The objective of this paper is to analyze fiscal revenues registered by the European Union member states in order to determine groups with similar fiscal structures, their composition and to identify the similarities that characterize European countries in this respect. The research conducted in this paper is relevant especially for countries as Romania, which is in the process of adopting the European single currency, as it allows us to determine which countries are similar in terms of fiscal structure so that the comparison is carried out mainly with those countries. The analysis of European fiscal structures allows a better identification of tax preferences within the European Union and highlights the types of taxation that would allow leeway in implementing long term fiscal strategies, which could lead to improvements in macroeconomic dynamics registered by each member state and also at Union level.

Keywords: fiscal revenues, indirect taxation, direct taxation, social contributions
JEL Classifications: E62, H20, H71
1. Introduction

Provisions regarding fiscal policy coordination were introduced through the Maastricht Treaty and further enforced through the Stability and Growth Pact, Europe 2020 Strategy and the new European economic governance. The Maastricht Treaty imposes limits that countries as Romania that are in the process of adopting the euro currency must fulfil. These conditions regard fiscal deficits that can not exceed 3% Gross Domestic Product (GDP) and public debt that must be maintained within the limit of 60%GDP. The Stability and Growth Pact imposes similar conditions for euro area countries, maintaining therefore the same budgetary and sustainability rules that should allow monitoring budget balances and public debts. Europe 2020 Strategy enforced the need for better coordination in respect to fiscal policies, but without imposing clear rules that European Union (EU) member states should follow. As a response to economic crises’ effects, the fiscal framework was improved through the new economic governance that includes additional rules, which address not only macroeconomic imbalances but also fiscal aggregates. These rules concern mainly fiscal policy results, strengthening the surveillance of budgetary balances, public debts and government expenditures’ growth. Although additional rules have been put in place, aimed at limiting structural deficits and reducing the growth rate of public expenditures, the national authorities maintain fiscal sovereignty. The decision regarding fiscal structures remains as their disposal as long as the budgetary projects were approved and fiscal and budgetary outcomes are maintained within the limits imposed by the European fiscal framework (Hurduzeu, Lazar, 2014). This freedom gives fiscal authorities in each country a wide space in the use of fiscal policy so that they can decide on the proper use of fiscal structure as to allow fiscal instruments to fulfil their role internally, without affecting the stability of the other Member States of the European Union. This is particularly important in an economic union, in which the economies
are interconnected, as recording major budgetary, macroeconomic or sustainability imbalances can affect other participating countries. However fiscal rules set at European level create an extremely diverse picture of the European Union economies in terms of fiscal structures, as each member states is opting for a specific fiscal structure that is considered to be most appropriate to the internal needs, the results being also influenced by the collecting capacity of each country.

2. Literature Review
Fiscal policies have been widely used during the last years as instruments for restoring soundness and creating the path towards sustainability. The flexible fiscal framework that allows member states to decide on tax rates, hence the sustainability conditions are fulfilled, has determined many differences between the European Union member states and also many changes in fiscal structures. The issue of fiscal structures has been studied however, not only on the lights of the effects of the economic crisis, but mostly trying to determine similar trends within the European Union and to determine the state and dynamics of tax convergence between countries. Significant studies had been conducted by Bernardi (2003) that focused on tax systems and tax reforms. Tax burden convergence had been studied by Delgado (2009) and Esteve et. al (2000) that focused also on the European Union economies. Clear convergence tendencies among the EU 27 member states regarding taxation was determined by Vintila et al (2012) that concluded on similar trends after analysing fiscal systems and fiscal pressure in the European Union.

3. Research Methodology
The objective of this paper is to analyze fiscal revenues registered by the European Union member states in order to determine groups with similar fiscal structures, their composition and to identify the similarities that characterize European countries in this respect. The
research conducted in this paper is relevant especially for countries as Romania, which is in the process of adopting the European single currency, as it allows us to determine which countries are similar in terms of fiscal structure so that the comparison is carried out mainly with those countries. The analysis of European fiscal structures allows a better identification of tax preferences within the European Union and highlights the types of taxation that would allow leeway in implementing long term fiscal strategies, which could lead to improvements in macroeconomic dynamics registered by each member state and also at Union level. In order to meet the above mentioned objectives, we conducted comparative analysis of data for all 28 Member States, taking into account the fiscal revenues, indirect taxation revenues, direct taxation revenues and social contributions revenues. The source for all data used within this study is EUROSTAT database.

4. Results and discussion
In terms of total fiscal revenues, there are significant differences between the member states of the European Union, fiscal revenues ranging from 27.2% GDP in Lithuania to 48.9% GDP in Denmark (for year 2012). The lowest share of fiscal revenues to GDP was collected by Lithuania, followed by countries such as Bulgaria, Latvia and Slovakia. Romania is one of the European Union member states where the tax burden is low compared with the situation in other countries (Figure 1). The level of fiscal revenues being of 28.3% GDP, Romania is in the group of countries that receive the least direct and indirect tax revenues (including social contributions) relative to GDP. The reduced fiscal revenues highlights a lower tax burden in these countries, compared to other European states, but also raises questions about the capacity to collect in these countries. States with a high tax burden that collect fiscal revenues above the EU average (40.3% GDP) are: Italy, Finland, Sweden, Austria, France,
Belgium and Denmark. In the case of the latest of these countries, fiscal revenues account for nearly half of GDP. The analysis of the level of fiscal revenues shows a large variation between member states of the European Union. Five European countries, including Romania, register fiscal revenues below 30% GDP. The largest group consists of 16 countries with tax burden of 30% to 40% GDP.

Countries with high tax burden, which exceeds the EU average, registered fiscal revenues between 44% and 49% of GDP. In terms of tax burden similarity, Romania resembles primarily with Slovakia. The level of fiscal revenues is also similar to the one in countries as Latvia and Ireland.

**Figure 1**

**Fiscal revenues in the European Union in 2012, % GDP**

Source: *EUROSTAT, author’s calculations*

In the analysis of fiscal structures is important the preference for a particular type of tax, namely direct taxation, indirect taxation or social contributions.
As regards indirect taxation, the European Union is also split by large differences in terms of the degree of tax collection. Budgetary revenues collected through indirect taxation vary between 10% and 19% of GDP. States with the lowest revenues are: Slovakia, Spain, Lithuania, Germany, Ireland, Latvia and the Netherlands (12% GDP). At the opposite side are: Hungary, Croatia and Sweden, countries in which indirect tax revenues exceed 18% GDP. Interestingly, Hungary, which is in the group of countries that are financed significantly through indirect taxation, in terms of tax burden is below the EU average. The situation is similar in Croatia, a country where fiscal revenues as a share of GDP are below the level recorded in Hungary. Although there are significant differences between Member States of the European Union in terms of indirect taxation revenues, there is one aspect that characterize most countries. Value added tax remains the main tax rate, adding the largest share of budgetary revenues in indirect taxation revenues, having also an important role in overall taxation.

In Romania indirect taxation is the source of budget revenues that accumulate under 13% GDP. The total level of taxation is reduced, so are the direct tax revenues. Budgetary resources in Romania through indirect tax receipts fluctuated during the period 2000-2013, due to the influence of factors such as: changes in gross domestic product, changes regarding tax rates, changes in the degree of collection, but also due to external factors that affected all economies. The level of tax revenues from indirect taxes, in Romania, was approximately 12.7% in 2013 GDP, a share similar to the one recorded in 2000 (12.2% GDP). However, during this period considerable fluctuations were registered. The lowest point was recorded in 2010, when fiscal revenues were significantly influenced by the economic crisis and its effects on the economy. However in Romania the downward trend started in 2006. During 2006-2010, indirect taxation had registered a downward trend continuously from
12.9% of GDP to 10.5% of GDP. From 2010 until 2012, there has been a change in the trend, budget revenues obtained through indirect taxation growing in value. This trend change coincides with the change of VAT in 2010, from 19% to 24%, which proved to be positive in terms of the level of budget revenues collected through this tax. VAT change is similar to that of other member states of the European Union, that like Romania, have resorted to increasing the rates of indirect taxation in an attempt to collect additional budget revenues, as to cover the budgetary expenditure required to support the economy and reduce budgetary deficits, without compromising sound public finances.

Direct taxation, comprising of current taxes on wealth, income is subject to many differences in the European Union. Due to different tax rates and different collecting capacities, there are significant gaps between countries, direct taxation revenues varying from 5% GDP in Lithuania to 31.8% GDP in Denmark. However, the European Union average is 13.1% GDP, being more representative for the European economies, the difference between Denmark and Sweden that registers also a high share of direct taxation to GDP being of almost 5 percentage points. In this respect also, Romania is more similar with Slovakia, but also with Bulgaria, Croatia and Hungary (Figure 2).
Figure 2

Direct taxation revenues in the European Union in 2013, %GDP

Source: EUROSTAT, author’s calculations

Total social contributions are the criteria that divide European Union countries in three categories, taking into consideration public revenues collected through this type of taxation. As the revenues vary from 1% GDP to 20% GDP, we divided EU member states in three groups, according to three intervals, as follows. The first group consists of countries in which social contributions revenues are less than 10% GDP. This group is formed by Denmark, Ireland, Malta, Sweden, Bulgaria, Latvia, United Kingdom, Romania and Cyprus. The second group is represented by countries in which social contributions revenues account for more than 10% GDP, but are less than the EU average, of 14.1% GDP (Figure 3).
The third group is represented by states with social contributions revenues of more than 15% GDP, which can account up to almost 20% GDP. These states are mostly high tax burden countries, except for Slovenia that is not similar in that respect. Is this highlighted the situation registered in Denmark, were social contributions account for less than 2% GDP, most of the public revenues being registered through direct taxation. Denmark is also the European member state that registered the highest tax burden in the European Union. Romania is a low tax burden country, compared the other countries in the European Union. It registers low levels of both indirect and direct taxation revenues. Social revenues are also below the European Union average, but not as low as in the above mentioned situation. In this

Figure 3
Social contributions revenues in the European Union in 2013, %GDP

Source: EUROSTAT, author’s calculations
respect Romania is more similar to United Kingdom, Cyprus and Latvia.

Conclusions
The primary data analysis revealed differences between the European Union member states regarding the overall level of taxation. In some cases public revenue are more than double than in other European Union member states. Although there are many differences between Member States, similarities in terms of fiscal structures and general trends can also be observed, such as the importance of VAT in total fiscal revenues. Also, many EU member states collect most revenues through social contributions. The European Union remains a space with high tax burden. Despite the efforts undertaken in the years prior to the crisis in order to reduce fiscal pressure, during the last years most countries resorted to increased tax rates in order to cover the necessary expenditure and regain or maintain the soundness of fiscal policies. Compared to the other European Union member states, Romania is a low tax burden country. It registers low levels of both indirect and direct taxation revenues, social contributions revenues being also below the European Union average. The low level of fiscal revenues can be explained partially through low tax rates, but partially highlights some issues regarding the collecting capacity.

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