

A SURVEY ON THE TAX POLICY IN EU

Adrian Mihai INCEU
Dan Tudor LAZĂR
Eugenia Ramona NANDRA
Radu NECHITA

Adrian Mihai INCEU

Associate professor, Department of Finance, Faculty of Economics and Business Administration, Babes-Bolyai University, Cluj-Napoca, Romania

Tel/fax: 0040-264-431361

Email: inceuadrian@yahoo.com

Dan Tudor LAZĂR,

Associate professor, Department of Public Administration, Faculty of Political, Administrative and Communications Sciences, Babes-Bolyai University, Cluj-Napoca, Romania

Tel/fax: 0040-264-431361

Email: danlazar@apubb.ro

Eugenia Ramona NANDRA,

PhD candidate, Department of Finance, Faculty of Economics and Business Administration, Babes-Bolyai University, Cluj-Napoca, Romania

Tel: +0040-264-418652

Email: ramonanandra@yahoo.com

Radu NECHITA,

Lecturer, Department of European Institutions Management, Faculty of European Studies, Babes-Bolyai University, Cluj-Napoca

Tel: +0040-264-418652

Email: radunechita@gmail.com

Abstract

In this study we make an analysis of the major aspects concerning the tax policy in the EU countries. For revealing a global image on tax policy within the EU we have to consider in our analysis the overall tax burden, the structure of tax revenues (direct taxation, indirect taxation, social contributions) and the main types of taxes: corporate tax, personal tax, consumption tax. This article is based on a dynamic analysis of taxation using as a main tools descriptive and empirical analysis. The empirical study tries to determinate the correlation between tax burden and the implicit tax rate on capital and business income, consumption and labor through the panel methodology. This analysis is based the data delivered by the EUROSTAT. The main results obtained from the empirical study is that there are major differences concerning the correlation between total taxes as percentage of GDP and the implicit tax rate of profit, consumption and labor.



*Transylvanian Review
of Administrative Sciences,
21 E/2007, pp. 61-72*

Introduction

This paper provides an overview of some of the more common broad features of tax systems in the EU countries. After the last EU enlargement the interactions between the tax systems of the Member States are of growing importance. Member State tax policies can have spillover or externality effects, positive or negative, on other Member States. Similarly, differing abilities to provide net fiscal benefits to residents may impair the efficient allocation of productive factors across Member States. Furthermore, separate tax mechanisms increase administrative and compliance complexity and costs for governments and taxpayers, and constrain Member States in pursuing redistributive tax policies. These considerations have important implications for the design and coordination of tax systems in the EU. We can sustain following this analysis that the EU tax policy is at the border of tax harmonization and tax competition. For indirect taxation (VAT and excises) a partial degree of harmonization was realized in the last decades. That was the result of an intensified process of tax competition that had takes place between member states concerning the tax base and the tax rates for VAT and excises. Now the efforts are made to harmonization concerning the direct taxes, especially the corporate taxation to avoid the possible distortions. But in the field of direct taxation a partial degree of harmonization is more difficult to be realized because the member states aren't too happy to renounce to their sovereignty and to their right to establish the corporate tax rate that is more proper for their purposes. The most controversial problem is to establish the common consolidate tax base for corporate taxation. It is expected until 2008 to be issued a Directive for the common consolidate corporate tax base. Overall tax levels in the EU are much higher than those in the US. This reflects the high demand for income transfers through the budget in most EU Member States. Consumption and labor, in particular, are taxed heavily. Subsequently, the broad equivalencies and differences between various taxes are clarified.

The tax-to-GDP ratio rose steadily in most EU countries up to the late 1990s, largely reflecting a sustained expansion of public sector commitments to welfare provision. Since the late 1990s, many EU countries have cut tax rates. However, the tax burden in the EU area remains much higher than in most other economies. The tax mix is also different, with high tax wedges on labor and a stronger reliance on consumption and environmentally related taxes. Recent measures targeted at lowering the tax burden on labor, in particular at the lower end of the income scale, have had promising results in terms of employment growth, showing how tax design is an important influence on countries' performances. Finally, the free movement of goods, people and capital within the EU area, combined with the Euro introduction, has also affected the design of national tax systems and has brought to the fore a number of international taxation issues.

THEORETICAL BASIS

The 1992 Maastricht Treaty and later the Stability and Growth Pacts created a framework in which many EU countries have implemented fiscal consolidation efforts. In many EU countries, scaling back public spending was achieved by curtailing

public sector pay, adopting strict replacement rules for civil servants, and cutting or postponing public investment. Meanwhile, the tax-to-GDP ratio continued to rise in most EU countries¹.

EU Member States have carried out important reforms of their tax systems determined by some factors like unemployment rate, ageing population. In doing this, they have also faced the difficulty of finding alternative tax bases to finance their expenditures. Also, Member States have undertaken efforts to rationalize and simplify their tax systems. Almost all efforts have gone in the direction of broadening the tax base in order to reduce the tax rates. This potentially brings economic benefits but also bring forward the question of a possible trade-off between efficiency and fairness.

Finally, globalization and ageing have raised the issue of the financing of the social models in the European countries. In particular, the constraints imposed by these challenges have focused the debate around the need for finding alternative and robust tax bases.²

METHODS AND RESULTS

Descriptive analysis

The level of tax burden in the European Union is considered very high. For our analysis we make a comparison between EU, US and Japan using as the main relevant indicator the ratio of taxes and actual social contributions to GDP. In 2005, the tax-to-GDP ratio in the European Union amounted to 39.6 % in the GDP (weighted average), about 13 percentage points of GDP above those recorded in the United States and Japan. Tax-to-GDP ratios in the European Union are high not only compared with the U.S and Japan but generally; among the major non-European OECD members, only New Zealand has a tax ratio that exceeds 35% of GDP³.

As we can see from the next figure there are wide differences in tax levels across the Union. These differences do not only reflect social choices such as public or private provision of services, e.g. old age and health risk protection, but also technical factors.

Already before the 2004 enlargement, the Union showed wide variety of tax ratios. It included a number of Member States with tax ratios not too far from the 50 % mark, like the Scandinavian countries and Belgium, as well as several low-tax Member States, notably Ireland, Spain, the UK and Greece. For the EU-15, the gap in the ratio from the top ranking (Sweden) to the bottom (Ireland) amounts to over 20 percentage points of GDP.

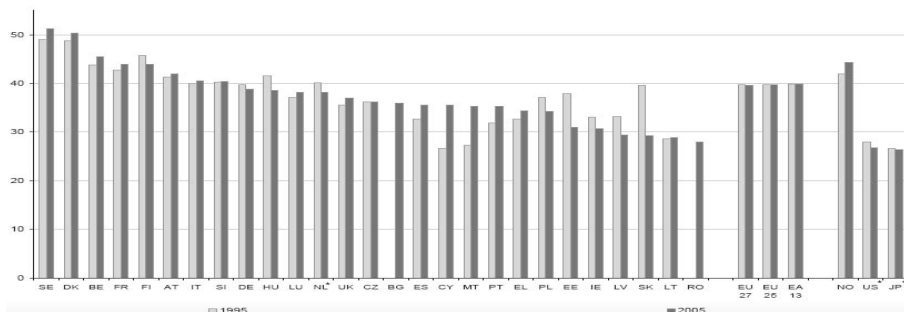
After 2004 accession of ten new Member States resulted in additional diversity as two of the new Member States, Lithuania and Latvia, had tax-to-GDP ratios even lower

¹ Joumard, I., *Tax Systems in European Union Countries*, OECD, www.ssrn.com, 2001

² Carone, G., Nicodeme, G., Schmidt, J.H., *Tax revenues in the European Union: Recent trends and challenges ahead*, European Commission, Directorate-General for Economic and Financial Affairs, Brussels, Belgium, 2007

³ Eurostat, *Taxation Trends in the European Union*, European Commission, ec.europa.eu/eurostat, 2007

than Ireland's; the 2007 accession of Romania has added to this, given that the country is the lowest taxing of all 27 Member States. Given the usually significantly lower tax ratios in the accession countries, EU enlargement therefore resulted in a decline for the EU mean value. In the arithmetic average, the total tax-to-GDP ratio of the new Member States is almost seven percentage points lower than the average of the EU-15.



Source: Taxation Trends in the European Union, 2007

Figure 1: Tax to GDP ratio in EU countries, the US, Japan, and Norway, 1995, and 2005, in % (ranked by 2005 level)

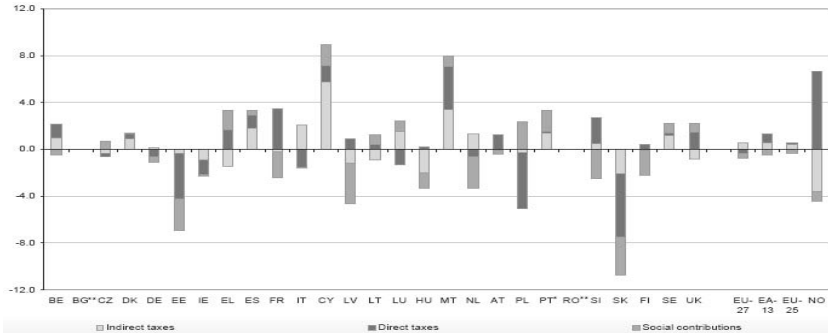
There are substantial differences in the total tax burden not only between the EU-15 and the new Member States but also within this group. One may distinguish two groups of countries, one composed of Slovenia (40.5 %) and Hungary (38.5 %) with a level exceeding the EU-27 average (37.4 %) and the remaining new Member States: from the Czech Republic (36.3 %, i.e. one point below average) to Romania (28.0 %, i.e. nine and a half percentage points below average). Generally we can affirm that in terms of the tax ratio, the geographically peripheral countries (with the exception of the Nordics) tend to display lower taxation: the UK and Ireland, Portugal and Spain, Cyprus and Malta, the Baltic States and Poland, Slovakia and the newest two Member States Romania and Bulgaria have low tax ratios, whereas the ‘continental’ countries in the core as a rule have higher taxation: France, the Benelux, Germany, Austria, Czech Republic, Austria and Hungary, Slovenia exceed the average or are at least quite close to it.

There are many reasons why government revenue from taxes and social contributions varies from year to year as a percentage of GDP. A more in-depth analysis than the one presented here would be needed to explain the causes of such variations in particular countries. However, in general the main reasons are changes in economic activity (affecting levels of employment, sales of goods and services etc.) and in tax legislation (affecting tax rates, thresholds, exemptions etc.). It should be noted that, even using accrual methods of recording the effects of changes in legislation or economic activity tend to have a delayed impact on tax revenue.

There are three main categories or types of compulsory levies – indirect taxes such as value added tax (VAT), direct taxes on income and wealth, and social contributions for paying into social security funds or other social insurance schemes.

Taking the whole 1995-2005 period, tax revenue as a percentage of GDP rose slightly in Greece, but a different trend is observed if the shorter time scale of 2000-

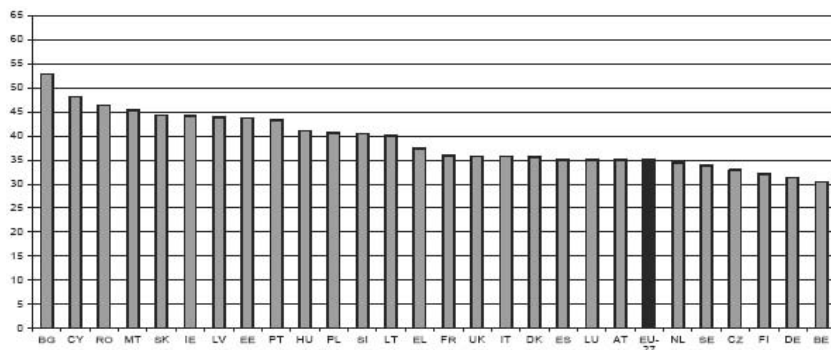
2005 is used, the ratio falling over this period by 3.3 percentage points to 36.7% in 2005. In Germany and Finland, too, an increase in the ratio from 1995-2000 was followed by a fall of over 3 percentage points to 40.2% and 44.0% respectively in 2005. In the Czech Republic the opposite trend occurred, the ratio falling in 1995-2000 before moving up 2.9 percentage points between 2000 and 2004, though it eased in 2005 to 36.3%. Data are available only since 2000 for Bulgaria, where the ratio has increased each year since 2002 to reach 34.8% in 2005.



Note: *) PT, direct taxes 2004. **) BG, RO no data
Source: Commission Services

Figure 2: Evolution by major type of taxes, 1995-2005, differences in % of GDP

Generally, the new Member States have a different structure compared to the EU-15 countries; in particular while most old Member States raise roughly equal shares of revenues from direct taxes, indirect taxes, and social contributions, the new Member states often display a substantially lower share of direct taxes on the total. Because of differing national tax structures, these three components vary considerably in importance among countries in terms of their tax revenue generated. One notable feature is that, in the new Member States generally (including Bulgaria and Romania), there is less reliance on direct taxes as a form of government revenue than in the EU as a whole.⁴



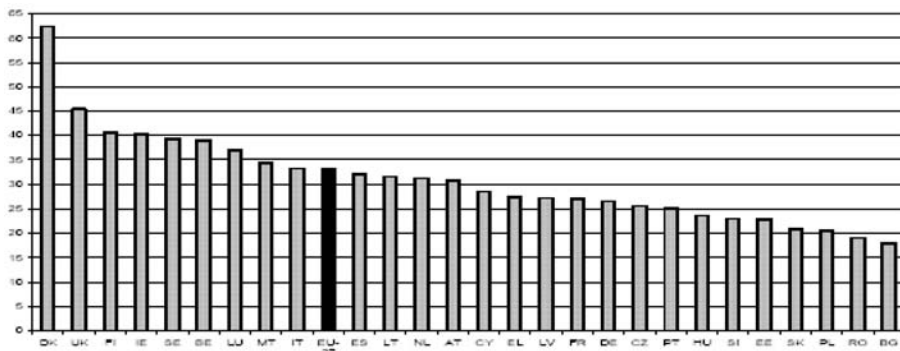
Source: Eurostat

Figure 3: Share of indirect taxes in total taxation (2005).% total

⁴ Wozowczyk, M., Paternoster, A., *Tax revenue in the EU*, Eurostat, 2007

From the figure above we can see that the share of indirect taxes in total taxation is much higher in the NMS 12 compared to the EU 15; in the top are Bulgaria, Cyprus and Romania and at the opposite end Finland, Germany and Belgium.

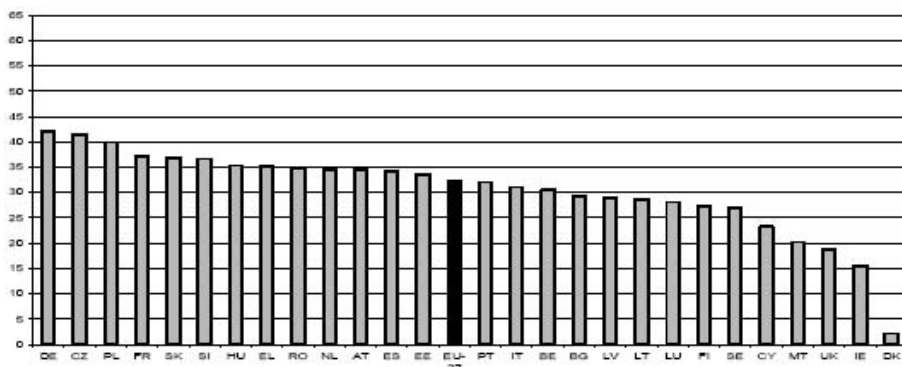
For the direct taxation the situation is changing radically and in top we can find Denmark with the most important share, followed by the UK and in the last position are Romania and Bulgaria.



Source: Eurostat

Figure 4: Share of direct taxes in total taxation (2005)

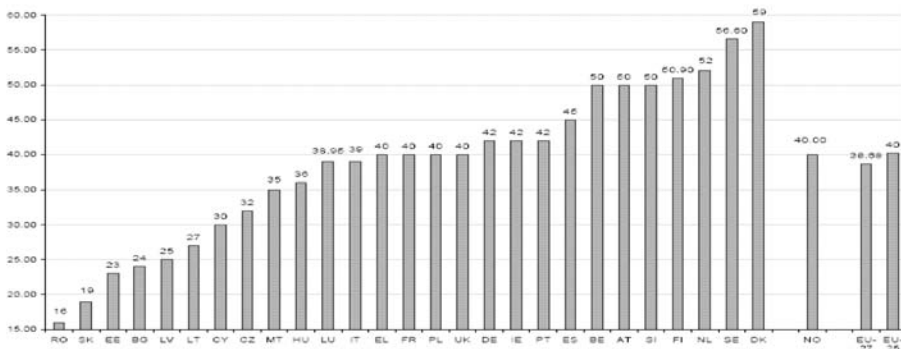
For the social security share in total taxation the lowest level we can find in Denmark and the top position is occupied by Germany. On average the indirect taxation have the high share in taxation in EU 27.



Source: Eurostat

Figure 5: Share of social security contributions in total taxation (2005)

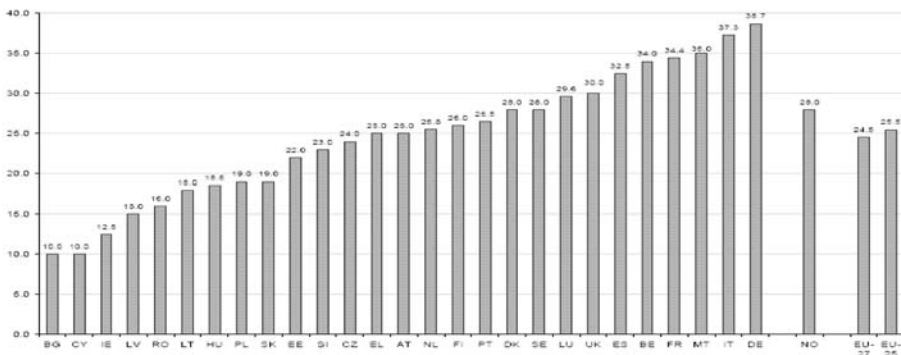
Social security contributions constitute a third important source of taxes. EU Member States increasingly relied on social security contributions until the mid-1990s, with a change in 1996-1998 when the need to decrease labor costs materialized in a decline in social security contributions.



Source: Commission Services. Note: Without surcharges. DK, FI, SE: State taxes plus municipality taxes

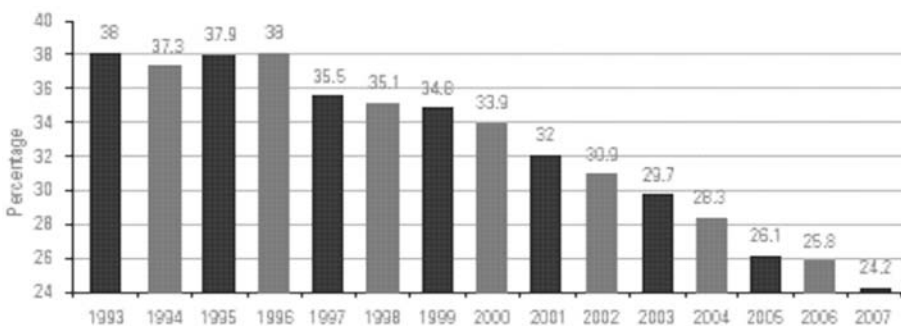
Figure 6: Top statutory personal income tax rate, 2006 income, in %

The higher statutory corporate tax rate can be find in Germany, Italy, Belgium, Spain, France, Malta, where is above 30% and in the opposite side with the lower corporate tax rate is countries like Bulgaria, Cyprus, Latvia, Romania, with rates between 10 and 16 %. As we can see from the Table 4 in EU 27 the average statutory tax rate is higher with 5 percentage points comparative with the new member states NMS 12.



Source: Commission Services

Figure 7: Top statutory tax rate on corporate income, 2007 income, in %



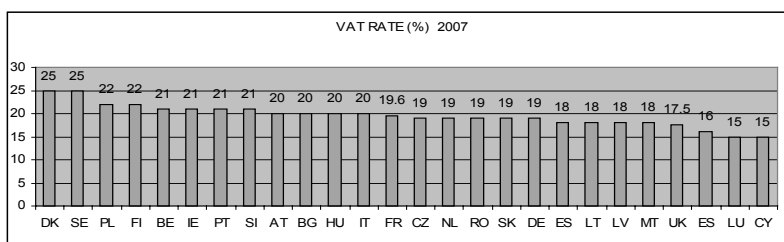
Source: KPMG

Figure 8: EU Corporate Tax Rate, 1993-2007

In recognition of this EU governments have focused instead on modernizing their VAT system to better reflect current business environment. For example, the review of the VAT rules for the finance and insurance sectors is intended to create clearer legislation which is easier to administer and comply with. From this it flows that VAT revenues from these sectors will be more stable and tax leakage will be minimized.

Much of the legislative debate has been focused on how to alter the system to better reflect taxation where consumption actually occurs, principally for services that can be supplied at a distance (e.g., e-commerce, telecommunications etc.). The outcome of any new legislation in this area, which could come into effect as early as 2010, will see a shift of VAT revenue from one country to another, principally from low-rate countries to high rate countries⁵.

One of the advantages for governments of indirect taxes over corporate profits tax is that they supply a steady flow of funds throughout the year, rather than lump sums at widely spaced intervals. Keeping systems up to date with tax authorities' information requirements is a major cost and resource issue for the business sector. As indirect taxes become more important to governments, so regulators are intensifying their scrutiny of companies' tax systems to satisfy themselves that tax revenues are not at risk.



Source: KPMG

Figure 9: VAT Rate in EU countries, 2007

Empirical analysis

In this study we make a panel analysis on two groups of countries: the old member states-EU 15 and the new member states - NMS 12 and we try to compare the most important correlation between the level of taxation and the major implicit tax rates: on capital and business income (ITCBI), consumption (ITC) and labor (ITL).

This analysis is based the data delivered by the Eurostat, for 2000-2005 with annual data.

Implicit tax rate (ITRs) measure the actual or effective average tax burden directly or indirectly levied on different types of economic income or activities that could potentially be taxed by Member States. Note, however, that the final economic incidence of the burden of taxation can often be shifted from one taxpayer to another

⁵ KPMG, *KPMG's Corporate and Indirect Tax Rate Survey 2007*

through the interplay of demand and supply: a typical example is when firms increase sales prices in response to a higher in corporate income taxation; to a certain extent the firms' customers end up bearing part of the increased tax burden. The ITRs cannot take these effects into account, as this can only be done within a general equilibrium framework. Despite this limitation, ITRs allow the monitoring of tax burden levels over time (enabling the identification of shifts between the taxation of different economic functions e.g. from capital to labor) and across countries. Alternative measures of effective tax rates exist, which, using tax legislation, simulate the tax burden generated by a given tax, and can be linked to individual behavior. However, these 'forward-looking' effective tax rates do not allow the comparison of the tax burden implied by different taxes; nor do they facilitate the identification of shifts in the taxation of different economic income and activities.

The ITR on consumption is defined as all consumption taxes divided by the final consumption expenditure of private households on the economic territory.

The ITR on employed labor is defined as the sum of all direct and indirect taxes and employees' and employers' social contributions levied on employed labor income divided by the total compensation of employees working in the economic territory. The ITR on labor is calculated for employed labor only (so excluding the tax burden falling on social transfers, including pensions). Direct taxes are defined as the revenue from personal income tax that can be allocated to labor income. Indirect taxes on labor income, currently applied in some Member States, are taxes such as payroll taxes paid by the employer.

The overall implicit tax rate on capital is computed as the ratio between revenue from all capital taxes, and all (in principle) potentially taxable capital and business income in the economy. It aims at representing the average tax burden falling on capital income.

ITR on capital and business income which excludes taxes on wealth or the capital stock but simply measures the average effective tax burden on private sector investment and saving, as a ratio between taxes paid on capital income streams and the aggregate of capital and business income.

Our analysis is taking into consideration the evolution of tax burden and the correlation with the most important implicit tax rate on business income, consumption and labor. Using the panel methodology we make the analysis on two groups of countries: old members of EU (EU 15) and new members of EU (NMS 12). The results are different because the tax burden evolution is more significant in some of the NMS 12, like Slovakia with 10% point's reduction, followed by Estonia with almost 7.5% point's, while in the EU 15 the most significant reduction was in Ireland with 2.3% point's.

For the EU 15 our study reveal that the evolution of all the three rates is significant in determining the tax burden evolution, and the correlation is robust. If the implicit tax rate on business income is changing with one unit the tax burden will change in the same direction with 0.21. Also if implicit tax rate on consumption is changing with one unit than the tax burden will be change with 0.53. With 0.55 if the implicit tax rate on labor will increase with one unit.

<i>The regression results for NMS 12</i>		<i>The regression results for EU 15</i>	
Independent Variables		Independent Variables	
Dependent Variable		Dependent Variable	
Total Taxation		Total Taxation	
Constant	17.1	Constant	2.92
ITCBI	0.34***	ITCBI	0.21***
ITC	0.22*	ITC	0.53***
ITL	0.16***	ITL	0.55***
R ²	0.95	R ²	0.99
Usable Observations	37	Usable Observations	78
<i>Notes: ***Significant at 1%; **Significant at 5%; *Significant at 10%;</i>		<i>Notes: ***Significant at 1%; **Significant at 5%; *Significant at 10%;</i>	

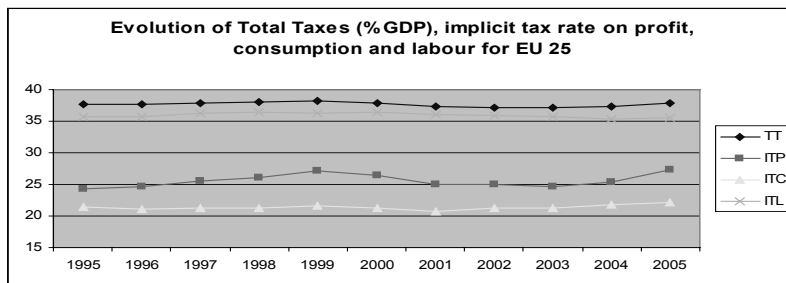
For NMS 12 the most significant implicit tax rate for total taxation evolution is the ITCBI. If this rate is changing with one unit the total taxation in GDP it will change in the same direction with 0.34. These results are obtaining even in the NMS 12 it was an important decrease of statutory corporate tax rate, but the implicit tax rate is not decreasing, in some countries was increasing because in the same time with nominal tax reduction many of the previous exemption were eliminated thus the tax base was broadened. This means that the effective tax burden is not lower and also the total taxation to GDP is not decreasing. But this study has some limits and this result is not reflecting accuracy the situation because for many countries the methodology of implicit tax rate is not the same within the European Union and for some countries the data are missing.

Furthermore it is important to note that a cut in the statutory rate that is offset by an equivalent widening of the tax base will leave the ITR on capital unchanged. This is not a limitation of the indicator, but rather an advantage given that the ITR aims at measuring the effective tax burden. This property of the indicator may contribute to explain the relatively limited fall in the ITR on capital in the last years despite significant EU wide reductions in statutory corporate tax rates.

Interpreting the ITRs on capital one should bear in mind that the bases used for the computation are, particularly in the new Member States, not only narrower but

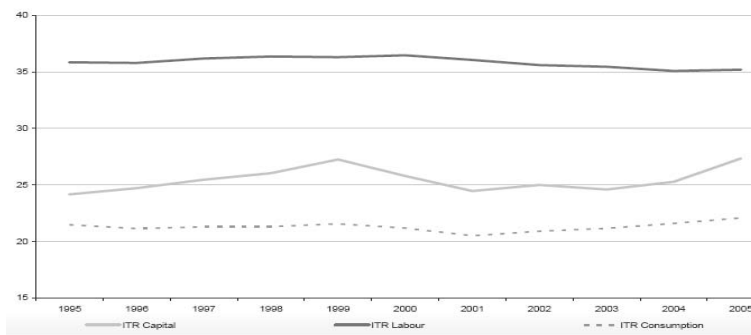
also more volatile than GDP as a whole, and thus subject to wide swings. Hence, the overall volatility of this ratio is significantly higher than that of the other ITRs. A degree of caution is therefore advisable when making cross-country comparisons or comparisons of one Member State with the EU averages.

The least influence on tax burden is determined by ITL, only with 0.16 it will be the change of tax burden when ITL is changing with one unit.



Source: Eurostat

Figure 10



Source: Commission Services

Figure 11: Development of implicit tax rates for the EU average, 1995 - 2005, in %

Conclusions

Since the enlargement of the EU, we see an increasing diversity of tax regimes as compared to the situation that existed in the “EU-15”. An example is the zero rate of taxation on undistributed corporate profits as applied in Estonia. In general, we have seen reductions in corporate tax rates, accompanied by a broadening of tax bases. But we see no evidence at present of a “race to the bottom” situation involving Member States trying to attract tax bases at the expense of the other EU Member States.

Another example of the diversity of tax regimes is the increasing political interest in “flat tax” systems. Furthermore, the tax levels and systems in those EU Member States that have, or are contemplating, flat taxes are quite different.

In principle, replacing a comprehensive progressive income tax system with a flat tax system could improve the efficiency and the simplicity of the tax system.

But these gains are uncertain and they would depend critically on the details of the reform. A number of these gains could be made simply by modifying existing income tax systems.

The Commission is required to check the compatibility of national law with Community law. Member States must respect the rules on nondiscrimination and fiscal state aids and the rules established under the Code of Conduct against harmful tax competition in the business tax area.

But under the principle of subsidiarity, Member States are free to implement the tax system they wish according to their economic and social objectives, as long as this tax system respects Community law.

The most important measure to eliminate the diversity of company taxation in the EU (which causes several distortions and obstacles for the cross-border business activities) is introducing a Common Consolidated Corporate Tax Base (CCCTB) for the EU-wide activities of multinationals until the end of 2008. The minimum degree is a harmonized tax base which should be based on a single set of tax accounting principles using the International Financial Reporting Standards (IFRS) as a starting point.⁶ The directive could not include every last detail about a CCTB, and would have to be flexible enough to allow the tax base to be changed to keep up with developments.

References

1. Boss, A., Do We Need Tax Harmonization in the EU?, Kiel Institute Working Paper No. 916, March 1999.
2. Carone, G., G. Nicodeme, and J.H. Schmidt, *Tax revenues in the European Union: Recent trends and challenges ahead*, European Commission, Directorate-General for Economic and Financial Affairs, Brussels, Belgium, 2007.
3. Halkos, G.E., and N.C., Kyriazis, *Is tax competition harmful and is the EU an optimal tax area?*, 2006, *Journal Law and Economics*, no. 21, p. 163-177, Springer Science & Business Media 3.
4. Joumard, I., *Tax Systems in European Union Countries*, OECD, 2001, available on line at www.ssrn.com.
5. Nandra, E.R., *Tax Competition in the European Union –Evidence from Panel Data*, International Conference MIBES, Larissa, Greece, 2007.
6. Wozowczyk, M., Paternoster, A., 2007, *Tax revenue in the EU*, Eurostat.
7. Eurostat, *Taxation Trends in the European Union*, European Commission, 2007, available online at ec.europa.eu/eurostat.
8. KPMG, 2007, *KPMG's Corporate and Indirect Tax Rate Survey 2007*.

⁶ Nandra, E.R., *Tax Competition in the European Union –Evidence from Panel Data*, International Conference MIBES, Larissa, Greece, 2007