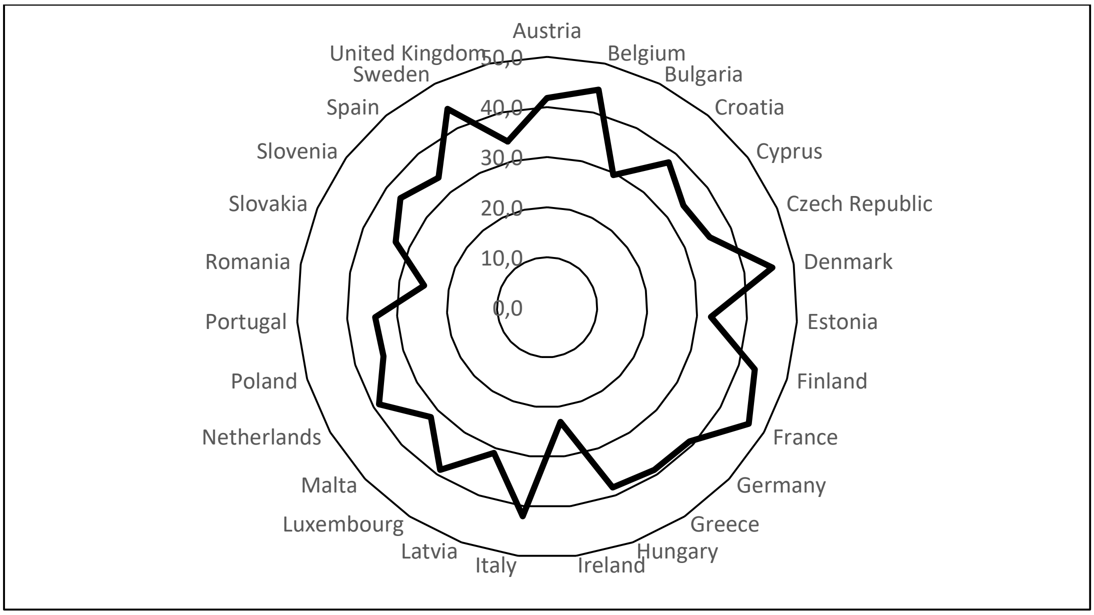

Figure 8: Total tax revenues as % of GDP for EU countries in 2017 (own drawing based on data retrived from European Commission, 2019g)

Figure 8 shows the differences of the EU tax systems taking into consideration the ratios of total tax to GDP. As seen in the figure there are significant variances among the EU countries, since the Member States have big diversities in their tax systems. Except for VAT, the taxes are barely harmonized in the EU.

In Figure 9, the shares of the components of the tax revenues as a percentage of GDP are shown for each EU country[11] in 2017. From the figure it is also seen how diverse the components of each type of tax among the EU countries.

[11] The 2017 data for Lithuania is not available in the data retrived from European Commission (2019g)

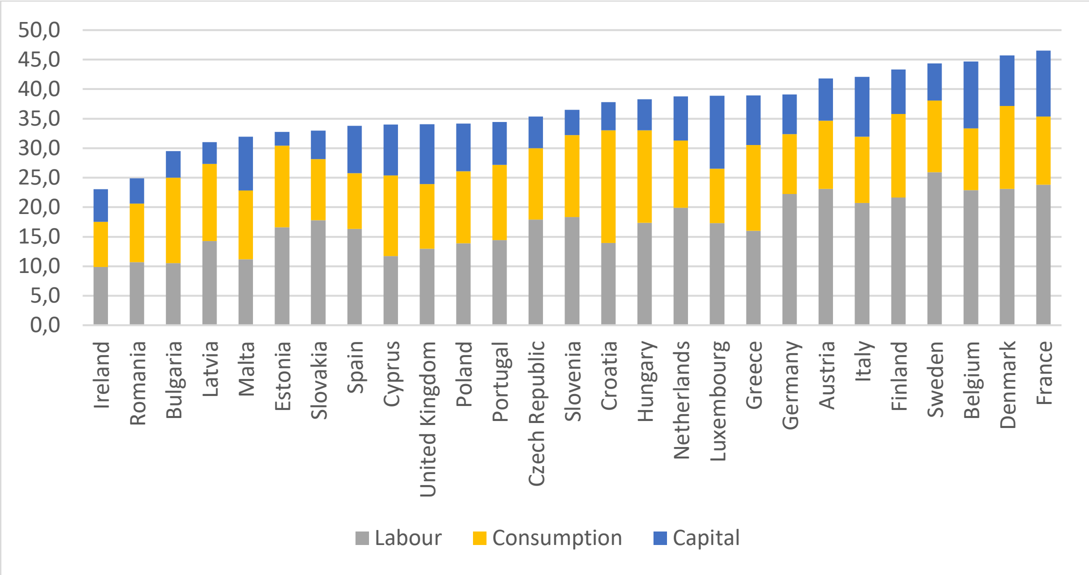

Figure 9: Components of total tax revenues as % of GDP in 2017 (own drawing based on data retrieved from European Commission, 2019g)

Tax systems have been developed in different ways in line with the particular conditions of a country. The differences in the tax systems could base on historical, political, economic and social conditions. It is seen from Figure 8 that countries having similar geography, historical development and demographic characteristics like Sweden and Finland, Latvia and Lithuania, Bulgaria and Romania have alike tax revenue ratios (Nikola, 2015, p. 95).

Nikola (2015) uses hierarchical clustering method to identify the clusters of countries with similar tax burden and finds that countries in the EU are grouped into two. The first group includes countries with low tax burden while the second group includes countries with a high tax burden. In the first group there are newly accessed countries and in the second group, there are welfare states that provide their citizens with extensive social benefits.

In her study, Nikola (2015) also groups EU countries by dividing the tax burden on consumption, labour and capital by utilizing hierarchical clustering method to analyze the structure of tax systems. She explained emerged clusters in terms of geography. According to her, since the countries which were close in the past have similar developments, differences among prices, wages and taxes have been decreasing gradually.

However, in Nikola's (2015) analysis, Ireland differentiates with low tax burden, although it is not in the group of newly accessed countries. Its main deviation regarding its low tax burden is about expecially its low labour tax revenue compared to other EU countries.

D'Arcy and Nistotskaya (2016) also look past to explain the variation in tax outcomes among countries and analyze to what extent early modern tax systems clarify the variations in contemporary tax structures. They come up with the result that the countries undertaking tax reforms earlier and in a more comprehensive manner have higher tax revenue and stronger state capacity. For example, according to their study, the reason behind Sweden having a broad base, strong, high yielding and stable tax system is its replacement of the medieval fiscal system where states used intermediaries to obtain tax revenues with a central and rationalized tax system in the 1600s. On the contrary, in the same era in Greece as a part of the Ottoman Empire, the taxes were being collected by tax farming. Although the Ottoman Empire undertook reforms for centralizing the tax system in nineteenth-century Greece missed it because it gained independence in 1833.

It is clear from Figure 9 that the tax systems of countries with high tax revenues which are France, Denmark, Belgium, Sweden, Finland highly rely on high labour taxes. The deviations in the tax revenue of the EU countries are highly related with the labour tax shares of them. Therefore, labour taxes will be analyzed in detail below.

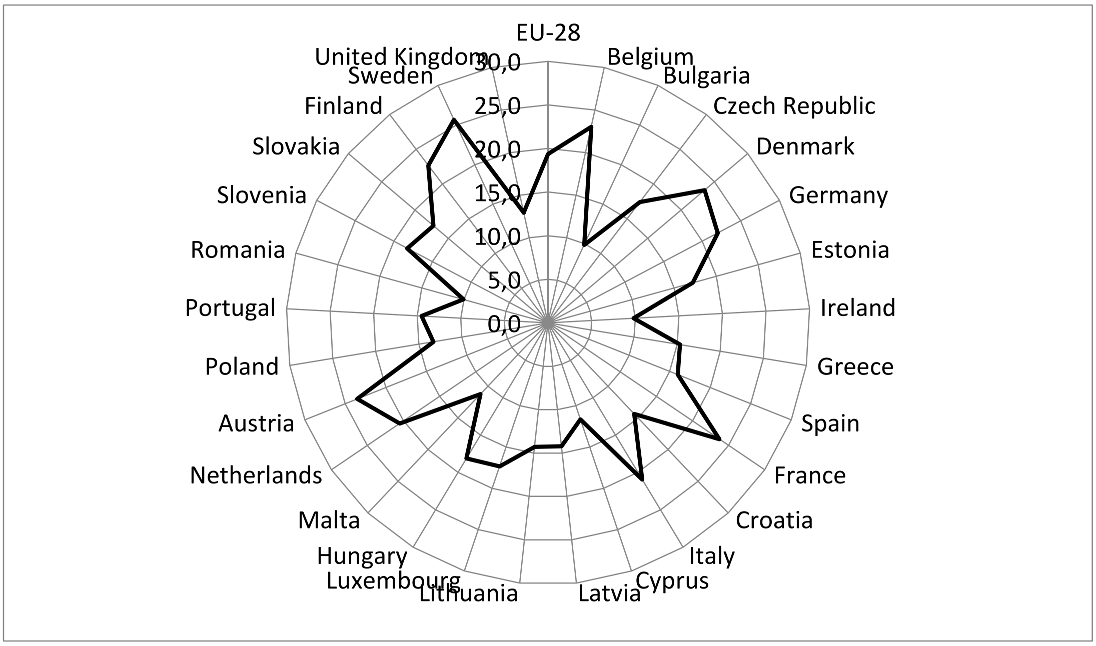

Figure 10: Labour tax revenues as % of GDP of EU countries in 2017 (own drawing based on data retrieved from European Commission, 2019b)

Figure10 shows the sharp differences of the EU tax systems from the labour tax point of view. As explained above, harmonization steps have been barely taken for direct taxes in the EU. Therefore, labour taxes are diverse throughout the EU in spite of the general efforts of the Member States to shift tax burden from labour to other taxes since the 1990s (Joumard, 2001). As a peculiarity of the Anglo-Saxon model, in the United Kingdom and Ireland, labour taxes are among the lowest. Labour is most heavily taxed in Sweden, Austria, Denmark, France and Belgium which are known as welfare states. The newly accessed countries such as Bulgaria, Romania, Malta, Latvia and Lithuania have lower labour tax ratios to GDP compared to the average.

In Figure 11, the composition of tax wedge in the EU countries for the year 2017 is shown. Tax wedge is ratio of the difference between the total gross income and income after-tax to total labour cost[12]. It includes PIT, employees' and employers' social security contributions with any other taxes on labour. The tax wedge may be used in benchmarking the tax burden on labour. Therefore, to see the factors causing diversities in the labour tax revenue ratios the compositions of tax wedge are indicated for each of the EU countries in Figure 11.

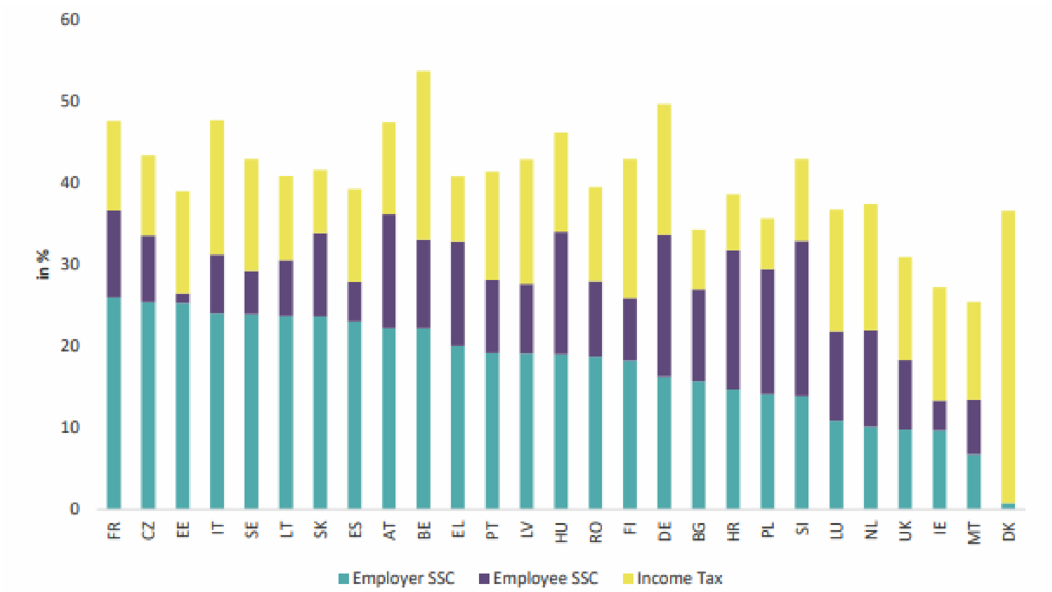

Figure 11: Composition of tax wedge in EU Member States for 2017[13] ,European Commission, 2018d, p.45)

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[12] Labour cost refers to sum of gross wage and the employers' social security contributions.

[13] Country abbreviations in Figure 11 - AT: Austria, BE:Belgium, BG: Bulgaria, CZ; Czechia, DK: Denmark, DE: Germany, EE: Estonia, IE: Ireland, EL: Greece, ES: Spain, FR: France, IT: Italy, CY: Cyprus, LV: Latvia, LT: Lithuania, LU: Luxemburg, HU: Hungary, MT: Malta, NL: Netherlands, PL: Poland, RO: Romania, SI: Slovenia, SK: Slovakia, FI: Finland, SE: Sweden, UK: Uniten Kingdom.

It is seen from the figure that the components of the tax wedge vary substantially among the Member States. However, in most of the EU countries the ratio of total social security contribution from employers and employees is higher than the ratio of income taxes. Exceptionally, in Denmark the ratio of social security contributions in tax wedge is very low because welfare spending is financed from general taxation but not from social contributions. This is also one of the reasons for the highest PIT revenue ratios of Denmark. (European Commission, 2018a, p.30) Apart from Denmark, for the countries that heavily taxed labour such as France, Belgium, Sweden and Austria the social security contributions especially for employers account for the biggest share of the tax wedge. On the other hand, in Ireland and Malta with low tax revenue ratios, the income taxes as a component of tax wedge is relatively high.

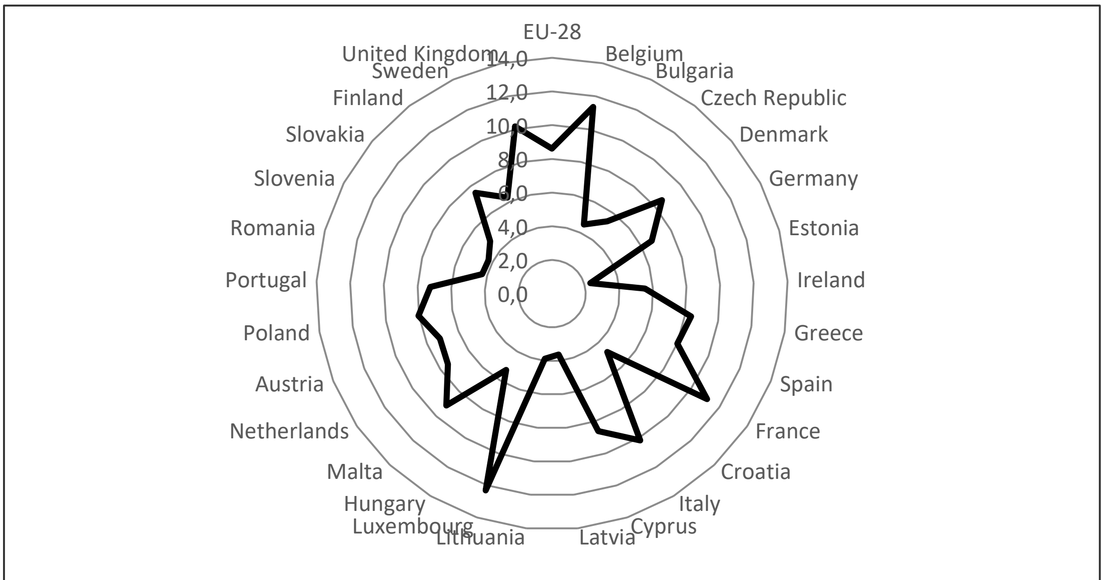


Figure 12: Capital tax revenues as % of GDP for EU countries in 2017 (own drawing based data retrieved from European Commission, 2019c)

As is shown in Figure 12 capital tax revenue to GDP ratio is the most diverse tax revenue ratio in the EU. In general capital tax rates are higher in the core countries such as Belgium, France, Italy, Luxemburg, and lower in the peripheral countries such as Bulgaria, Estonia, Croatia, Latvia, Lithuania and Slovenia. To understand the high diversification, one can look at the components of capital tax revenues as a percentage of GDP.

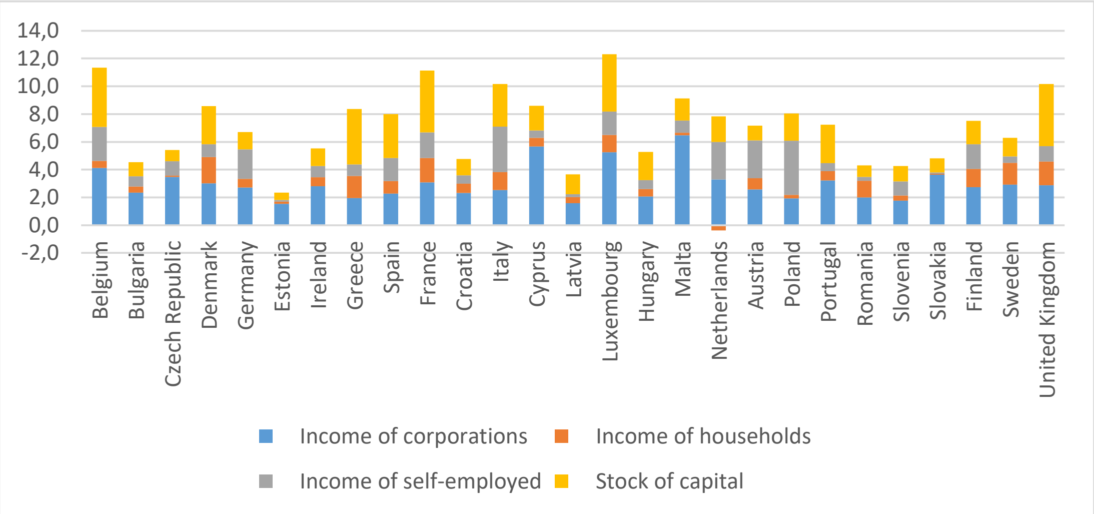


Figure 13: Composition of capital income tax revenue as a % of GDP of EU Countires in 2017 (own drawing based on data retrieved from European Commission, 2019a)

Figure 13 shows the composition of capital income tax revenue in the EU countries.[14] As it is seen from Figure 13, the corporate income tax accounts for the highest share

[14] The 2017 data for Lithuania is not available in the data retrived form European Commission (2019a)

of the total capital tax revenue. For this reason, it is analyzed seperately below. The share of tax revenues from stock of capital is the second highest as a component of capital tax revenue. Taxes on stock of capital includes mainly wealth tax, capital taxes including the inheritance tax, the real estate tax according to definition of European Commission (European Commission, 2018a). It is seen that generally in the developed and welfare states like France, the United Kingdom and Belgium, the taxes from stock of capital are higher compared to peripheral states like Estonia, Romania and Bulgaria.

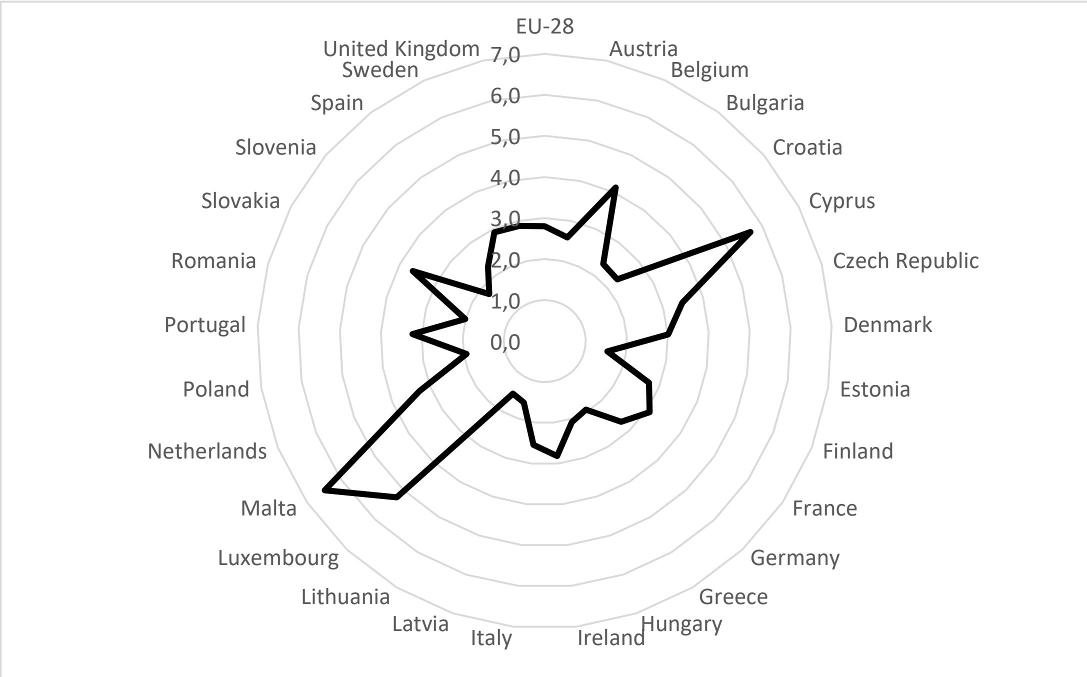


Figure 14: CIT revenues as % of GDP for EU countries in 2017 (own drawing based on data retrieved from European Commission, 2019d)

As the highest component of capital tax revenue, corporate income tax revenue ratios are very diverse among the EU countries. One of the explanations about this diversity is proposed by Baldwin and Krugman (2004). According to them, the variations may stem from the presence of the agglomeration forces in the core EU countries that are mentioned in Section 2.1.3.2. However, as seen in Figure 14 the high rates of CIT in core countries and low rates of CIT revenue in peripheral countries which are pointed out in their study can not be observed for 2017. According to 2017 CIT data, one can not make a general statement that the peripheral countries have low CIT revenues while the core EU countries have higher CIT revenue.

On the other hand, as it is stated in the section 2.1.3 due to tax competition among EU countries, the small countries are more likely to cut especially corporate income taxes in order to attract foreign investors. When the implicit tax rate of corporate income has been taken into account the highest rates are in France (52.8 %) and Denmark (37 %). Belgium, the United Kingdom, Italy and Finland are the other countries which have high implicit tax rates on corporate income above 30%. The lowest rates are in Luxemburg, Lithuania, Estonia, Ireland, Bulgaria, and the Netherlands which are below 15 % (European Commission, 2018a). According to this view, generally low implicit corporate income taxes are observed in small countries. This may imply the tendencies of small countries of lowering corporate income taxes in order to attract capital to their country.

For some countries the two radar graphs about capital tax revenue ratio (Figure 12) and CIT (Figure 14) as a component of capital tax look different. It is seen that most significant diversification from the view of radar graphs is for France, the United Kingdom, Italy and Malta. Although the capital tax revenue ratios are high in France, the United Kingdom and Italy, their corporate tax revenue ratios are lower comparatively. Figure 13 explains these differences. For France and the United Kingdom, it is seen that the share of the tax revenues from capital stock is higher than the tax revenues from corporate income. On the other hand, in Italy tax revenue from income of self employed is higher than the revenues from corporate income tax. On the contrary, although the capital tax revenue is not high for Malta in comparison with other EU Member States, corporate income tax revenue ratio is high. As it is seen from Figure 13, the corporate income tax revenues in Malta account for the highest share of the capital income tax and the ratio of it is high compared to other Member States.

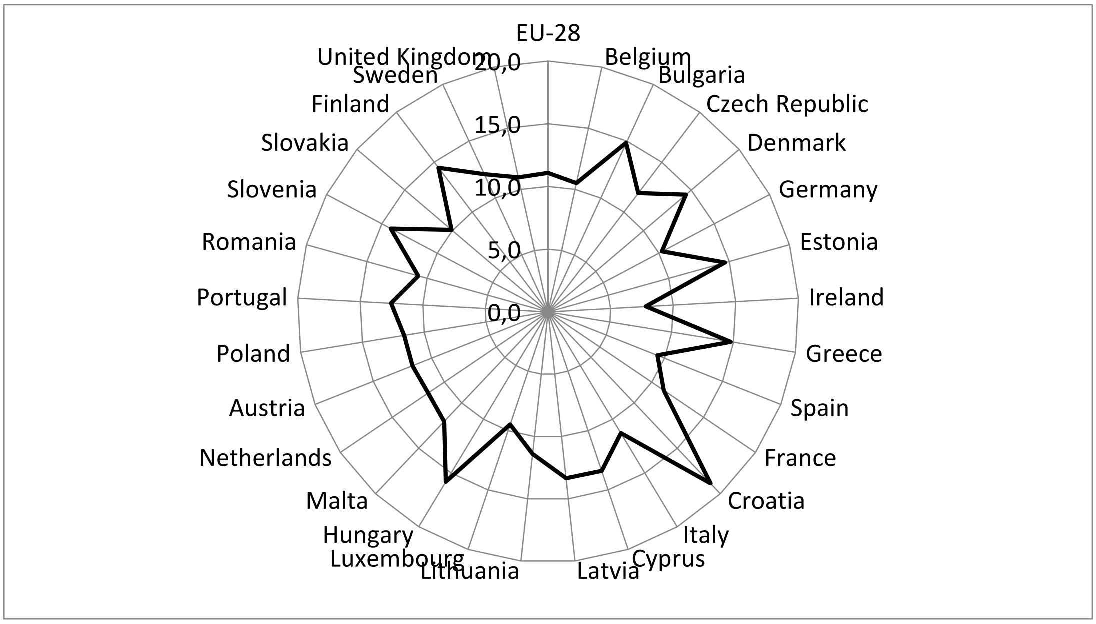


Figure 15: Consumption taxes as % of GDP for EU countries in 2017 (own drawing based on data retrieved from European Commission, 2019e)

The radar diagram in Figure 15 which presents consumption tax ratios seems more like a circle compared to other types of taxes. This better look may be the result of the convergence in the VAT rates in the EU countries due to the tax harmonization rules in the EU. The VAT which accounts for between two-thirds and three-quarters of the implicit tax rate on consumption has the biggest share in the consumption taxes

(European Commission, 2017). However, there are still diversities among the countries also for the consumption tax revenue rates.

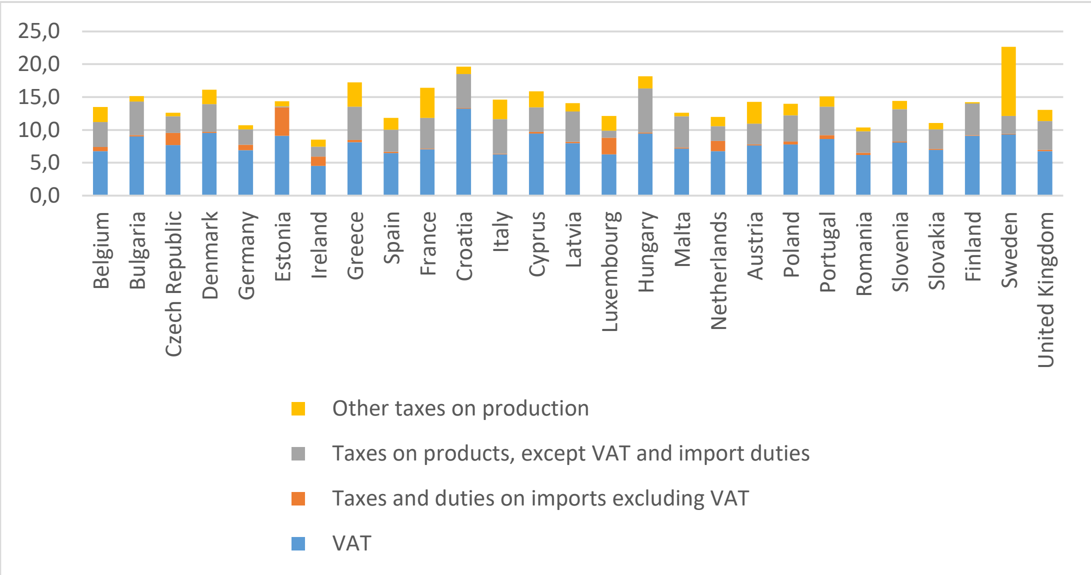


Figure 16: Composition of consumption tax revenue as % of GDP for EU countires in 2017 (own drawing based on data retrieved from European Commission, 2019a)

Figure 16 shows components of consumption tax revenue of EU countires[15]. It is seen that VAT revenues accounts for the highest share of the consumption tax revenue. Since VAT has the most important role in the general levels of the consumption tax revenues, it is examined below individually.

[15] The 2017 data for Lithuania is not available in the data retrived form European Commission (2019a)

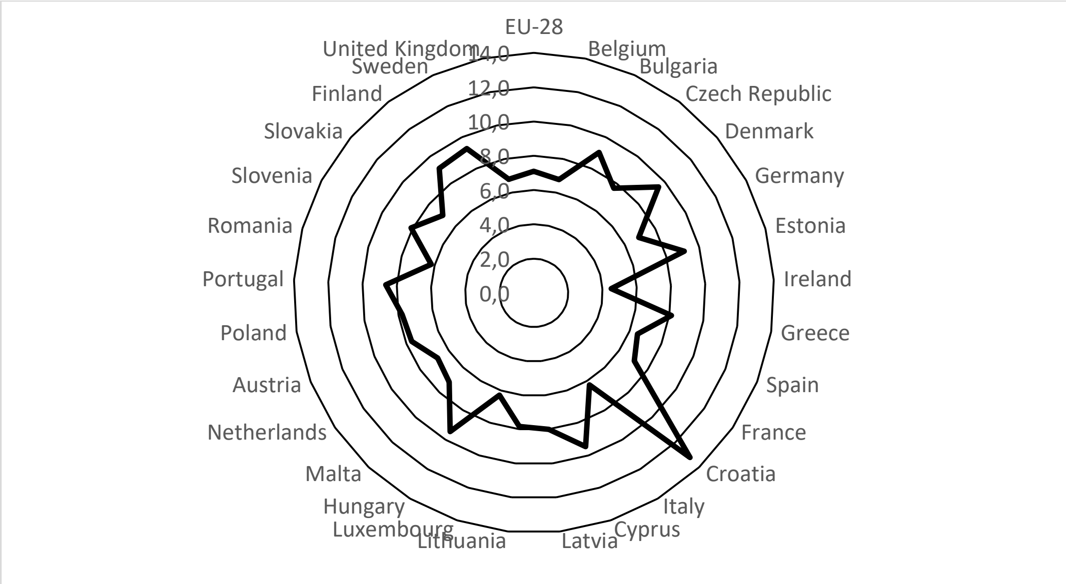


Figure 17: VAT revenues as % of GDP per country in 2017 (own drawing based on data retrieved from European Commission, 2019f)

When two radar graphs (Figure 15 and Figura 17) showing revenue ratio of consumption tax and VAT respectively, are examined, it is seen that they look like each other very much. It shows that VAT revenue ratios dominate the consumption revenue ratios due to high revenue share of VAT.

According to implemented VAT Directive 2006/112, the standard rate may not be less than 15 % and the reduced rate must be no less than 5%. This provision may have a role to converge the ratios of VAT to GDP as seen in Figure 17. In spite of this, differentiations and exemptions are still common in the EU. It can be argued that variations in revenues of VAT and consumption tax accordingly, may stem from tax erosion and evasions of VAT. Other components of the consumption tax such as environmental-related taxes[16], taxes on products which include excise duties, taxes on imports and other taxes on production vary markedly for each country. Although, Directive 2008/118/EC consists general rules for excise duties with the aim of avoiding obstacles for the proper functioning of the internal market, one can not say that it has a significant effect on convergence of revenues from excise duties.

Other taxes on production mainly includes taxes on international transactions and taxes on pollution according to the definition of European Commission and they have diverse characteristics for each Member State (European Commission, 2018a). These variations in the components of the consumption tax revenues except VAT also have a role for the diversification of the consumption tax revenue ratios among the countries.

The high revenue rates of consumption tax as well as VAT in Croatia attract attention in the radar graphs. Croatia has a higher revenue ratio of consumption taxes and a lower revenue ratio of labour tax compared to other EU countries. It raises approximately half of all revenues from consumption taxes. It can be said that low shares of labour taxes are counterbalanced by relatively high reveue ratios of consumption taxes. This situation is similar for Bulgaria and Hungary (European Commission, 2018a). On the contrary, compared to high labour tax revenue ratios, the consumption tax revenue ratios are relatively low in France. Ireland having the lowest total tax revenue ratio among the EU countries, has the lowest revenue ratio for consumption taxes as well.

[16] Environmental taxes are one of the category under indirect taxes, in general one of the components of the consumption taxes, but may sometimes also represent taxes on the capital stock (European Commision, 2018a).

CHAPTER 3

EU SOVEREIGN DEBT CRISIS AND TAXATION

After the establishment of the EMU in 1999, members of it achieved their objectives through accession process to monetary union. They ensure low stable inflation and price stability which is the primary objective of the ECB (Issing, 2008). However, with the appearing signs of the financial crisis, the success of the EMU has been questioned and the EMU has been blamed for the emergence of the financial crisis in the Euro Area. In this chapter, firstly the main causes and evolution of the European sovereign debt crisis and then the role of the taxation policies in the build-up of the crisis will be investigated briefly.

3.1. The Cause and Progression of the Crisis

Many studies on the European sovereign debt crises, found the errors and omissions in the design of the EMU as the main culprit. The EMU whose establishment process has been completed with the introduction of the single currency involves coordination of economic and fiscal policies and common monetary policy.

The process that resulted in high indebtedness of Southern Euro Area countries namely, Greece, Italy, Portugal and Spain have started with their adoption of low-interest rates set by the ECB for the Euro Area countries. These low-interest rates accompanied by higher than the promised inflation rate according to the provisions of Treaty on European Union (1992) conduced to high borrowing in the economies. Easy access to credits as a member of the EMU also boosted the demand and induced high borrowing. The high borrowing especially of the private sector did not alone pose a crisis in the economies of Southern Euro Area countries. The countries used borrowed funds mainly not for industries having potential in productivity growth. Rather, after accession to single currency area their economic reliance on tourism, other service industries, construction and consumption became significant. Before accession to the single currency area, the countries had their own national currency and had run their own monetary policy. They were autonomous to establish policies to increase their competitiveness. However, with the adoption of the Euro, after their loss of control on monetary policy they lost power on competitiveness and for this reason, they left manufacturing jobs to Asian countries to a large extent. Therefore, accession to EMU can be considered as one of the reasons that their economic focus shifted from long term investment to service industries. (European Parliament, 2014). In addition to this, if Southern Euro Area countries had control on monetary policy, they could have restrained demand by changing interest rate and the tension in the economies could have been alleviated by the monetary policy ran according to countries own conditions. As the economic conditions in each Euro Area country have varied, the ECB could not be able to use appropriate monetary policy tools responsive to each countriy's needs. Therefore, the one-size-fits-all monetary policy of the ECB did not help Euro Area countries in terms of avoiding economic circumstances leading to a crisis.

High borrowing of the Southern Euro Area countries from the core Euro Area countries has arisen imbalances in the current accounts. The increased demand of the Southern Euro Area countries boosted imports, especially from other EU countries. As a result, while Southern Euro Area countries' current account deficit accelerated, the core Euro Area countries namely Germany, the Netherlands and Austria ran current account surpluses. This means that resources were reallocated from Northern capital abundant core Euro Area countries to capital-scarce Southern Euro Area countries. However, as stated above these resources were not used for long-term investment but mostly for consumption and service sector. This led to the occurrence of speculative bubbles and overspending in these countries.

At this point, the accusations of Southern Euro Area countries by core Euro Area countries and vice versa have to be mentioned. The Southern Euro Area countries are accused of spending more than they could afford and lack of fiscal discipline which led to debt accumulation.

On the other hand, Germany was blamed for imbalances in Euro Area and seen as the main beneficiary of the Euro. The introduction of Germany's labour market reform in 2003 which is known as Agenda 2010 caused a wage moderation in Germany. Reduction in wages in Germany improved the competitiveness of its economy and is thought to have a role in the occurrence of current account imbalances. However, Young and Semmler (2011) argue that after accession to single monetary currency outflow of capital to the Southern Euro Area countries reduced German GDP and had a negative impact on Germany's economy while capital inflow increased national income of the Southern Euro Area countries. In line with that, while peripheral countries enjoyed a period of rapid growth, Germany witnessed the lowest growth rate among all EU countries from 1995 to 2009.

It is claimed that one of the causes of the crisis is the fact that Euro Area is a monetary union without being a political union. In general, theoretically, the political unions provide an automatic transfer from a central budget to the areas where a negative shock is faced. Although the EU has a central budget only for areas such as transport, energy and environment protection where it makes sense to pool resources, it lacks automatic solidarity mechanism. This is the outcome of the intention to avoid moral hazards. If a solidarity mechanism is set, this may lead to excessive debt and deficit in some countries knowing that their deficits will be met by means of this mechanism. For this reason, the Euro Area countries are not willing to automatically transfer their resources to deficit countries. The position of the EU countries on this issue is guaranteed by Article 125 of TFEU which is known as " no bail-out" rule (De Grauwe, 2010).

Lacking of a transfer mechanism of funds to the countries whose economies are negatively affected by economic shocks is one of the reasons for Southern Euro Area countries' devastating economic outcomes since the beginning of the crisis. When we look at the bigger picture, we can see that the financial crisis in peripheral Euro Area countries is directly linked with the global financial crisis of 2008. Naturally, in the first place, the financial crisis in the EU was triggered by the global financial crisis. Tightening of credit conditions and liquidity squeeze in the global market had a direct negative effect on the economy of the EU within which some countries' economies highly relied on the banking sector. The excess credit growth and high current account deficits were reassessed by the investors and this led to capital outflows from the Euro Area (Lane, 2012).

These developments affected peripheral Euro Area countries more due to their large current account deficits. Large current account deficit may be hazardous since a sudden stop in funds may lead to capital flow reversals. This, consequently may cause output contractions, rising unemployment, asset price declines and eventually economic recessions. That is what happened in Euro Area following a sudden decrease in fund flow to the market (Lane, 2012).

Financial crisis broken out in 2007 in the USA firstly had an effect on European banks. European banks had losses as they had asset-backed securities of the USA market. In spite of this, in 2008 and in early 2009 the economic and financial overlook was not dire in the EU. In the course of the crisis, the global financial crisis had different effects on the countries across the Euro Area. The countries having reliance on external funding namely current account deficit and high credit expansion had sharp current account reversals which led to output declines. Output declines lowered tax revenues and this had a role in increasing sovereign debt (Lane, 2012).

In 2010, bond buyers reassessed their risks especially in the countries with high current account deficit and domestic credit boom. Besides, they realized that not all Euro Area countries were equally safe because there was not a solidarity mechanism among these countries in case of a financial crisis. At this point, the interest rates in Southern Euro Area countries began to rise. This also contributed to the rise in sovereign debts. With the revelation of an insolvency problem in Greece in late 2009, interest rates in Greece rose sharply. This raised perceived risk in the market of other Southern Euro Area countries (Feldstein, 2012). These countries were affected relatively more from the crisis compared to the core Euro Area countries. This situation might emanate from the asymmetric economic structure shaped after the adoption of the single monetary union.

Thereafter, the EU tried to recover from the crisis by introducing so many tools. These tools have been criticized by so many economists[17] which is out of the scope of this study. However, the tax policy tools employed by the EU to recover from the crisis will be analyzed in the next section.

3.2. The Role of Tax Policy in the Build-up of the Crisis

In the studies focused on the relation between taxation and the financial crisis there is a consensus that the taxation did not cause the crisis on its own, however it contributed to build-up of the crisis to some extent (European Commission, 2010a, p. 45), (Hemmelgarn & Nicodeme, 2010, p. 2), (Keen, Klemm, & Perry, 2010, p. 44), (IMF, 2009, p. 4). Some defects of the tax systems in the EU were found as factors contributing to the causes of the crisis in these studies.

Two of these defects have been criticized even long before the crisis. In the renowned study of the Joumard (2001) debt bias and housing favoring characteristic of the EU countries' tax policies are pointed out along with the other shortcomings of the tax systems in the EU. Nowadays, these are also seen as factors contributing to the causes of the crisis since these features of the EU tax policy are among the reasons for high indebtedness and other financial market problems. These factors will be explained below in separate topics.

[17] Among others see Efstathiou and Wolff (2018), Junevicius and Justinaviciene (2010), Brkic and Kotarski (2010)

3.2.1. Debt Bias Taxation for Corporate Financing

Corporations basically have two tools for financing; issuing equity and taking debt. In a situation of perfect information and no taxation, the consequences of issuing equity and taking debt would be similar. However, in the real world, imperfect information and different tax treatments towards them affect the preference of corporations between these tools (Keen, Klemm, & Perry, 2012, p. 30).

In general, tax systems in the EU favour debt financing over equity financing. This stems from the fact that interest payments on corporate debt can be deducted from corporate tax amounts, however, return on equities can not (European Commission, 2010a). Interest payment deductibility from CIT obligation may cause debt bias in financing of the corporations. In these circumstances, corporations prefer taking debt to avoid paying more tax.

As a consequence of this favourable tax treatment for debt financing in the EU, the ratio of non-financial corporate debt to GDP ratio has risen roughly from 70 percent to more than 80 percent between 2002 and 2009 and debt to equity ratio has increased from 160 percent to 320 percent in the same period (European Commission, 2010a). In Figure 18, the rise in corporate debts of non-financial corporations until the crisis is seen. In the figure only the data of the countries which accessed in the EU before 2004 is shown in order to observe the developments of private debt ratio of the EU countries for a long period.

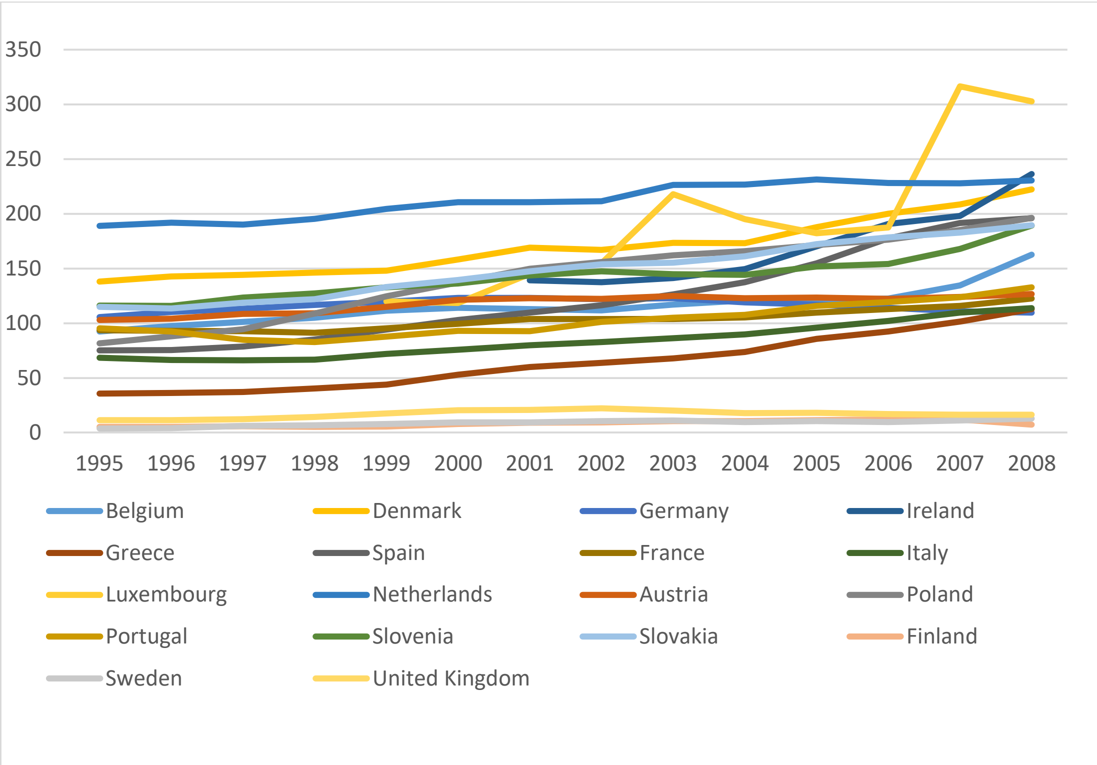


Figure 18: Private Sector Debt as a % of GDP for selected countries: Non-Financial Corporations (own drawing based on data retrieved from Eurostat, 2018b)

This tendency has led to high leverage ratios for corporations. This has made companies more vulnerable to possible credit constraints and economic shocks. Besides, highly leveraged companies are also more susceptible to volatility in currency, profits and interest rates. Accordingly, it increases the probability of bankruptcy of companies (Szarowska, 2014, p. 326).

The effects of the crisis are felt severely by the corporations due to their reliance on debt financing which is seen as an outcome of the debt bias character of the tax systems. The study by Desai, Foley and Hines (2004) is in line with the allegation that indebtedness of companies is influenced by taxes. According to their study indebtedness is higher in high tax countries because the tax amount to be deducted from tax base is more due to debt bias taxation. Empirically, a 10 percent increase in tax rate enhances the debt to asset rate by 2.6 percent. This conclusion can be regarded as a proof to show the effects of taxes on the debt financing.

3.2.2. Taxation Favoring of the Housing Market

The price bubbles in the housing market have been identified as one of the triggers of the 2008 global financial crisis. They occurred not only in the USA but also in some EU countries such as Ireland and Spain. The liquidity squeeze in financial markets following the burst of the price bubbles had effects on the global economy. Although taxation is not the sole factor of the build-up of price bubbles, it has a direct role for the demand rise in the housing market which then with other factors led to the occurrence of price bubbles.

The key factor for the occurrence of price bubbles can be identified as low-interest rates. The low-interest rates were mainly the consequence of monetary policy run in the aftermath of the technologic bubble burst in 2000 and economic turmoil following September 11, 2001 for the USA. For Spain and Ireland, it was the consequence of accession to the EMU as explained above. The other factors such as liberal mortgage markets, tax treatments, low transaction costs can be cited as only contributors to the build-up of the crisis (Hemmelgarn & Nicodeme, 2010, p. 21).

Generally, houses are bought for consumption or speculation. If a house is bought for consumption, the household decides on the type and location of a house. If a house is bought for speculation the most important consideration is the potential increase in the house's value. Taxation mostly influences speculation decision by changing the cost of housing capital[18]. These costs may be the interest cost of borrowed funds to buy the house, lost interest earnings on the equity of the house, depreciation cost, maintenance,

[18] Cost of housing capital can be defined as cost of owning and operating a house.

property tax etc. As taxation affects all these items, we can say that it also affects the demand for houses (Hemmelgarn & Nicodeme, 2010).

As the housing market is an important component of the economy, governments intervene in the housing market to steer the economy. The housing market and the business cycles are thought to be positively correlated due to its effects on consumption. Increase in house values in the households' balance sheets stimulate consumption (Ceriani, Manestra, Ricotti, Sanelli, & Zangari, 2011, p. 43). This makes tax treatments favouring housing market an important tool for the governments to manipulate the economy. Besides, politicians most of the times promote home-ownership especially for poorer families (Hemmelgarn & Nicodeme, 2010, p. 6).

The taxation system favoured housing market in three ways in most of the EU countries. These are non-taxation of imputed rents[19], mortgage tax relief and non-taxation of capital gains.

In a fully neutral and comprehensive tax system, imputed rents and capital gains on housing should be taxed. Besides, deductibility of mortgage interest and interest arising from borrowing to acquire other assets should be the same. Deduction of mortgage interest rate from tax base without deducting other interest payments from tax base reinforces tax bias towards housing (IMF, 2009, p. 18).

[19] Imputed rent is the amount of housing services consumed by homeowners who are not actually renting their residence. According to some economists imputed rent is the money that housholds earn by paying themselves instead of a landlord so this amount should be taxed.

Table 2: The taxation of owner-occupied houses in some European States and the USA (Boeijen-Ostaszewska & Schellekens, 2010) and (Wieser & Mundt, 2012)

Country	Taxation of imputed rents	Deduction of interest/mortgage interest tax relief	Capital gains taxation
Belgium	Yes	Tax deductibility with a limit (for mortgages)	No
Germany	No	No	No
Ireland	No	Tax credit for the first seven years with a limit (for mortgages)	No
Italy	No	Tax credit with a limit (for mortgages)	No
Netherlands	Yes	Tax deductibility without limit (since 2013 only for mortgages)	No
Spain	No	Yes (Tax credit with a limit on the amount of housing costs)	Yes (after 10 years holding period or in case of reinvestment within 3 years)
UK	No	No	Yes (exemption for principal taxation
USA	No	Tax deductibility with a limit on the amount of mortgage principal ($1 million)	No (if capital gains<$500,000)
Austria	No	Yes (but strongly limited)	Yes (exemptions for principal residences; 2 years)
Czechia	No	Yes (fairly generous)	Yes (exemptions for principal residences; 5 years)
France	No	Yes (tax credit for the first 5 years)	Yes (exceptions for principal residences; 2 years)

In Table 2 favorable tax treatments towards home ownership are shown in some EU countries. As it is seen, imputed rents and capital gains from house ownership are not taxed and tax relief for mortgages is provided in most countries except a few.

According to Keen, Klemm and Perry (2010), tax relief for mortgages has a direct role in the build-up of housing debt. Countries offering more favourable tax treatment towards housing have higher mortgage debt ratios. Figure 19 shows the relation between favourable tax treatment for homeownership and residential mortgage debt to GDP for the years between 2001 and 2006. Figure 19 indicates that in the countries highly favoring housing market, the mortgage debt to GDP is also high. As the rise in mortgage debt is a factor for the occurrence of housing bubbles, we can claim that these favourable tax treatments have contributed to the crisis.

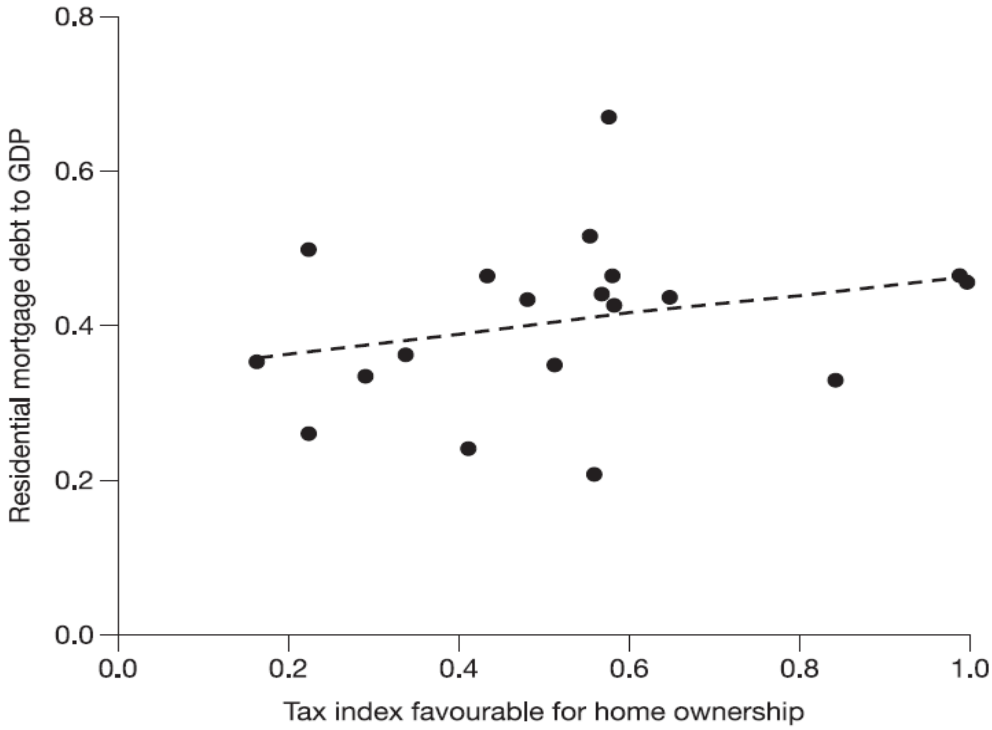
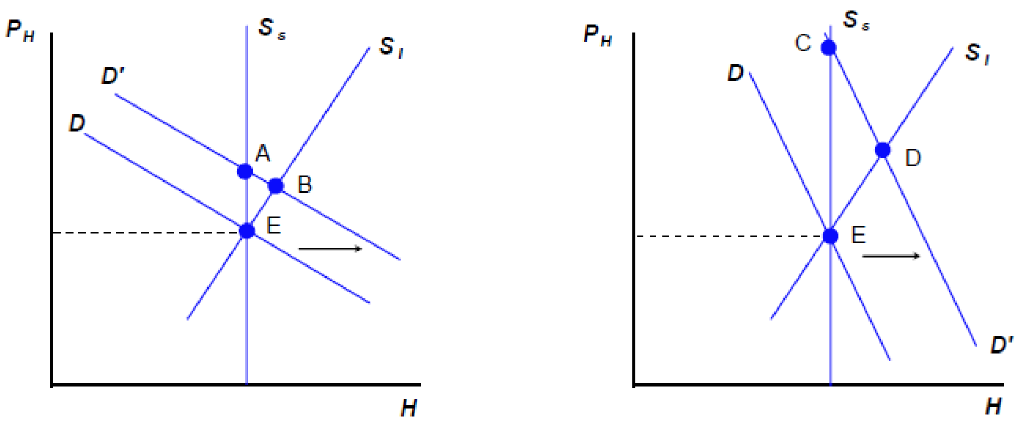


Figure 19: Debt ratios and the tax treatment of owner-occupation, 2001-2006 (Keen et al., 2010, p. 64)

One of the other consequences of favourable taxation for house ownership is that it produces volatility in the housing market. According to Noord (2003) a tax system with generous incentives may cause greater volatility in house prices. This is due to tax incentives' effect on the demand elasticity of the housing market. As the price sensitivity tends to fall with the extent of preferential tax treatment, the slope of the demand curve increases and the demand curve becomes steeper accordingly. The impact of prices on demand is cut down by tax incentives so the demand does not increase as much as in the case of no or less favourable tax treatment.

Figure 20 depicts how steeper demand curve causes sharper increase in price level. The left panel shows the impact of the demand shock on prices in case of tax treatment of housing is less generous and the right panel shows what would happen if tax treatment of housing is generous. It is seen that same magnitude of demand shock increases prices more in case of more favourable tax treatment for the housing market. The price movements mainly stem from the inelastic supply of housing in the short run. Therefore the tax incentives on home ownership exacerbate this situation and create more volatility in the market (Noord, 2003).



(a) (b)

Tax treatment of housing less generous Tax treatment of housing is generous

Figure 20: The impact of a demand shock on house prices (Noord, 2003, p.6)

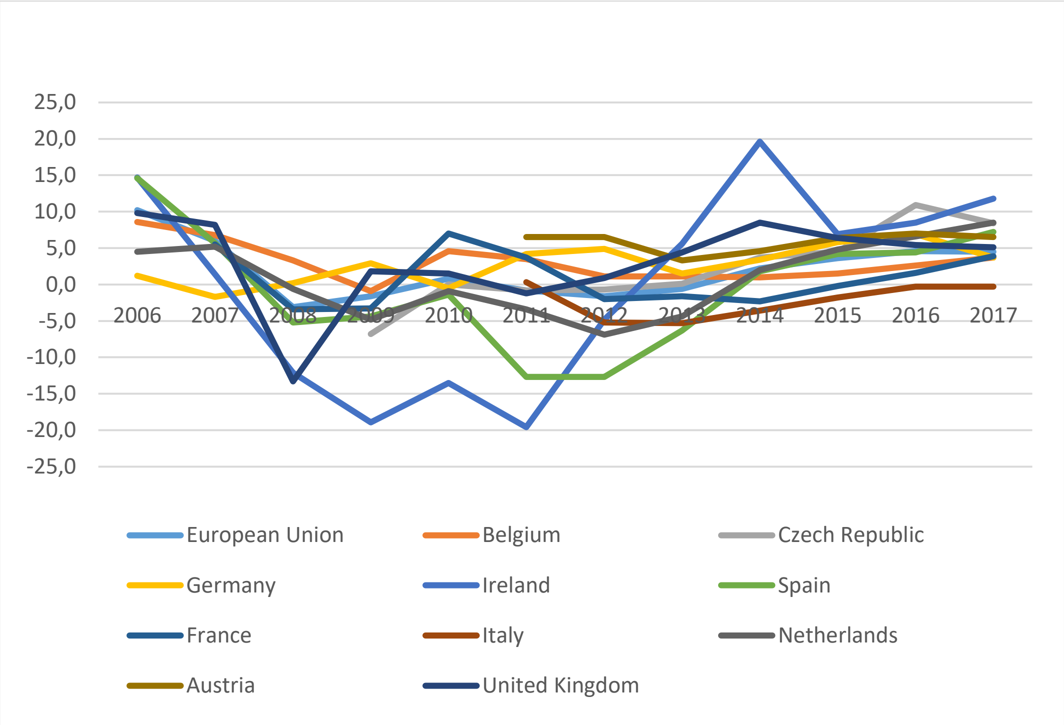


Figure 21: Annual rate of change in house prices for selected countries. 2006-2017 (own drawing based on data retrieved from Eurostat, 2018c)

Figure 21 depicts the house price volatility in the countries whose tax treatments for housing is stated in Table 2. When we examine the house price volatilities in these countries taking into account the information given in Table 2, we can say that house prices are more volatile in countries having more generous tax treatments for housing. As an example, Belgium which taxes imputed rents and only limitedly favours housing compared to other countries has less volatility in house prices. On the other hand, Ireland which has the most volatile house prices is seen to be one of the generous countries in terms of tax treatments towards housing.

To conclude, there is evidence that tax incentives on housing market may have played a role in the occurrence of a housing bubble. However, it may have a secondary role and it is difficult to measure the size of its effects on the housing market (European Commission, 2010a).

3.2.3. The Role of the EU Tax System in the Build-Up of the Financial Crisis

The causes of the crisis concerning taxation which are common for most of the countries including the EU countries are explained above. In addition to these, some elements of the tax system in the EU countries can be considered to have a contributive role in the build-up of the crisis.

Firstly, tax competition which is concluded to be more prevalent in the EU as in Section 2.1.3.1 may have been a contributing factor among the causes of the crisis. As it explained above, the newly accessed, peripheral and small EU countries are more likely to cut taxes to attract a large amount of capital inflows into their country. Capital inflows worsen the current accounts of these countries which put them in a risky position in case of a potential shock and outflow of capital. At this point, tax competition fueled by the abolishment of borders in the EU seems to be a significant factor of structural instability in the EU (Blechová, 2016).

Due to tax competition tax burden may be shifted from mobile capital to immobile capital and labour in order to sustain the same amount of tax revenue. Besides, decreases in the tax revenues may undermine governments provision of social security transfers. In sum, these may foster income inequalities especially in the winner countries of tax competition and make the economy more vulnerable to economic shocks. Therefore, tax competition in the EU can be considered as a factor that makes the markets unstable and contributes to the build-up of the crisis.

Secondly, it is seen that the factors contributing to the crisis concerning taxation mainly have arisen from unfair and unequal tax treatments. Taxation favouring debt for corporations and housing market are contradictory with the requirements of a fair and equal tax system.

Lastly, the tax harmonization in the EU may also be connected to the crisis. Early taxation measures taken independently to prevent the factors contributing to the build-up of the crisis could have helped the EU countries for avoiding the effects of the crisis (IMF, 2009, p.4). However, tax harmonization may have constrained EU countries to take measures to do that.

Contrary to the common assumption that the EU has little power and autonomy over taxation, Genschel and Jachtenfuchs (2011) argue that the EU exerts considerable control over EU countries' taxing power. They try to prove their claim by pointing out four taxation developments in the EU. Firstly, the number of secondary tax laws has been increased remarkably since the 1990s. Secondly, the tax areas included in the secondary law is broadened. Although before only the VAT is covered by tax legislation since the 1980s it is extended to excises, corporate taxes and personal income taxes as well. Thirdly, legal instruments regulating taxes have been varied. Decisions and regulations started to be used in addition to directives in the area of taxation. Finally, although it is limited, tax legislation power of the Council of Ministers has been delegated to the EC for some issues such as reducing tax rates of gas, electricity and heating. As a consequence, national governments have been left with little powers on taxation on the contrary to the belief that the Member States are autonomous in formulating their tax policies.

From this point of view, Member States' limited power on taxation may have constrained them and left only limited room to maneuver in tax policy which becomes crucial in times of crisis. Especially for the Euro Area countries tax policy has a significant role since they are also not free in monetary policy, rather they have a common one run by the ECB.

Pursuing an independent tax policy gains importance especially in cases of existence of instabilities in the economy. A country with an independent tax policy has tools to prevent the instabilities or at least to alleviate the effects of the crisis originated from other countries. In other words, the tax policy tools such as changing different types of taxes in an attempt to stabilize the economy or a sector are constrained by so many binding tax laws of the EU. If the Member States had not been in the Union, they might have used tax policy freely and crisis might not have affected them to that extent.

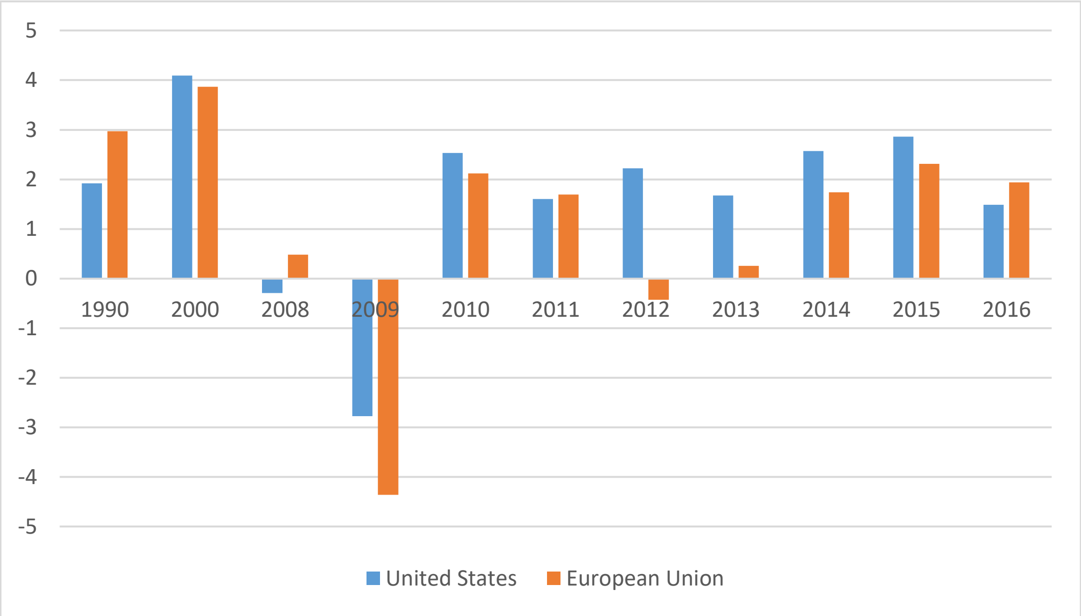


Figure 22: Comparison of growth rates of the EU and USA as % of GDP, 1990-2016 (own drawing based on data retrieved from Worldbank, 2018)

Figure 22 demonstrates the growth rates of the EU and the USA for examining the recovery process of both from the crisis. The data for the year 2008 reveals that the EU has been affected by the crisis more severely. Besides, the recovery process of the EU lasted longer than the recovery process in the USA. This could be a reflection of the claim that being in a Union may pose a constraint for the Member States in stabilizing their economy and hinder the recovery process. Enacting an independent monetary and tax policy might help countries in overcoming the crisis in the EU.

Because of having a stabilizing effect, some specific taxes are thought to have helped in prevention of the financial crisis. Since the financial sector is seen as a main culprit for the crisis, imposition of taxes on financial sector may have alleviated the effects of economic shocks. Therefore, financial transaction tax (FTT) and/or financial activity tax (FAT)[20] were suggested for stabilizing the financial sector (Hemmelgarn & Nicodeme, 2012). However, these kinds of taxes should be imposed in all of the countries of the Union. Otherwise, an individual country's own imposition of financial taxes would be ineffective and harmful for the country. This attempt would lead to capital outflow from the Member State who levies taxes on financial transactions. This also shows that the EU countries have a constraint while running tax policy since they have to take into account the consequences that might arise from being a member of a union. Hence as a response to crisis, EC introduced FTT which will be explained in the next chapter.

[20] FTT is a kind of turnover tax on financial transactions while FAT is a tax on profits and remuneration of financial institutions.

CHAPTER 4

THE EU'S TAXATION MEASURES TO COPE WITH THE CRISIS

In the EU, a wide range of tax measures was taken both at country level and at the EU level during the recovery process of the crisis. In this chapter, general information regrading these measures is provided.

4.1. The Role of Tax Measures in Times of Crisis

Taxation policy is not only important for raising revenue for the governments but is employed for the aim of stabilizing the economy in times of crisis as well.

In general, taxes affect almost all economic activities such as investment, consumption and employment. In times of crises, governments use tax policies to steer the economies. Build-in stabilizing role of taxation is crucial in those periods. Any increase in tax rates on these activities would not be favorable as it would be a negative signal for the consumers, investors and employees and might result in a reduction in GDP. This may also encourage tax evasion and at last aggravate economic situation. Instead, by lowering the tax rates or providing tax incentives, governments may boost the economy. In this way, governments can increase production, aggregate demand and take measures for full employment.

On the other hand, efforts to boost the economy through lowering tax rates might reduce tax revenue and governments’ income and finally would increase the budget deficits during the times of crisis. Therefore, a maneuver focused only on lowering tax rates would result in either an emergence of and/or increase in budget deficits.

In times of crisis, the efforts are dedicated to take appropriate tax measures which increase tax revenues without increasing tax burden on citizens. According to Carbone

(2012), taxation actions in times of crisis should focus on three fundamental aspects. These are increasing tax reliefs to guide the behaviour of taxpayers, especially for capital taxpayers, implementing a tax shelter to ensure the return of foreign capital and combating tax evasion. These actions do not impoverish the population while increasing tax revenues.

4.2. Taxation Response to Crisis in the EU

Although taxation policy is one of the tools which can be used by Euro Area countries independently, there are also some constraints for taxation policy in the EU. The Member States are bound by the requirements set in the "Stability and Growth Pact"[21] which is an agreement among the Member States and it comprises of rules to ensure sound public finances within the Union. As two of the requirements of the Pact, the 3% ceiling of GDP for budget deficit and 60% of GDP for public debt limit the Member States' powers on taxation matters. However, some of the EU countries violated the deficit rules during the years of 1999 and 2000. Subsequently, in 2005 the rules were relaxed by the EU Council under the pressure of the countries that violate the fiscal deficit requirement (Brkic & Kotarski, 2010).

The other constraint of tax policy for EU countries is the EU's legislation of harmonization actions on taxation which has a role in the tax treatments for specific tax types in a Member State. The harmonization steps taken by the EC and explained in detail above also limits the powers of the Member States on taxation. However according to Defaa (2011) these harmonization actions are necessary as the fragmented twenty-eight different tax systems may cause distortions of the efficient allocation of resources, high compliance cost for companies and citizens for cross border activities, possibility of tax avoidance and evasion, harmful tax competition and inconsistencies

[21] Stability and Growth Pact is the agreement among Member States including rules to ensure sustainable, sound public finance and to coordinate Member States' fiscal policies. The set of rules of the act entered into force in 1998. However, the rules have evolved several times in the following years until 2015.

which stem from different practices of twenty-eight different national tax administrations.

In such a setting, the exit strategy out of the crisis in the EU was not only at national level but also at EU level due to the interdependencies of Member States in taxation matters. Below, the EU's initiatives in response to the crisis will be explained first and the Member States' own national measures as a matter of their independent tax policy will be examined later.

4.2.1. Common Responses to the Crisis in the EU

Although the EU countries have taken tax measures generally on their own in response to the crisis, the EU has several initiatives to coordinate these measures and interventions in the course of the crisis. Sometimes one country's own tax measures in the EU may not have the desired effects on the economy, rather may cause an outflow of investment, capital or consumption to other countries. In these circumstances, the joint interventions are necessary to reach the goals of the tax policy.

The EC's first initiative in response to the crisis is *European Economic Recovery Plan for Growth and Jobs* (Communication from the Commission to the European Council, 2008) unveiled on 26th November 2008. The Plan consists of a combination of tax and expenditure measures to support the economy. Regarding taxation, the Plan suggests lowering especially labour income tax and social contributions to have a positive impact on job retention and creation and to boost purchasing power.

In the Taxation Trend Reports published in years 2009 and 2010 by the EC it is seen that the Member States took measures in line with the suggestions of the Plan (European Commission, 2009) (European Commission, 2010b). However, it is hard to say that all of the Member States took tax measures consistent with each other and the Plan.

European Semester introduced as a response to the crisis in 2010 is another framework to coordinate the economic policies of Member States. According to the Semester to ensure sound public finances, to prevent excessive macroeconomic imbalances, to support structural reforms and to boost investment throughout the EU, every year before the internal approval of the national budgets of the Member States the EC analyses each Member State's next year's budget and provides recommendations for each country. The recommendations of the EC are also endorsed by the Council. The Member States are expected to take any action that they deem appropriate in response to the EC's recommendations. The effectiveness and usefulness of these recommendations and the Member States' compliance level with them have still been argued and studied (Efstathiou & Wolff, 2018).

The *European Semester* can be deemed as a cornerstone for the tax policy in the EU. Having a direct link with the revenues of the State's budget, taxation is one of the key policies analyzed and monitored by the EC in the context of it. One of the most important aims for setting up this framework is to provide guidance to the Member States on common steps towards more sustainable, growth- and job-friendly tax systems to ensure substantial fiscal consolidation and to remove tax distortions that could have negative effects on macroeconomic imbalances (Petru-ovidiu, 2004).

The other initiative of the EU suggesting tax coordination in response to the crisis is *Euro Plus Pact* which was adopted on 25 March 2011 by the European Council and signed by all the EU countries except the Czechia, Hungary, Sweden and the United Kingdom. The Pact mainly establishes monitoring system of a number of variables indicating financial and economic imbalances in the Member States by the EC (Gabrisch & Staehr, 2014).

The main goal of the Pact is not having tax coordination in the EU; instead it focuses on strengthening cost competitiveness in order to prevent financial and economic imbalances. Four priority areas are set down in the Pact which are competitiveness and employment, sustainability of public finances, reinforcing financial stability and tax policy coordination. Tax policy coordination is seen as one of the tools to achieve objectives under these areas. In this context, the Member States commit to ensure the exchange of best practices, avoidance of harmful practices and proposals to fight against fraud and tax evasion within the framework of the Pact. However, commitments of the Member States have not been fulfilled for recent years. This is because of the insufficient possessiveness of the Pact by the EU countries. For this reason, the Pact failed to encourage the Member States to undertake reforms. Therefore, it is hard to say that it had a role in terms of taxation matters.

The proposal of the EC regarding introduction of financial transaction tax (FTT) is one of the most significant attempts of the EU in response to the crisis. For the first time, eleven EU countries express their willingness to adopt a common tax in order to prevent financial volatility causing the crisis.

The main aim of the FTT is to reduce the number of speculative transactions and volatility and to create tax revenue. The idea is traced back to Keynes. He identified security contracts as one of the causes of financial volatility and suggested taxation of these contracts (Keynes, 1936, p. 160). Subsequently, Tobin (1978), Stiglitz (1989) and Summers and Summers (1989) advocated similar ideas. The idea has been debated after the 2008 crisis not only in the EU but at the global level and some authors such as Davila (2014) and Coelho (2016) have seen it as a tool to correct financial instabilities.

The FTT can contribute to the solution of two problems having a role in the build-up of the crisis.

- It can stabilize the financial markets through reducing speculative activities. FTT will increase transaction cost and this could reduce harmful financial transactions for short term speculations without reducing long term investments (Hemmelgarn & Nicodeme, 2012).
- It can create substantial tax revenue which may be a source for the EU to recover the cost of the potential future financial crisis. Thus FTT revenues may partially replace Gross National Income contribution of EU Member States to the EU budget (Nerudová & Dvořáková, 2014).

In spite of its positive effects, some economists such as Pomeranets (2012) and Matheson (2011) criticize FTT. The objections to FTT can be summarized as follows:

- Even the tax rate is low, it may have harmful effects on long-term investment because it would raise the cost of capital.
- It may hamper the price settling process in financial markets
- It is impossible to distinguish harmful speculation from beneficial transactions. Every transaction may not have a potential for speculation. Therefore, to impose FTT on the transaction not having a potential for speculation may be unnecessary and/or may affect financial markets negatively.
- It is unclear who would carry the burden of the tax and whether the tax burden would pass to consumers or not.
- It would lead to a relocation of financial activities to tax-free jurisdiction (Schäfer et al. 2012, p. 84).

Even though the EC proposed FTT Plan in September 2011, it did not receive the number of votes required for unanimity principle within the European Council. However, due to the eagerness of eleven Member States (Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and the Slovak Republic) these countries decided to go further for the establishment of FTT through engaging in *enhanced cooperation*. Enhanced cooperation resorts when unanimity conditions determined under Title III of TFEU (2012) could not be reached in the European Council. It allows a group of at least nine Member States to take common measures for a policy area. The European Council provided authorization to these Member States to establish enhanced cooperation. This development is of great importance since it is the first time European Council's authorization is given to a group of members in the taxation area for establishing a common system. Since the EC issued its Proposal for a Council Directive regarding adopting enhanced cooperation in the area of FTT in February 2013, discussions have been ongoing. In 2015 Estonia has been dropped out of the FTT plan at its own request. At present, the FTT has not been introduced (Hemmelgarn, Nicodeme, Tasnadi, & Vermote, 2016).

The FTT Plan is a standstill issue in the Council for the time being and further study is considered to be necessary in order to progress. In spite of the willingness of the ten Member States, the stagnated process is considered to stem from the financial institutions' lobbying to prevent FTT and attempts of several countries to attract financial companies from London to their location after Brexit decision (Mittendrein, 2018).

4.2.2. Tax Measures Taken by Member States for Economic Recovery

As explained in detail above, each country in the EU has different economic characteristics and conditions. To understand the reason behind the diverse measures taken by different Member States, we should take into consideration the Member States' conditions on the eve of the crisis and how they are affected by the shocks. Just like economic conditions, different characteristics of the tax systems required different tax policy responses and tax measures as well.

As an example prior to the crisis, Italy had net borrowing equaled to 3% of GDP. Therefore, tax revenues had been increased for the purpose of decreasing borrowing. Total tax to GDP ratio was the fourth highest in the EU in 2009 which was 43.1%. Since high taxes may lead to stagnant economic growth, the focus was on polices that could stimulate the economy on the eve of the crisis. In this context, Italian government took plenty of measures to rationalize the tax revenues and to shift the tax burden from direct to indirect taxes as a response to the crisis (Bozio, Emmerson, Peichl, & Tetlow, 2015, p. 413). On the other hand in Germany excessive deficit procedure[22] was put into effect between 2002 and 2006. In 2007, Germany had implemented a series of

[22] Excessive deficit procedure is an action conducted by the EC against any EU Member State exceeding the budgetary deficit limit identified in the Stability and Growth Pact.

fiscal tightening procedures to improve public finances. As a response to the crisis, the German government agreed on new tax acts containing measures in the context of budget consolidation in 2010 (European Commission, 2011c, p. 192).

These examples show that each country had its own priorities determined according to their economic conditions prior to the crisis and the measures taken are linked with them.

In general, since 2010 Member States aimed at ensuring more sustainable public finances, promoting economic growth and employment and shaping fairer distribution of an outcome. According to the taxation trend reports published every year by the EC, trends of taxation after the crisis can be summarized as follows:

- rising tax burden to seek consolidation of public finances,
- reducing the tax burden on taxation of employment and labour,
- increasing taxation on consumption as it is thought to have less adverse effects on economic growth,
- making efforts to improve tax governance by strengthening tax compliance and reducing tax evasion (Diamond, 2015).

Table 3 presents the tax policy measures opted by the Member States during the 2009-2013 period. The Member States applied a vast number and kind of measures to cope with the crisis. Additionally, some countries have relied mostly on automatic stabilizers to stimulate the economy while complementing them with some discretionary tax tools (European Commission, 2010b).

When we look at Table 3 it is hard to identify similar trends adopted by each Member State in terms of tax-related measures in response to the crisis. Most of the Member States' tax measures were not consistent throughout the years following the crisis. There are many Member States that both increased and decreased PIT, CIT and VAT during the period between 2008-2013. As an example in 2011 Denmark increased the PIT rate. However, in 2012 a new tax reform was introduced which lowers the PIT rate.

Table 3[23]: Tax measures taken by the EU countires, 2009-2013 (European Commission, 2010b, p. 28) (European Commission, 2011b, p. 32) and (European Commission, 2013, p. 20)

		Tax Changes in 2009		Tax changes in 2010-2011		Tax changes in 2012-2013	
		Statutory Tax Rates[24]	Base or Special Regimes[25]	Statutory Tax Rates	Base or Special Tax Regimes	Statutory Tax Rates	Base or Special Tax Regimes
PIT	Increase	EL, IE	EL, IE, LT	EL, ES, FR, IE, LV, LU, PT, UK	AT,CZ, DK, EE, ES, FR, IE, LV, PT, RO, SK, UK	BG, EL, FR, CY, LU, PT, SI, SK, FI	BE, CZ, EE, IE, EL, ES, FR, LU, NL, AT, PL, EL, UK, PT

[23] Country abbreviations in Table 3 - AT: Austria, BE:Belgium, BG: Bulgaria, CZ; Czechia, DK: Denmark, DE: Germany, EE: Estonia, IE: Ireland, EL: Greece, ES: Spain, FR: France, IT: Italy, CY: Cyprus, LV: Latvia, LT: Lithuania, LU: Luxemburg, HU: Hungary, MT: Malta, NL: Netherlands, PL: Poland, RO: Romania, SI: Slovenia, SK: Slovakia, FI: Finland, SE: Sweden, UK: Uniten Kingdom.

[24] Statutory tax rates are the tax ratios determined by tax rules.

[25] Special tax regimes means any tax legislation or practice providing preferencial taxation through reductions in tax rate or tax base.

Table 3 (cont'd)

		Tax Changes in 2009		Tax changes in 2010-2011		Tax changes in 2012-2013	
		Statutory Tax Rates	Base or Special Regimes	Statutory Tax Rates	Base or Special Tax Regimes	Statutory Tax Rates	Base or Special Tax Regimes
PIT	Decrease	AT, FI, FR, DE, HU, LV, LT, RO	AT, BE, BG, FI, DE, HU, IE, IT, LV, LU, NL, PL, PT, RO, SK, SI, ES, SE	DE, DK, FI, HU, NL	AT, BG, DE, FI, IT, LT, SE	LV, MT	BE, DK, DE, IT, HU, MT, NL, AT, SI, FI, SE, UK
CIT	Increase	LT	IE,EL,IT,LT	EL, PT	LU, RO	EL, CY, LU,PT, SK, HU	EL, ES, LU, AT, FI, PT, BE, FR
CIT	Decrease	CZ, LU, SI, SE	AT, DE, NL, PT, RO, SE, IT, CY, PT, PL, ES, UK	CZ, EL, HU, LT, NL, UK	AT, BE, DE, ES, LT, NL	DK, EE, SI, FI, SE, UK	IE, EL, ES, FR, HR, IT, LT, LU, HU, NL, RO, SL, FI, SE, UK, CZ

Table 3 (cont'd)

		Tax Changes in 2009		Tax changes in 2010-2011		Tax changes in 2012-2013	
		Statutory Tax Rates	Base or Special Regimes	Statutory Tax Rates	Base or Special Tax Regimes	Statutory Tax Rates	Base or Special Tax Regimes
VAT	Increase	EE, HU, LV, LT	EE, LV, LT	CZ, EL,ES,FI, HU,LV,PL,PT, RO,SK,UK	BG, CY, EL, ES,FR, PT, RO, SK	CZ, ES, FR, HR, IT, CY, NL, SI, FI	BE, ES, LV, LU, PL, PT
VAT	Decrease	FI, UK	BE, CY, FR, MT, RO	IE	BE, DE, HU, LT, NL, PL	EL, HR, LV	LT, LU, SE

The actions under tax policy are not in the same direction for most of the countries. If we try to get a general perception, we can say firstly that mostly discretionary tax cuts were preferred by the Member States except for the ones whose budgets are not sufficient for cutting taxes. (Hemmelgarn & Nicodeme, 2010, p. 19). Secondly, some Member States favored supporting household spending power through lowering PIT rates while some of them increase PIT in varied scale and often by means of tax base changes. Thirdly, with some exceptions, most Member States opt for increasing VAT rates or limiting the scope of exemptions and reduced rates to cover their budgetary needs. Due to the reduction in PIT rates and increase in VAT rates we can deduct that there has been a shift in tax burden from direct taxes to indirect taxes. Fourthly, we can see that the main trend for the Member States is decreasing the CIT rate. Finally, it is known that some Member States such as the Netherlands, Bulgaria and Spain took measures targeting individual sectors such as housing, tourism etc. (European Commission, 2011b).

The Member States' tax measures were not limited to changes in tax rates. Rather, extensive measures have been taken by the Member States in the different type of taxes. These different kinds of tax measures following the crisis during the years between 2008-2013 are explained below for some of the Member States which took a variety of tax measures in the areas of PIT, CIT and VAT. The information about the tax measures of these countries are provided to point out different tax measures taken in the EU. These measures are set of significant examples preferred to be taken by different Member States. As the crisis was out broken in 2008 and the repercussion of it began to diminish in 2013, the tax measures taken between 2008 and 2013 are examined. The tax measures explained below for some EU countries is limited to the tax types of PIT, CIT and VAT since they are major taxes which account for the biggest share of the total taxation. and/or have a strong effect on growth. According to EC's data on taxation between 2008 and 2013, PIT's share of the 28 EU countries is between 23.6 % to 24.6%, VAT revenues share is between 17.2 % and 18.3 % of total taxation in the EU. Although corporate income taxation varied in the range between 2.2% and 2.9% of total EU taxation in the same period, it is thought to have a strong effect on growth. Strong relation between the corporate income taxes' and economic growth is based on its affects on invenstment level. High corporate taxes discourage investment and growth rates accordingly. (European Commission, 2019b; 2019c ; 2019d; 2019e).

4.2.2.1. Personal Income Tax Measures

In the field of PIT, the Member States mostly favored decreasing tax burden in the wake of the crisis. However some of them increased it (European Commission, 2019b; 2019c ; 2019d; 2019e). According to the information provided in the various annual tax reports Hungary and Germany mostly took measures decasing PIT. On the other hand, France, Greece and the United Kingdom mostly took measures increasing PIT rates in the wake of the crisis.

The different kinds of personal income tax measures following the crisis during the years between 2008-2013 are explained below for some of the Member States.

Germany is one of the countries that generally took tax measures decreasing PIT according to Table 3 between 2009 and 2013. Germany decreased PIT via providing better deductibility of child care costs and an increase in the employee allowance and allowance for children started from January 2012. Besides, in 2009 Germany reduced the lowest PIT rate applied and the deductibility of payments for health and nursing care insurance which was 0.4 % of GDP, has been improved since 2010 (European Commission, 2011b).

As another country Hungary which generally decreased PIT, introduced a tax reform in 2011. With the reform, the highest marginal tax rate was decreased from 32% to a 16% flat rate. In the meanwhile, the tax base rose to 127% of gross earnings by the abolition of allowances. Therefore, the tax rate corresponded to 20.3%. Moreover, Hungary increased tax allowances for families with children and tax reliefs were also granted to low and medium income earners. In Hungary, as of 2012 the employment tax credit was fully phased out which led to a tax increase for low-income earners (European Commission, 2012a).

In the United Kingdom, PIT's progressivity was increased by granting higher tax allowances and setting a top rate of 50% which was 10 percentage points higher than the previous implementation in 2010. As of April 2011, tax relief on some areas was restricted (European Commission, 2011b). Also in 2011, the amount of the employment tax credit was reduced by 20% and the income threshold for tax credits was increased. Substantial tax credits for families with children were also introduced. However, as of 2012 the employment tax credit was fully phased out, leading to a net tax increase for income earners. Moreover, for the years 2012 and 2013 the basic PIT rate limit was reduced (European Commission, 2012a). These developments during the crisis mainly referred to the increase of PIT rates in the United Kingdom in spite of few measures leading to a reduction in PIT.

In Greece, in 2010 a new unified progressive taxation structure with nine brackets with a 45% top rate was introduced which was previously with four brackets and 40% top rate. In the same year bonuses granted to business executives in the financial sector were subject to a special progressive taxation (between 20% and 90%). Moreover, a 1% extraordinary one-time contribution from incomes of individuals was applied (European Commission, 2011b). In 2011 a new solidarity contribution ranged from 1% to 4% was introduced for individuals for the earnings belonging 2010 to 2014. The maximum PIT exemption was reduced from 12.000 Euro firstly to 8.000 Euro and then to 5,000 Euro in 2011. (European Commission, 2012a). Furthermore, Greece introduced a comprehensive reform in 2013 which broadened tax base via reducing special tax regimes and tax expenditures (European Commission, 2013).

As one of the countries which took measures mostly increasing PIT in the wake of the crisis, France abolished the tax deductibility of mortgage interest payments which is considered as one of a reason for house price volatility and replaced it with subsidized loans in 2010. The overall amount of tax incentives for personal income has been limited to 20,000 Euro plus 8% of the taxable income at the level of the household in 2010 and capped further in 2011 for households to 18,000 Euro plus %6 of taxable income. A tax of 50% levied on bonuses exceeding 27,500 Euro paid in 2009 by financial institutions to their traders. In 2011, the highest marginal income tax rate was increased to 41% which was 40% previously. Besides, tax rates levied on capital income and gains were raised by one point as well(European Commission, 2011b).

In 2011, many tax credits, including the deductibility of mortgage interest payments which is mentioned above as a cause of house price volatility in the house market, were abolished or reduced as one of the measures to reduce the budget deficit in France. The optional taxes on dividends, interests and capital gains were increased while taxes on labour income were remained the same. In 2012, a temporary progressive contribution on top incomes was introduced and the exemption of PIT was fully abolished (European Commission, 2012a). In 2013 French PIT allowances have been reduced to 10,000 Euros per household (European Commission, 2013).

4.2.2.2. Corporate Income Tax Measures

Following the crisis, the general tendency for CIT among the Member States is lowering the tax rate and narrowing the tax base. This trend is an outcome of a growth-friendly tax policy and concerns about keeping the mobile tax base in the country.

When we examine the changes in the CIT from the EC's tax reform reports, it is seen that all the Member States except a few of them lower the CIT consistently to some extent through decreasing rates or increasing incentives, tax credits or allowances.

In the period between 2008-2013 though the general trend was lowering the CIT, exceptionally, Hungary increased CIT in this period. Greece firstly decreased CIT in 2010 and then increased it in 2013. Some of the EU countries such as Austria, Belgium, France and Latvia kept the same rate while the others such as Finland, the United Kingdom and Sweden lowered the rate during the years when the impacts of the crisis are observed. Statutory CIT rate decrease is most in the United Kingdom.

Table 4: CIT rates of the Member States for the 2008-2013 period (KPMG, 2018c)

Country	Years					
	2008	2009	2010	2011	2012	2013
Austria	25.00	25.00	25.00	25.00	25.00	25.00
Belgium	33.99	33.99	33.99	33.99	33.99	33.99
Bulgaria	10.00	10.00	10.00	10.00	10.00	10.00
Croatia	20.00	20.00	20.00	20.00	20.00	20.00
Cyprus	10.00	10.00	10.00	10.00	10.00	12.50
Czechia	21.00	20.00	19.00	19.00	19.00	19.00
Denmark	25.00	25.00	25.00	25.00	25.00	25.00
Estonia	21.00	21.00	21.00	21.00	21.00	21.00
Finland	26.00	26.00	26.00	26.00	24.50	24.50
France	33.33	33.33	33.33	33.33	33.33	33.33
Germany	29.51	29.44	29.41	29.37	29.48	29.55
Greece	25.00	25.00	24.00	20.00	20.00	26.00
Hungary	16.00	16.00	19.00	19.00	19.00	19.00
Italy	31.40	31.40	31.40	31.40	31.40	31.40
Latvia	15.00	15.00	15.00	15.00	15.00	15.00
Lithuania	15.00	20.00	15.00	15.00	15.00	15.00
Luxembourg	29.63	28.59	28.59	28.80	28.80	29.22
Malta	35.00	35.00	35.00	35.00	35.00	35.00
Netherlands	25.50	25.50	25.50	25.00	25.00	25.00
Norway	28.00	28.00	28.00	28.00	28.00	28.00
Poland	19.00	19.00	19.00	19.00	19.00	19.00
Portugal	25.00	25.00	25.00	25.00	25.00	25.00
Romania	16.00	16.00	16.00	16.00	16.00	16.00
Slovakia	19.00	19.00	19.00	19.00	19.00	23.00
Slovenia	22.00	21.00	20.00	20.00	18.00	17.00
Spain	30.00	30.00	30.00	30.00	30.00	30.00

Table 4 (cont'd)

Country	Years					
	2008	2009	2010	2011	2012	2013
Sweden	28.00	26.30	26.30	26.30	26.30	22.00
United Kingdom	30.00	28.00	28.00	26.00	24.00	23.00
EU average	23.17	23.11	22.93	22.70	22.51	22.75

The lowering trend in CIT rates is supported by the allowances and incentives granted in most of the Member States. Several Member States changed the CIT base. For instance, the United Kingdom and Slovenia applied incentives to corporate investments. Besides, Slovenia raised the allowance for investment and increased the exemption rate for investments in research and development from 40% to 100% as well. Some Member States decreased the tax burden on corporate income by broadening the scope of special regimes. These measures were all taken for the purpose of increasing growth rate and avoiding the effects of crisis (European Commission, 2012a).

Despite the pegged rates of some countries seen in Table 4, these countries run special tax regimes which increase or decrease the tax burden on the corporations. As an example Germany and Italy adopted special tax regimes which lower the tax burden on corporations according to the tax reports of the EU.

The tax measures including special tax regimes implemented by some countries which took a variety of significant tax measures are explained below to understand their approach from the aspect of CIT for overcoming the crisis.

Germany reformed corporate tax system in the pre-crisis years and lowered CIT rate from 40% to 30% in 2008 as a response to the crisis. To compensate the tax cuts, base-broadening measures were implemented (European Commission, 2010b). However, after the out broken of the crisis, Germany relaxed the rules that have been taken to broaden the base of CIT. The interest barrier rule which sets a limit for deduction of interest expenses was relaxed and the depreciation allowance for low-value assets was improved in 2010 (European Commission, 2011b).

As another country decreasing CIT in the wake of the crisis, Italy reduced CIT rates by 5.9 percentage from 37.5% to 31.4% in 2008. Its special regional tax based on the value of production (IRAP) was cut from 4.25% to 3.9% in 2008 (European Commission, 2008b). Moreover, 10% of IRAP paid by employers became deductible from PIT and CIT since 2009. By December 2011 the deduction of labour costs for women and younger employees was increased. A surcharge rate on the CIT applied to companies in the energy sector was decreased as of December 2011 until 2013 (European Commission, 2012b). Besides, tax deduction amounts for employers on the labour component of regional production tax base was increased from 4,600 euros to 7,500 euros by 2013 (European Commission, 2013).

The United Kingdom which decreased CIT rates, implemented additional measures, such as an increase in R&D tax credits and a phasing-out of capital allowances on industrial buildings during the years of the crisis. In 2009, it delayed the planned increase in the small companies' rate, leaving it at 21% for the years of 2009-2011 (European Commission, 2010b). In 2011, the standard and reduced CIT rates were cut by 1% to 27% and 20%, respectively (European Commission, 2011b)

As a response to the crisis capital allowance rate on plant and machinery was reduced in the United Kingdom from 20% to 18% and the special rate from 10% to 8%. Besides, the rate of tax relief for investment by SMEs was increased to 200% in April 2011 (European Commission, 2012b). As a result, direct taxes on corporate income have decreased by 7.4% in 2012 compared to 2011. This was due to the reduction in corporation tax rate and increased allowances and credits available to companies explained above to a certain extent. (European Commission, 2014).

Being the only country that concretely took measures generally to increase CIT during the years of crisis, Portugal firstly introduced a CIT special tax regime at an amount of 2.5 percent to taxable profits more than 2 million Euro in July 2010 (European Commission, 2011b). As of January 2012, the reduced CIT rate of 12.5% was abolished and the tax rate of 25% was applied instead. From January 2012 surtax of 3% and 5% rates were levied on taxable profits over 10 million Euros. Moreover, the withholding tax on investment income earned by legal entities without a permanent establishment in Portugal was increased from 21.5% to 25% (European Commission, 2012a). As from 2011, Portugal introduced a new bank levy on specified liabilities at rates varying from 0.01 % to 0.05 % (European Commission, 2012b).

4.2.2.3. Valule Added Tax Measures

Most Member States such as Hungary, Romania, Greece, Spain and the United Kingdom raised standard VAT rates during the years 2010 and 2011 as a response to the crisis. Exceptionally, few Member States lowered VAT rates to some extent. Some of the countries which raised VAT used this VAT revenue increase to compensate the tax reforms for lowering of PIT and CIT (European Commission, 2011b). For the years 2012 and 2013, the Member States mostly broaden VAT bases through applying standard VAT rate commonly, instead of applying reduced VAT rates for some areas. In the meanwhile, some Member States introduced new reduced rates, or decrease the reduced rates more or broaden the scope of the reduced rates of VAT which can be seen in Table 5 (European Commission, 2014).

Table 5: The evolution of VAT rates in the Member States during the Crisis (European Commission, 2018c)

<table>
<tr><th>Member States and Dates</th><th>Reduced Rate[26]</th><th>Standard Rate</th><th>Member States and Dates</th><th>Reduced Rate</th><th>Standard Rate</th></tr>
<tr><td>Belgium</td><td></td><td></td><td>Latvia</td><td></td><td></td></tr>
<tr><td>1.01.2000</td><td>6 | 12</td><td>21</td><td>1.05.2004</td><td>5</td><td>18</td></tr>
<tr><td>Bulgaria</td><td></td><td></td><td>1.01.2009</td><td>10</td><td>21</td></tr>
<tr><td>1.01.1999</td><td>-</td><td>20</td><td>1.01.2011</td><td>12</td><td>22</td></tr>
<tr><td>1.01.2007</td><td>7</td><td>20</td><td>1.07.2012</td><td>12</td><td>21</td></tr>
<tr><td>1.04.2011</td><td>9</td><td>20</td><td>Lithuania</td><td></td><td></td></tr>
<tr><td>Czech Republic</td><td></td><td></td><td>1.01.2001</td><td>5 | 9</td><td>18</td></tr>
<tr><td>1.05.2004</td><td>5</td><td>19</td><td>1.01.2009</td><td>5 | 9</td><td>19</td></tr>
<tr><td>1.01.2008</td><td>9</td><td>19</td><td>1.09.2009</td><td>5 | 9</td><td>21</td></tr>
<tr><td>1.01.2010</td><td>10</td><td>20</td><td>Luxembourg</td><td></td><td></td></tr>
<tr><td>1.01.2012</td><td>14</td><td>20</td><td>1.01.1993</td><td>3 | 6</td><td>15</td></tr>
<tr><td>1.01.2013</td><td>15</td><td>21</td><td>Hungary</td><td></td><td></td></tr>
<tr><td>Denmark</td><td></td><td></td><td>1.09.2006</td><td>5</td><td>20</td></tr>
<tr><td>1.01.1992</td><td>-</td><td>25</td><td>1.07.2009</td><td>5 | 18</td><td>25</td></tr>
<tr><td>Germany</td><td></td><td></td><td>1.01.2012</td><td>5 | 18</td><td>27</td></tr>
<tr><td>1.04.1998</td><td>7</td><td>16</td><td>Malta</td><td></td><td></td></tr>
<tr><td>1.01.2007</td><td>7</td><td>19</td><td>1.01.2004</td><td>5</td><td>18</td></tr>
<tr><td>Estonia</td><td></td><td></td><td>1.01.2011</td><td>5 | 7</td><td>18</td></tr>
<tr><td>2000-2008</td><td>5</td><td>18</td><td>Netherlands</td><td></td><td></td></tr>
<tr><td>1.01.2009</td><td>9</td><td>18</td><td>1.01.2001</td><td>6</td><td>19</td></tr>
</table>

[26] Reduced VAT rate is applied to certain goods and services and it is lower than the standart VAT rate.

Table 5 (cont'd)

<table>
<tr><th>Member States and Dates</th><th>Reduced Rate</th><th>Standard Rate</th><th>Member States and Dates</th><th>Reduced Rate</th><th>Standard Rate</th></tr>
<tr><td>1.07.2009</td><td>9</td><td>20</td><td>1.10.2012</td><td>6</td><td>21</td></tr>
<tr><td>Ireland</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>1.01.2005</td><td>4.8 | 13.5</td><td>21</td><td>Austria</td><td></td><td></td></tr>
<tr><td>1.12.2008</td><td>4.8 | 13.5</td><td>21.5</td><td>1.01.1995</td><td>10</td><td>20</td></tr>
<tr><td>1.01.2010</td><td>4.8 | 13.5</td><td>21</td><td>Poland</td><td></td><td></td></tr>
<tr><td>1.07.2011</td><td>4.8 | 9 | 13.5</td><td>21</td><td>4.09.2000</td><td>3 | 7</td><td>22</td></tr>
<tr><td>1.01.2012</td><td>4.8 | 9 | 13.5</td><td>23</td><td>1.01.2011</td><td>5 | 8</td><td>23</td></tr>
<tr><td>Greece</td><td></td><td></td><td>Portugal</td><td></td><td></td></tr>
<tr><td>1.04.2005</td><td>45 | 9</td><td>19</td><td>1.07.2005</td><td>5 | 12</td><td>21</td></tr>
<tr><td>15.03.2010</td><td>5 | 10</td><td>21</td><td>1.07.2008</td><td>5 | 12</td><td>20</td></tr>
<tr><td>1.07.2010</td><td>5.5 | 11</td><td>23</td><td>1.07.2010</td><td>6 | 13</td><td>21</td></tr>
<tr><td>1.01.2011</td><td>6.5 | 13</td><td>23</td><td>1.01.2011</td><td>6 | 13</td><td>23</td></tr>
<tr><td>Spain</td><td></td><td></td><td>Romania</td><td></td><td></td></tr>
<tr><td>1.01.1995</td><td>4 | 7</td><td>16</td><td>1.01.2004</td><td>9</td><td>19</td></tr>
<tr><td>1.07.2010</td><td>4 | 8</td><td>18</td><td>1.12.2008</td><td>5 | 9</td><td>19</td></tr>
<tr><td>1.09.2012</td><td>4 | 10</td><td>21</td><td>1.07.2010</td><td>5 | 9</td><td>24</td></tr>
<tr><td>France</td><td></td><td></td><td>Slovenia</td><td></td><td></td></tr>
<tr><td>1.04.2000</td><td>2.1 | 5.5</td><td>19.6</td><td>1.01.2002</td><td>8.5</td><td>20</td></tr>
<tr><td>1.01.2012</td><td>2.1 | 5.5 | 7</td><td>19.6</td><td>1.07.2013</td><td>9.5</td><td>22</td></tr>
<tr><td>1.01.2014</td><td>2.1 | 5.5 | 10</td><td>20</td><td>Slovak Rep.</td><td></td><td></td></tr>
<tr><td>Croatia</td><td></td><td></td><td>1.01.2007</td><td>10</td><td>19</td></tr>
</table>

Table 5 (cont'd)

Member States and Dates	Reduced Rate	Standard Rate	Member States and Dates	Reduced Rate	Standard Rate
1.01.2006	0 | 10	22	1.05.2010	6 | 10	19
1.08.2009	0 | 10	23	1.01.2011	10	20
1.03.2012	0 | 10	25	Finland		
1.01.2013	5 | 10	25	1.01.1998	8 | 17	22
1.01.2014	5 | 13	25	1.10.2009	8 | 12	22
Italy			1.07.2010	9 | 13	23
1.10.1997	4 | 10	20	1.01.2013	10 | 14	24
17.09.2011	4 | 10	21	Sweden		
1.10.2013	4 | 10	22	1.01.1996	6 | 12	25
Cyprus			UK		
1.08.2005	5 | 8	15	1.09.1997	5	17.5
1.03.2012	5 | 8	17	1.12.2008	5	15
14.01.2013	5 | 8	18	1.01.2010	5	17.5
13.01.2014	5 | 9	19	4.01.2011	5	20

Table 5 presents the evolution of VAT rates in the Member States during the crisis years. As it is seen in the table, while some of the countries changed VAT rates several times, some of them kept the same rates. According to the table, a common trend regarding VAT is the increase in standard and reduced rates. The VAT rate increases are more evident and common among the Member States compared to the increases in PIT and CIT rates. In line with that, Šimurina and Barbić (2017, p. 149) conclude that one of the effects of the crisis on the tax system is the growing common trend toward higher consumption taxes.

When the VAT measures taken by the Member States are analyzed, it is found that there is no country that necessarily decreased VAT rates between the years 2008 and 2013. Below, the VAT treatments of some countries in the EU in the wake of the crisis are explained.

Czechia, firstly in 2009 lowered the VAT rate for labour-intensive services. However, for the following years we can say that it is one of the countries that increased the VAT the most. The VAT rates were increased step by step during the years between 2009 and 2013. Czechia increased both standard and reduced VAT rates by 1 % from 19% to 20 % for standard rate and from 9% to 10% for reduced rate in 2010 (European Commission, 2011b). In the same manner, as of January 2012, the reduced VAT rate was increased from 10% to 14%. From 2013, Czechia increased standard and reduced VAT rates by 1% to 21% and 15% respectively (European Commission, 2012b).

Latvia increased the standard VAT rate from 18 % to 21 % and the reduced VAT rate from 5 % to 10 % in 2009. Besides several goods were made ineligible for the reduced rate in the same year (European Commission, 2010b). As of 2011, the standard VAT rate was increased by 1% from 21%to 22 % and the reduced rate increased by 2% from 10% to 12 %. The reduced rate applied for electricity was abolished, which means an increase from 10% to 22 % (European Commission, 2011b)

During the years between 2009 and 2013, Germany did not increase VAT rates contrary to most of the Member States. As a measure, it only applied the reduced VAT rate of 7 % on short-term accommodation in 2010 (European Commission, 2010b).

Sweden is the other county that did not increase VAT rates during the analyzed period, rather lowered VAT rates on restaurant and catering services from 13% to 12% (European Commission, 2012a).

CHAPTER 5

CONCLUSION

The 2008 Global Financial Crisis, regarded as the worst economic crisis since the 1930 Great Depression, had deep effects on financial sector of the EU Member States. The crisis attracted attention to fiscal policies in the EU, once many Member States announced their higher than expected budget deficits in 2009. As an element of fiscal policy, taxation gained importance and debates on taxation arose in the wake of the crisis.

Fiscal policy of the Member States is not seen as an area of integration so it has remained as one of the national responsibilities for the Member States. In line with that, decisions on taxation at the EU level are taken unanimously via intergovernmental negotiations. This poses intergovernmental gridlocks and problems in achieving tax coordination throughout the EU. In spite of the attempts of the EC, the Member States are still not eager to leave their powers on taxation to the Union which means the prevalence of unanimity principle over majority principle in taxation matters.

Although setting a common taxation policy is not envisaged in the EU, well-functioning of the common market requires some arrangements in the area of taxation. The well-functioning of the internal market can only be ensured by harmonizing indirect taxes of the Member States in order to avoid any impediments for trade within the Union. Therefore, the harmonization steps mostly have been focused on indirect taxes. Nevertheless, some steps have been taken to some extent for direct taxation which is considered necessary for the free movement of capital, services and persons. Besides, to avoid harmful effects of tax competition, alignment for CIT of the Mem

States has still been worked on. Within this general picture of taxation in the EU, the role of taxation in the build-up of the EU sovereign debt crisis is analyzed in this thesis. In order to examine the role of taxation policy of the EU Member States in the emergence of the crisis, firstly the EU tax system was assessed. This assessment was made in order to see the drawbacks of the tax system in the EU which might have a role in financial imbalances leading to the crisis. This assessment was made according to desired characteristic of a tax system which are commonly accepted. These characteristics are determined as revenue generation and flexibility, fairness, equity and efficiency.

Revenue generation of the EU tax policy seems adequate at first sight when we take into consideration the total tax revenue rates of the Member States. These rates are considerably high in the EU. However, it is not an evidence for the existence of an efficient revenue generating tax system. This may also be the result of a high tax burden on taxpayers. Therefore, tax elasticities of the Member States were looked at to see the revenue generating feature of a country. It is found out that taxes are elastic in the EU, so tax revenues are responsive to the economic changes. This could be interpreted such that revenue generation and flexibility of the tax systems is in a convincing level on average.

To assess the EU tax system according to the equity and fairness criteria, the revenue share and implicit tax rates of different type of taxes in the EU countries are examined. As the requirments of a fair tax system differs from different perspectives, the fairness of tax sytems in the EU is a controversial issue. In the EU, labour tax revenue share and the implicit tax rate of labour compared to other types of taxes are by far the highest. From one point of view labour income represents what the individual contributes to the society. Therefore taxes on labour are deemed as unfair compared to consumption and capital taxes by the opponents of labour tax. On the other hand, according to income tax proponents, income is a good measurement for ability to pay. Besides progressivity of income taxes is a tool for ensuring fairness and equity of the tax system. Therefore, the high rates of labour taxes is seen as an indicator of a fair tax systems in the EU.

The efficiency of a tax system refers to taxation with the least effect on the allocation of resources and on the behaviour of economic agents, which means less distortionary effects on decisions to work, save, consume and produce. While assessing the efficiency of the tax systems in the EU, one should take into account the trade off between the efficiency and fairness. The structure of higher share of labour tax than the share of consumption taxes may be considered as a sign of an inefficient tax system. As labour taxes have negative impacts on economic performance in several ways, it is thought to be one of the most distortionary taxes. However, the fairness concerns of governments may forestall their attempts to ensure efficiency in a tax system.

Tax compliance level is also an indicator for efficiency of a tax system. Broad based tax system with high compliance levels may help governments to obtain required tax revenue with low tax rates which means lower tax burden on taxpayers. Low tax rates induce low effect on the allocation of resources. To see the tax compliance level in the EU, tax gap which means the difference between the tax amounts taxpayers should have paid and the actual collected tax is examined. It is concluded that the tax gap calculated for most of the EU countries is higher than most of the non-EU countries. Additionally, the high administrative cost in the EU tax system shows that the resources are not used efficiently in the system and does not imply an efficient tax system. For these reasons, it could not be claimed that tax systems in the EU are efficient.

Although a general structure of the EU tax system is assessed in the study according to the average rates of the Member States, it is known that the Member States' tax structures are considerably different from each other. Therefore, the diversities of the EU tax system are analyzed subsequently to understand the EU tax system comprehensively.

Firstly, the ratio of total tax revenue of the Member States to their GDPs are investigated and it is found out that the ratios are considerably different among the EU countries. It is seen that countries with similar geography, historical development and demographic characteristics have similar tax revenue ratios. Secondly, the ratios of labour tax revenue to GDPs of the countries are examined. The diversity in terms of labour tax revenue ratios is explained as a result of the lack of harmonization for indirect taxes in the EU and the diversities in the labour tax components. Thirdly, the ratio of capital income tax to the GDPs of the Member States is looked into and the difference between the rates of core and peripheral EU countries is pointed out. Finally, it is found out that consumption tax revenue ratios to GDPs are more alike among the Member States compared to the other taxes. This is explained as a result of tax harmonization steps of the EU.

After the thorough analysis of Eu's tax system, the causes and progression of the 2008-2009 global financial crisis in the EU is discussed. One of the most important reasons behind the crisis is traced back to the adoption of a single currency in the Euro Area. The low-interest rates set centrally by the ECB led to decreases in interest rates than they should have been which caused an increase in borrowing especially in the Southern Euro Area countries. As a result of the loss of monetary control with the adoption of a single currency, the countries having financial imbalances could not use monetary policies to prevent budget and current accounts deficits. Lacking of a transfer mechanism of funds to the countries having financial imbalances in the EU is seen as another reason for intensification of the crisis. Of course, the financial crisis in the EU has been triggered by the global financial crisis broken out in 2007 in the USA. In the first place, the Member States having strong reliance on external funding had current account deficits. Then the other EU countries economies, which depends on each other very much, are affected by the adverse economic conditions.

When the causes of the crisis are considered, one can not say that taxation is a reason for the crisis. However, some defects of the tax systems in the EU and tax policy run by the Member States may have contributed to the causes of the crisis. From this point of view, three factors are pointed out to have a role in contributing to the emergence of the crisis.

The first factor which may contribute to the crisis is debt bias taxation for corporate financing. Although the interest payment for corporate debt can be deducted from the corporate tax amounts, return on equities can not be deducted from a tax basis. Therefore, one can say that tax systems favour debt financing of corporations over equity financing in the EU. As a result, corporations prefer taking debt rather than issuing equity, so the corporate indebtedness ratios increased between the years from 2002 to 2007. The corporations became vulnerable to credit constraints and economic shocks before the crisis so the effects of the crisis are felt deeply by the corporations during the crisis.

The second factor is the taxation favoring the housing market in the EU. Price bubbles in the housing market occurred in some EU countries just like the USA prior to the crisis. Taxation favoring housing market has a direct role for the demand rise in the housing market, which then led to the occurrence of price bubbles in the housing market. Besides, tax reliefs for mortgages led to the housing debt increase. Favoring taxation for house ownership induced volatility in the housing market. It is found out that house prices are more volatile in countries having more generous tax treatments for housing. For these reasons we can say that favoring tax treatments contributed to the causes of the crisis.

As a third factor, the elements of EU tax policy are examined in terms of their effects in the build-up of the crisis. Tax competition which is observed to be more prevalent in the EU may be a contributing factor for the causes of crisis. Since tax burden is shifted from mobile capital to immobile capital and labour due to tax competition, the economies become more vulnerable to economic shocks because of income inequalities. Besides, newly accessed, peripheral and small EU Member States are more likely to cut taxes to attract large amount of capital. However, this capital inflow worsen their current accounts and put them in a risky position. This made them more vulnerable to crisis as well. Therefore, tax competition in the EU may contribute to the causes for emergence of the crisis. Secondly, structure of tax system favouring debt for corporations and the housing market in the EU is also considered to have adverse effects on the economy prior to the crisis. Thirdly, tax harmonization steps taken by the EU is thought to constrained EU countries in terms of taking necessary measures to cope with the crisis. This exacerbates the effects of the crisis on the Member States' economies.

As a response to the crisis, measures both at the national level and EU level have been taken in the wake of the crisis. The EU has taken several initiatives to coordinate Member States' measures and tried to adopt joint interventions regarding taxation. One of the most important initiatives is the European Semester which aims to coordinate economic policies of the Member States. European Semester involves EC's analysis of each Member States' following year's budgets and its provision of recommendations. It also aims to provide guidance to the Member States for more sustainable, growth and job-friendly tax systems. Taxation is one of the key policies analyzed and monitoried by the EC in the context of European Semester.

The other initiative of the EC as a response to the crisis is the introduction of the financial transaction tax. The financial transaction tax is imposed to reduce speculative transactions and volatility and stabilize financial markets. In spite of the acceptance of ten Member States by now, the FTT is a standstill issue in the Council for the time being.

Apart from measures taken at EU level, the Member States individually has adopted diverse measures taking into account their own conditions and different characteristics of their tax systems. When the actions taken by the Member States considered in general, one can say that mostly discretionary tax cuts have been preferred by the Member States except for the ones whose budgets are not sufficient for cutting taxes. Moreover, some Member States generally lowered PIT rates to support household spending power while others have preferred to increase PIT rates in a varied scale. It can be also observed that in general, the Member States have decreased CIT rates and increased VAT rates in the wake of the crisis.

In this thesis, after providing historical, legal and political devolopments regarding the taxation matters in the EU, tax system in the EU thoroughly examined. In this respect this thesis contributes to the litetarature by providing a thorough analysis regarding the tax system in the EU and demonstrating its role in the build up of the sovereign debt crisis in the EU. It is concluded that although taxation policy can not be considered as one of the causes of the crisis, some tax features in the EU may have contributed to the build-up of the crisis. A further study focusing on the effects of tax measures which is provided in the last Chapter of the thesis on the economic recovery process is suggested in order to have better understanding the relation between tax policies and the crisis.

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APPENDICES

A. TURKISH SUMMARY/TÜRKÇE ÖZET

Vergilendirme, Avrupa Birliği gündeminde her zaman yer tutmuş olan ve önemi giderek artan bir konudur. Aslında vergilendirme Avrupa Birliğinin bütünleşmesi kapsamındaki konulardan biri değildir. Nitekim Avrupa Birliğini kuran Antlaşmalarda ortak bir vergilendirme politikası belirlenmesi öngörülmemiş, vergi politikası kararları üye ülkelerin kendi sorumluluklarına bırakılmıştır. Vergilendirmeye ilişkin kararların Avrupa Birliğinin uluslarüstü yetkilerini kullanarak oy çoğunluğu yöntemi yerine hükümetler arası müzakereler yoluyla oy birliği yöntemiyle alınması da vergilendirme konusunda üye ülkelerin yetkisinin üstünlüğünü göstermektedir. Oy birliği yöntemi Avrupa Birliğinde vergilerin uyumlulaştırılması açısından engel teşkil ettiğinden eleştirilmektedir. Zira vergilendirmeye ilişkin herhangi bir konuda her üye devletin onayını almak pek mümkün gözükmemekte ve bu nedenle vergi uyumlulaştırılmasına ilişkin kararlar alınırken tıkanıklıklar yaşanmakta ve kararlar genellikle çok zor alınamakta ya da alınamamaktadır.

Vergilendirme her üye ülkenin kendi yetki alanında bırakılsa da Avrupa Birliği iç pazarı üye ülkelerin birbirinden bir hayli farklı yapıdaki vergi sistemlerinin koordinasyonunu gerektirmektedir. Avrupa Birliğindeki farklı vergi sistemlerinin varlığından kaynaklanan olumsuz etkileri bertaraf etmek için vergi politikası kordinasyonuna ilişkin bir çok girişim yapılmıştır. Bu girişimler, Avrupa Birliği içindeki ticaretin herhangi bir şekilde olumsuz etkilenmemesi için çoğunlukla dolaylı vergilere ilişkin olmuştur. Yine de Birlik içinde kişilerin, sermayenin ve hizmetlerin serbest dolaşımı için gerekli olduğundan dolaysız vergilerin kordinasyonuna ilişkin de bazı adımlar atılmıştır. Bunun yanı sıra, Avrupa Birliği içinde daha yoğun görülen vergi rekabetinin zararlı etkilerini bertaraf etmek için dolaysız vergilerden biri olan kurumlar vergisinin farklı üye ülkelerdeki farklı oranlarının birilerine yaklaştırılması için girişimlerde bulunulmuştur. Vergilendirme politikası sadece politkayı yürüten ülkenin ekonomisinde değil, diğer üye ülkelerin ekonomisi üzerinde de etkisi olması bakımından önem taşımaktadır. Bir üye ülkede alınan vergi kararları diğer üye ülkelerin ekonomik çıkarlarını etkilemektedir. Bu açıdan, Avrupa Birliğinde ülkeler tarafından alınan vergi kararları sadece üye ülkeler değil, Birlik dışındaki diğer ülkeler tarafından da takip edilmektedir. Vergi politikasının Avrupa Birliği için önem arz etmesinin diğer bir nedeni de Avro Alanında yer alan üye ülkelerin para politikası yetkilerini Avrupa Merkez Bankasına devretmiş olmasıdır. Ortak para politikasının merkezi olarak Avrupa Merkez Bankası tarafından yürütülmesi nedeniyle Avro bölgesi ülkeleri para politikası araçlarını kullanarak ekonomiye yön verme kabiliyetlerini kaybetmişlerdir. Bu ülkeler ekonomiye müdehale etmek için sadece Maliye Politikası araçlarını kullanabilmektedir. Maliye politikası araçlarından biri olan vergilendirme de bu nedenle ortak para birimine geçişten sonra daha da önemli bir araç haline gelmiştir.

Avrupa Birliğindeki ülkeler vergi politikası uygularken Birlik içinde olmaları nedeniyle üç unsuru dikkate almalıdırlar. Bunların ilki vergi rakabetidir. Vergi rekabeti ülkelerin daha çok sermaye, yatırım, işgücü ve vergi geliri sağlamak için vergi azaltma davranışlarını tanımlar. Vergi rekabetinin ekonomiye katkısı olup olmadığı tartışmalı bir konudur. Vergi rekabetini savunanlara göre vergi rakabeti sonucunda düşen vergi oranları yabancı yatırımı ve de buna bağlı olarak istihdam seviyesini arttıracaktır. Bunun yanısıra, düşük vergi gelirleri nedeniyle kamu harcamaları düşecek ve harcama verimliliği sağlanmış olacaktır. Vergi rekabeti karşıtlarına göre ise vergi rekabeti fon ve yatırım akışı konusunda sapmalara yol açabilmekte, vergilerin istenen düzeyde elde edilmesine engel olup kamu harcamalarının finansmanında sorun teşkil edebilmekte, vergi yükünü hareketli vergi tabanından hareketsiz vergi tabanına kaydırabilmekteve vergi uyumunu olumsuz etkileyip vergiye uyma ve idari giderlerini arttabilmekte ve ülkelerin ekonomisine zarar verebilmektedir. Vergi rekabeti sadece Avrupa Birliği ülkeleri arasında değil tüm ülkeler arasında görülmektedir. Ancak

Avrupa Birliği üllkeleri arasındaki vergi rekabeti ortak pazar nedeniyle sermaye kontrollerinin azaltılması, döviz kuru dalgalanmalarının ve siyasi risklerin azalması neticesinde artan vergi arbitrajına bağlı olarak diğer ülkelerle olan vergi rekabetine göre daha güçlüdür. Ayrıca vergi rekabeti Avrupa Birliğinde bazı ülkelere avantaj sağlarken bazı ülkelerin aleyhinde sonuçlar doğurabilmektedir. Bu açıdan düşünüldüğünde üye ülkeler kendi sorumluluklarında olan vergi politikasını uygularken üye ülkeler arasındaki vergi rekabetini de dikkate almalıdırlar.

Vergi rekabetinin olumsuz etkilerini bertaraf etmek çin Avrupa Birliğinde birçok adım atılmıştır. AB ülkelerinin vergi politikası uygularken dikkate alması gereken diğer bir unsur olan vergi uyumlaştırmasına ilişkin çabalar tek pazarın gerekliliklerinden biri olup, bu yolla ülkeler arasındaki vergi rakabetinin önlenmesi de amaçlanmaktadır. Zira vergi uyumlaştırması ile sağlanacak benzer vergi oranları ülkeler arasında sermaye, işgücü, yatırımların vergi kaynaklı yer değiştirmesine engel olacaktır. Ancak Avrupa Birliğindeki vergi uyumlaştırması ülkelerin vergi kararları alırken yetkilerinin azalmasına neden olmaktadır. Nitekim bir maliye politikası aracı olarak ülkeler tarafından kullanılabilecek vergi politikasına ilişkin kararlar alınırken vergi uyumlaştırmasına için Avrupa Birliği düzeyinde kabul edilmiş vergi mevzuatına göre hareket edilmesi gerekmektedir.

Avrupa Birliğinde vergilendirme konusunda etkisi olan diğer bir unsur Avrupa Birliğinin İşleyişi Hakkında Anlaşmada yer alan katmanlı yetki ilkesidir. Bu ilkeye göre Birlik, bir eylemi ancak o eylemin amaçlarının üye devletler tarafından merkezi düzeyde veya bölgesel ve yerel düzeyde yeterli biçimde gerçekleştirilemeyeceği ve ayrıca bu eylemin Birlik düzeyinde daha iyi gerçekleştirilebileceği durumlarda harekete geçer. Avrupa Birliğinde varsayım yerel makamların toplumların ihtiyaçlarını bilmek konusuda ve kendi toplumlarına uygun vergi politkası uygulama konusunda yetkin olduklarıdır. Ancak bazı durumlarda merkezi vergilendirme ölçek ekonomisinden kaynaklanan bazı avantajlar ortaya çıkarabilir. Ya da ademi merkeziyetin neden olduğu bazı aksamalar katmanlı yetki ilkesine dayanılarak vergi uyumlulaştırması yoluyla engellenebilir. Vergi uyumlulaştırılması için Avrupa Birliğinde atılan adımlar bu yaklaşımın bir sonucudur.

2008 yılında başlayan küresel finansal kriz döneminde de vergilendirmeye büyük önem atfedilmiştir. Bilindiği gibi kriz Amerika Birleşik Devletlerinde ev fiyalarındaki artışların tersine dönmesi ile başlamış olup, Avrupa Birliğinde ilk olarak üye ülkelere uluslararası fon akışlarının durması ile birlikte hissedilmiştir. Ancak, krizi sadece dış kaynaklı olarak nitelendirmek mümkün değildir. Zira Avrupa Birliği'nin krizden çıkış sürecinin uzaması Avrupa Para Birliğinin tasarımından kaynaklanan bazı sorunların varlığının bir göstergesi olarak da değerlendirilebilmektedir. Krizin önemli bir sebebinin ortak para politikası olduğu düşünülse de, finansal bir kriz olması sebebiyle krizden çıkışta yine maliye politikası araçları kullanılmıştır. Maliye poltikası araçlarından biri olan vergi politikası araçları da çoğu üye ülke tarafından krizden çıkış için kullanılmıştır.

Avrupa Birliğinde kriz öncesi ve sonrası dönemdeki vergilendirme politikasının öneminden yola çıkılarak, bu tezde temel olarak vergilendirmenin krizin oluşumu üzerindeki etkisinin ortaya konulması amaçlanmıştır. Hangi vergi politikasının krizin oluşumunda etkisi olduğunun değerlendirlendirilmesinden sonra Avrupa Birliğinde krize karşı Birlik düzeyinde ve ülkeler bazında alınan vergi önlemleri incelenmiştir.

Diğer taraftan krizin öncesinde ve sonrasında izlenen vergi politikaları sadece Avrupa Birliğine üye ülkeleri değil Birlik dışındaki diğer ülkeleri, vergi uygulamalarının etkilerinin değerlendirilmesi, edinilen deneyimlerin gözlemlenmesi ve kendi vergi politikasına ilişkini karar alırken dikkate alınması bakımından yakından ilgilendirmelidir. Bu açıdan Avrupa Birliğinde krizin oluşumuna etkisi olabilecek vergi uygulamaları ile ülkelerce alınan vergi önlemleri diğer ülkelerin kriz stratejilerinde dikkate alınabilecektir.

Tezin giriş bölümünden sonra yer alan ikinci bölümünde Avrupa Birliğindeki vergi sistemleri ve vergi politkaları ile ilgili gerekli bilgiler verilmiş ayrıca vergi siteminin başarısı değerlendirilmiştir. Üçüncü bölümde Avrupa Borç Krizinin nedenleri ve oluşumu incelenmiş ayrıca vergi politikasının krizinin oluşumu üzerinde olabilecek etkileri ortaya konmuştur. Dördüncü bölümde ise Avrupa Birliği düzeyinde ve üye ülkelerce alınan vergi önlemleri incelenmiştir.

Avrupa Birliği Borç Krizinin oluşumuda vergi politikalarının etkisini görebilmek için önce Arupa Birliği ülkelerinin vergi sitemlerinin değerlendirilmesi gerekmektedir. Bu değerlendirmenin amacı Avrupa Birliğinde mali dengesizliklere yol açan olumsuzlukları tespit etmektir. Vergi sisteminin değerlendirmesi bir vergi sisteminden beklenen ve genel kabul görmüş özellikler dikkate alınarak yapılmıştır. Bu özellikler; vergi sisteminin gelir getiriciliği, esnekliği, adilliği, eşitliği ve ekonomik etkinliği olarak belirlenmiştir.

Avrupa Birliğindeki vergi sistemleri hasılat yaratma açısından değerlendirilirken öncelikle üye ülkelerin vergi gelirlerinin milli gelire oranlarına bakılmıştır. Bu oranlar çoğu zaman da eleştirildiği üzere oldukça yüksektir. Ancak bu yüksek vergi geliri oranı Avrupa Birliğinde gelir getirici bir vergi yapısı olduğunun göstergesi olmayabilir. Zira bu durum vergi mükellefleri üzerindeki yüksek vergi yükünden de kaynaklanıyor olabilir. Bu nedenle vergilerin gelir getirici özellikliğini anlayabilmek için üye ülkelerin vergi esnekliklerine de bakılmıştır. Vergi esnekliği vergi gelirlerindeki değişim oranının gayrisafi yurtiçi hasılanın büyüme hızındaki değişim oranına bölünmesiyle bulunur. Vergi gelir esnekliği verilerine göre Avrupa Birliğinde vergilerin esnek olduğu yani vergi gelirlerinin ekonomik değişikliklere cevap verecek yapıda olduğu sonucuna ulaşılmıştır. Bu, bazı ülkelerde geçerli olmasa da, Avrupa Birliğinde vergi sistemlerinin hasılat yaratma ve esneklik bakımından genel olarak iyi seviyede olduğunu göstermektedir.

Vergilendirmenin adilliği ve eşitliği tartışmalı bir konudur. Zira adillik ve eşitlik için herkesçe kabul edilmiş kesin bir tanımlama bulunmamaktadır. Bu çalışmada, Avrupa Birliği vergi sistemini adillik ve eşitlik bakımından değerlendirmek için farklı vergi gelirlerinin payı ve zımni vergi oranları karşılaştırılmıştır. Avrupa Birliğinde işgücü üzerinden alınan vergi gelirlerinin payı ve zımni oranları diğer vergilere göre oldukça yüksektir. İşgücünün, bir bireyin topluma yaptığı katkı olarak düşünüldüğünde işgücü üzerinden yüksek vergi alınmasının tüketim ve sermaye üzerinden vergi alınmasına kıyasla adil olmadığı değerlendirilmektedir. Öte yandan, gelir üzerinden alınan vergilerin taraftarlarına göre ise gelir, ödeme kabiliyetinin iyi bir göstergesi olup, gelir üzerinden alınan vergi mükleleflerin özel durumlarına göre ayarlanabilir olması bakımından en adil vergidir. Sonuç olarak Avrupa Birliği'ndeki gelir üzerinden alınan vergilerin yüksek olması bir görüşe göre adil ve eşit bir vergi sisteminin göstergesiyken diğer bir görüşe göre bunun tam aksidir. Dolayısıyla Avrupa Birliği ülkelerindeki vergi sistemlerinin adil ve eşitliği konusundaki yargı farklı bakış açılarına göre değişebilmektedir.

Vergi siteminin ekonomik etkinliği ise kaynakların tahisisine ve ekonomik birimlerin davranışlarına en az etkisi olan ve ekonomik kararlar üzerine asgari düzeyde saptırıcı etkiye sahip olan vergi sistemidir. İşgücü üzerinden alınan vergiler, ekonomik performans üzerindeki olumsuz etkileri nedeniyle piyasa üzerinde çarpıtıcı etkiye sahip olan vergilerden biri olarak değerlendirilir. Avrupa Birliğinde yüksek olan işgücü üzerinden alınan vergiler vergi sisteminin eonomik olarak etkin olmadığına işaret etmektedir. Ancak veginin adil olması ve ekonomik olarak etkin olması arasında bir çelişki söz konusudur. Adil vergilendirme sağlamaya yönelik vergi tedbirleri vergi sistemlerinin ekonomik etkinliğini olumsuz yönde etkileyebilir. Bu nedenle Avrupa Birliğindeki devletlerin işgücü üzerinden yüksek vergi alarak bir tercih olarak vergide adaleti sağlamak için verginin etkinliğinden ödün vermiş olabileceği de düşünülmektedir. Öte yandan, vergi tabanın genişliği de ekonomik etkin vergi sisteminin bir göstergesidir. Ancak Avrupa Birliğinde vergi tabanlarının sıkça uygulanan vergi muafiyeti, istisnası ve indirimleri nedeniyle dar olduğu bilinmektedir. Vergi uyum düzeyini görmek için, vergi mükelleflerinin ödemesi gereken vergi düzeyi ile fiili olarak toplanan vergi düzeyi arasındaki farkı gösteren vergi açığı düzeyinin incelenmesi gerekmektedir. Bu konuda daha önce yapılan çalışmalarda yer alan hesaplamalarda Avrupa Birliği üyesi ülkeler için hesaplanan vergi açığının Avrupa Birliği üyesi olmayan bir çok ülkeden daha yüksek olduğu görülmektedir. Bunlara ek olarak, Avrupa Birliğindeki vergi sistemlerindeki yüksek idari maliyet kaynakların verimli olarak kullanılmadığının da bir göstergesidir. Tüm bunlar bir arada düşünüldüğünde Avrupa Birliği ülkelerinin vergi sistemleri ekonomik etkin bir vergi sisteminin unsurlarını taşımamaktadır.

Yukarıda yer alan Avrupa Birliğindeki vergi sistemine ilişkin tüm değerlendirmeler üye ülkelerin ilgili vergi türündeki toplam değerlerinin ortalamalarına göre yapılmıştır. Ancak üye ülkelerin vergi sistemleri biribirinden bir hayli farklıdır. Avrupa Birliğindeki vergi sistemlerini daha iyi anlamak için ayrıca bu farklılıkların da göz önünde bulundurulması gerekmektedir.

Üye ülkelerin toplam vergi gelirlerinin gayrisafi yurtiçi hasılaya oranlarına bakıldığında, oranların birbirlerinden oldukça farklı olduğu görülmektedir. Bu farklılıklar tarihi, siyasi, ekonomik, sosyal koşullar ve yönetimsel yapılardan kaynaklanabilmektedir. Benzer coğrafya, tarihi gelişim ve nüfus özellikleri olan ülkelerde benzer vergi oranlarına rastlanmıştır. Örneğin İsveç ile Finalandiya, Letonya ve Litvanya, Bulgaristan ile Romanya benzer vergi hasılatı oranlarına sahiptir.

İşgücü üzerinden alınan vergilerin gayrisafi yurtiçi hasılaya oranları incelendiğinde üye ülkeler arasında görülen büyük farklılıkların dolaysız vergilerin Avrupa Birliğinde uymlulaştırılmamış olmamasından kaynaklandığı düşünülmektedir. İşçinin işverene toplam maliyeti ile işçinin eline geçen net ücret arasındaki farkı ifade eden vergi kamasının bileşenlerini kişisel gelir vergisi ile sosyal güvenlik katkılarının işçi ve işveren payları oluşturmaktadır. Bu bileşenlerin ülkeler arasında bir hayli farklılık arz ettiği gözlemlenmiştir. Doalyısıyla Avrupa Birliği ülkelerinde işgücü üzerinden alınan vergilerin oranlarının birbirlerinden farklı olması farklı oranlardaki sosyal güvenlik kesintileri ve kişisel gelir vergisi oranlarından kaynaklandığı değerlendirilmiştir. Çoğu Avrupa Birliği ülkesinde sosyal güvenlik kesintilerinin toplamı, kişisel gelir vergisinden fazladır.

Üye ülkeler için sermaye geliri vergilerinin gayrisafi yurtiçi hasılaya oranına bakıldığında da Avrupa Birliği ülkeleri için büyük farklılıklar olduğu dikkat çekmektedir. Sermaye geliri vergilerinin en büyük bileşeni olan kurumsal gelir vergisi hasılatının gayrisafi yurtiçi hasılaya oranı da ülkeler için farklılıklar arz etmektedir. Nispeten küçük ülkelerde kurumsal gelir vergisi hasılatının gayrisafi yurtiçi hasılaya oranının büyük ülkerinkine göre düşük olmasının, küçük ülkelerin vergi rekabetine daha açık olmasından kaynaklanabileceğini düşünülmüştür. Ayrıca daha gelişmiş refah ülkelerinde sermaye vergisinin bir bileşeni olan sermaye stoğu vergisinin daha yüksek olduğu gözlemlenmiştir.

Son olarak tüketim vergi gelirlerinin oranının üye ülkeler arasında diğer vergi türlerinin oranına göre daha yakın olduğu görülmektedir. Tüketim vergilerinin en büyük bileşeni katma değer vergisidir. Katma değer vergisinin hasılatının gayrisafi yurtiçi hasılaya oranındaki ülkeler arası farklılıkların tüketim vergisi hasılatındaki farklılıklarla benzerlik arz ettiği gözlemlenmiştir. Bu katma değer vergisinin tüketim vergisi içinde önemli yere sahip olduğunun göstergesidir. Bunun, Avrupa Birliğinde dolaylı vergilerin uyumlulaştırılmasına ilişin atılan adımların bir sonucu olduğu değerlendirilmektedir. Diğer taraftan, Avrupa Birliğindeki katma değer vergisinin uyumluluştırmasına ilişkin vergi mevzuatına rağmen yine de vergi hasılatı oranındaki farklılıklar olmasının, vergi mükellefleri için sağlanan çeşitli katma değer vergisi indirim, muafiyet ve istisna uygulamaları nedeniyle ortaya çıkan vergi erozyonunun bir sonucu olabileceği değerlendirilmiştir.

Avrupa Birliğinde vergi sistemlerini kapsamlıca inceledikten sonra, vergilendirmenin finansal borç krizi üzerindeki etkisini ortaya koymak için öncelikle krizin oluşma nedeni ve gelişimine bakmak gereklidir. Avrupa Birliğinde yaşanan kriz Avro Alanında tek para biriminin kabul edilemesine dayanır. Avrupa Merkez Bankası tarafından tüm Avro Alanı ülkeleri için belirlediği, olması gerekenden daha düşük seviyedeki düşük faiz oranı özellikle Güney Avro Alanı ülkelerinde borçlanmanın artmasına sebep olmuştur. Parasal politika araçlarının tek para biriminin kabul edilmesinden sonra kullanılamaması, mali dengesizlik yaşayan ülkelerin bütçe ve cari açıklarını azlatmak için para politikası önlemlerine başvuramaması sonucunu doğurmuştur. Avrupa Birliğinde mali istikrarsızlıklar yaşan ülkeler için diğer üye ülkelerden fon transferi mekanizmasının olmaması da krizin etkilerini derinleştirmiştir. Avrupa Birliği borç krizi ilk olarak Amerika Birleşik Devletlerinde yaşanan krizle tetiklenmiştir ancak krizin oldukça derin ve uzun süreli hissedilmesinin nedeni Amerika Birleşik Devletlerinde yaşanan krizin öncesinde de Avrupa Birliğinde var olan mali istikrasızlıktır.

Krizin nedenleri değerlendirildiğinde vergilendirmenin krizin bir sebebi olduğu söylenemez. Ancak Avrupa Birliğindeki vergi sistemlerinin kusurları ve uygulanan vergi politikalarının bazılarının krizin oluşumında payı olabileceği düşünülmektedir.

Krizin oluşumunda payı olabilecek vergi uygulamalarının ilki kurumsal finansmanda borçlanma yanlısı vergilendirmedir. Kurumsal borçlanma faizleri kurumlar vergisi matrahından düşülebilirken, hisse senedi getirilerinin vergi matrahında düşülmemesi vergi sisteminindeki borçlanma yanlılığını gösterir. Sonuç olarak kurumlar finansman sağlamak için hisse senedi ihraç etmek yerine borç almayı tercih ederler. Avrupa Birliğinde 2002 ile 2007 yılları arasındaki kurumsal borçlanmadaki artışın vergi sistemindeki kurumsal borçlanma yanlılığının bir sonucu olduğu değerlendirilmektedir.

Krizin nedenlerinde payı olan faktörlerden ikincisi konut piyasasını kayıran vergi uygulamalarıdır. Kriz öncesinde konut piyasasında oluşan fiyat balonları Amerika Birleşik Devletlerinde olduğu gibi Avrupa Birliğinde bazı üye ülkelerde de meydana gelmiştir. Bu fiyat balonlarının oluşmasının altında konut piyasasını kayırıcı vergilerin konut talebinde artışa neden olması da yatmaktadır. İpotekli krediler için vergi indirimleri, konut sahiplerine yönelik kayırıcı vergilendirme uygulamaları konut piyasasını kayırıcı vergi uygulamalaına örnek olarak verilebilir. Nitekim kayırıcı vergi uygulamalarının yaygın olduğu ülkelerde konut fiyatlarındaki dalgalanmaların daha fazla olduğu anlaşılmaktadır. Bu fiyat dalgalanmalarının ise krizin meydena çıkmasının nedenlerinden biri olan fiyat balonlarının oluşumunda etkisi olmuştur. Bu açıdan değerlendirildiğinde, ikincil düzeyde olsa da konut piyasasını kayıran vergi uygulamalarının krizin oluşumunda etkisi olduğu söylenebilir.

Bunların dışında, yukarıda incelenen Avrupa Birliğindeki vergilendirmeye ilişkin bazı unsurların da krizin oluşumunda payı olabileceği düşünülmektedir. Avrupa Birliğine üye ülkelerde diğer ülkelere göre daha güçlü olan vergi rekabeti ekonomiyi krize karşı daha hassas hale getirmiş olabilir. Zira, vergi yükü hareketli sermayeden hareketsiz sermaye ve işgücü üzerine kayması gelir eştisizliğine yol açmıştır. Gelir eşitsizliği bazı kesimleri krize karşı daha dayanıksız hale getirmiştir. Ayrıca nispeten küçük olan Avrupa Bilriği ülkelerinin diğer ülkelerden sermaye çekebilmek için vergi oranlarını düşürmesi ile dış ülkelerden çektikleri sermaye akımları cari hesap dengeleri üzerinde olumsuz etkilemiş olabileceği değerlendirilmiştir. Dolayısıyla vergi rekabati bu ülkelerde mali dengesizliğe yok açarak Avrupa Birliği içinde mali istikrarı olumsuz etkilemiştir. Krizde etkisi olabileceği düşünülen diğer bir unsur Avrupa Birliğinde vergi uyumlulaştırmasıdır. Vergi uyumlulaştırması, üye ülkelerin gerekli vergi tedbirlerini alma konusunda yetkilerini sınırlandırmış olduğundan, bu da krizin etkilerinin daha derin hissedilmesine sebep olmuştur.

Vergilerin yatırım, tüketim ve istihdam gibi ekonomik faaliyetler üzerindeki etkisinden dolayı, devletler kriz dönemlerinde vergi politikasını ekonomiye istikrar kazandırmak için bir araç olarak kullanırlar. Ancak, vergi politikası her ne kadar Avrupa Birliği ülkelerinin kendi uhdelerinde olsa da kendi vergi politikalarını uygularlarken iki şekilde sınırlandırılmışlardır. Bu sınırlandırmalardan ilki İstikrar ve Büyüme Paktının hükümlerinden kaynaklanmaktadır. Pakt hükümlerine göre bütçe açığının GSYİH'ya oranı %3'ü, kamu borçlarının GSYİH'ya oranı is %60'ı geçmemelidir. Üye ülkeler vergi politikalarını uygularken bu kriterlerin aşımına sebep olacak kararlar almamaları gerektiğinden, bu onlar için bir sınır teşkil etmektedir. Diğeri is Avrupa Birliğinin vergi uyumlulaştırmaya yönelik AB mevzuatıdır. Bunun bir örneği vergi uyumlulaştırması kapsamında katma değer vergisi için belirlenen alt ve üst limitlerdir.

Avrupa Birliğine üye ülkelerin birbiriyle etkileşimleri ve birbirlerine bağlılıkları nedeniyle krizden çıkış stratejisi sadece milli düzeyde değil Avrupa Birliği düzeyinde de olmuştur. Avrupa Birliği düzeyinde üye ülkelerin vergileme önlemlerini koordine etmek ve ortak hareket etmek için bazı girişimlerde bulunulmuştur. Bunlardan ilki Avrupa Sömestri sistemidir. Bu sistemin uygulamasına 2010 yılında başlanmış olup amacı üye ülkelerin ekonomi politikalarını koordine etmektir. Avrupa Sömestırı üye ülkelerin bir sonraki yıl bütçelerinin Avrupa Komisyonu tarafından incelenmesi ve Komisyon tarafından tavsiyelerde bulunmasına yönelik bir uygulamadır. Böylece üye ülkeler daha sürdürülebilir, büyüme ve istihdam odaklı bir vergi politikası için yönlendirilmiş olmaktadır. Avrupa Komisyonunum krize karşı bir diğer girişimi finansal işlem vergileridir. Finansal işlem vergileri spekülatif işlemleri ve fiyat dalgalamalarını azaltmak ve finansal piyasaları istikarlı hale getirmek amacıyla alınmaktadır. On üye ülkenin kabul etmesine rağmen, finansal işlemler vergisi şu anda Avrupa Komisyonunda bekleyen bir konudur ve halen uygulamaya geçmemiştir.

Avrupa Birliği düzeyinde alınan önlemler dışında, üye ülkeler kendi özel durumlarını ve ekonomik şartlarını dikkate alarak krize karşı çeşitli vergilendirme önlemleri almıştır. Üye ülkeler tarafından alınan önlemeler düşünüldüğünde bütçeleri yeterli düzeyde olamayanlar hariç olmak üzere genellikle vergi indirimi yaptıkları görülmektedir. Ayrıca, bazı üye ülkeler kişisel gelir vergisi oranını farklı düzeylerde arttırırken diğer bazı ülkeler hanehalkı satınalma gücünü arttırmak için kişisel gelir vergisini düşürmüştür. Krizi takip eden yıllarda üye ülkelerin genellikle kurumlar vergisini düşürdüğü ve KDV'yi arttırdığı gözlemlenmiştir.

Ülkelerin kişisel gelir vergisi, kurumsal gelir vergisi ve katma değer vergisi kapsamında aldıkları vergi önlemleri krizi takip eden 2008-2013 yılları arasındaki dönem için incelendiğinde, ülkelerin vergi oranlarını değiştirmenin yanı sıra çok çeşitli vergi önlemlerine de başvurduğu görülmektedir. Bir çok Avrupa Birliği ülkesinin krizden çıkış sürecinde yürüttüğü vergi politikalarının istikrarlı olmadığı, bir yıl alınan vergi önleminin sonraki yıllarda sürdürülmediği gözlemlenmiştir. Çalışmada Avrupa Bilriği ülkelerinin krize karşı aldıkları çeşitli vergi tedbirlerinden de örnekler verilmiştir.

Sonuç olarak, Avrupa Birliği ülkelerinin vergi sistemleri genel olarak değerlendirildiğinde bir takım olumsuz olarak değerlendirirlebilecek özellikler taşıdığı ortaya konmuştur. Ayrıca Birlik üyesi bir ülke olmanın vergilendirme açısından olumsuzluklar doğurduğu da değerlendirilmiştir. Vergi sistemlerinde Avrupa Birliği ülkeleri arasında farklılıklar olsa da, genel olarak vergilendirme konusunda bazı uygulamaların krizin oluşumda etkisi olan nedenlere katkı sağladığı sonucuna varılmıştır. Krize karşı Birlik düzeyinde alınan önlemlerin odağında vergilendirme yer almamıştır ancak çeşitli girişimlerle vergilendirmeye ilişkin koordinasyon sağlanmaya çalışılmıştır. Ülke bazında alınan önlemler ise her ülke için farklılık arz etmiştir. Ülkelerin kriz sonrası dönemde birbirleriyle istikrarsızlık teşkil eden bir çok farklı vergi politkası uygulamaları yürüttüğü, bu vergi politikalarını koordine atmek için Avrupa Birliği düzeyinde yapılan girişimlerin etkilerinin ise sınırlı düzeyde kaldığı değerlendirilmiştir.

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