TAXATION TRENDS IN EUROPEAN UNION

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Abstract
This work contains an economic analysis of the tax rates and revenue ratios of the European Union Member States. The paper also includes the structural reform initiatives that have been high on the tax policy agenda in last period. Despite the fairly short span of time, a wide spectrum of tax reforms was implemented or are going to be implemented (the Common Consolidated Corporate Tax Base, the key reform initiatives including dual income taxes and flat taxes, the elimination of harmful tax competition, the simplification and rationalization of the current VAT rates structure or key elements contributing to the establishment of the VAT anti-fraud strategy within the EU).
The main objective of this paper is to present a fairly view of the structure, level and trends of taxation in the European Union over the last ten years.

Keywords: *the overall tax ratio, tax revenue, implicit tax rates, harmful tax competition, tax reform*

Introduction

Based for the most part on the information given from the reports "Taxation Trends in the European Union" edited each year by European Commission, this paper describes and evaluates developments with respect to tax systems of the European Union Member States over the last years and discusses selected structural reform initiatives that have been taken lately or are going to be taken in the communitarian space.

Tax systems are continuously changing as Member States align their tax systems with evolving economic, political, and administrative conditions. A central policy issue in recent years has been the implications for the stability of tax bases of economic integration and the ever increasing mobility of capital, labor, and goods and services. The specific policy challenges differ widely across countries: developing countries focus, in particular, on attracting investment and raising revenue to promote development and developed countries are predominantly preoccupied by safeguarding their tax bases to preserve the welfare state and to meet the challenges of ageing.

Having a complete view of the structure, level, and trends of taxation and of the reform initiatives taken and those that are likely to be important in the coming years is useful both for corporations (that helps its with finding solutions to emerging challenges in growing and maintaining tax function efficiencies and productivity) and governments (that helps its to elaborate appropriate macroeconomic policies).

The paper content is divided into three parts. Part I examined the level and the distribution of the overall tax burden by major type of taxes. Part II presents the economic classification of taxes and conducts a comparison of implicit tax rates between Member States. Part III discusses selected specific commonalities in actual tax reforms implemented around the European Union over the last ten years.

Literature Review

There are many publications with helpful background on tax-related issues. I will enumerate only ones that I used in my work:

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1. The annual report "Taxation Trends in the European Union", edited by European Commission, contains statistics and an economic analysis of the tax systems of the European Union Member States. In the 2007 edition, the tax systems of each of the 27 Member States are compared within a unified statistical framework (the ESA95 harmonized system of national and regional accounts), at different levels of aggregation and classification of tax revenues. The framework utilized makes it possible to assess heterogeneous national taxation systems on a comparable basis.

2. Taxes in Europe Database (http://ec.europa.eu/taxation_customs/taxinv/welcome.do)**,** a tool launched by European Commission on the internet, contains information on about 600 most important taxes in the EU Member States. Using a methodology agreed with the Member States, this database includes information about the main aspects of each tax, as well as economic and statistical data such as the revenue generated. The database allows comparison among Member States.

3. Taxation Paper No 10/2007 - A history of the "tax package", written by Philippe Cattoir presents an overview of the EU "Tax Package", comprising the Code of Conduct for business taxation, the Directive on taxation of savings income and the Directive on taxation of interest and royalty payments. Its main objective is to offer a comprehensive view of the negotiation process, and a broad overview of the content of the package, as well as pending policy issues. This then allows drawing a number of lessons concerning the approach followed and the outlook for future European initiatives on direct taxation.

*4. Tax Policy: Recent Trends and Coming Challenges***,** written by John Norregaard and Tehmina S. Khan and edited by International Monetary Found (WP/07/274), provides an overview of the key economic factors that shape tax policy reform in many high-income countries, developing countries, and/or transition economies. The paper describes global and regional developments with respect to tax rates and revenue ratios over the last some 20 years.

5. Activities of the European Union in the Tax Field in 2007, edited by European Commission, presents all the European Commission communications related to personal and corporate taxation, value added tax, excise duties and other indirect taxes, tax administration, tax avoidance and evasion measures.

Theoretical background

A. Formulas:

1. The overall tax ratio is the ratio between total tax revenues and GDP

2. The top statutory personal income tax rate reflects the tax rate for the highest income bracket without surcharges. For Denmark, Finland and Sweden the municipal income tax is also included.

3. Taxation of corporate income is not only conducted through the corporate income tax (CIT), but, in some Member States, also through surcharges or even additional taxes levied on tax bases that are similar but often not identical to the CIT. In order to take these features into account, the simple CIT rate has been adjusted for comparison purposes. Adjustments have been carried out for Germany, Estonia, France, Italy, Lithuania and Portugal.

4. Implicit tax rates (ITR) in general measure the effective average tax burden on different types of economic income or activities, i.e. on labour, consumption and capital, as the ratio between revenue from the tax type under consideration and its (maximum possible) base.

5. The ITR on consumption is the ratio between the revenue from all consumption taxes and the final consumption expenditure of households.

6. The ITR on labour is calculated as the ratio of taxes and social security contributions on employed labour income to total compensation of employees.

7. The ITR on capital is the ratio between taxes on capital and aggregate capital and savings income.

B. Statistical dates:

Table A. Total tax revenue (including social security contributions) in % of GDP

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average 1995-2005	Difference 1995-2005
Belgium	43,8	44,4	44,9	45,5	45,5	45,2	45,2	45,3	44,9	45,0	45,5	45,0	1,7
Bulgaria	x	x	x	x	x	33,1	32,1	31,0	33,6	35,3	35,9	33,5	x
Czech Republic	36,2	34,7	35,0	33,3	34,0	33,8	34,0	34,8	35,7	36,8	36,3	35,0	0,1
Denmark	48,8	49,2	48,9	49,3	50,1	49,4	48,4	47,8	48,0	49,3	50,3	49,0	1,5
Germany	39,8	40,7	40,7	40,9	41,7	41,9	40,0	39,5	39,7	38,8	38,8	40,2	-1,0
Estonia	37,9	35,6	35,9	34,9	34,6	31,3	30,2	31,1	31,5	31,4	30,9	33,2	-6,9
Ireland	33,1	33,1	32,4	31,7	31,8	31,7	29,8	28,5	29,1	30,5	30,8	31,1	-2,3
Greece	32,6	33,0	34,3	36,3	37,3	37,9	36,6	36,7	35,5	34,3	34,4	35,4	1,8
Spain	32,7	33,1	33,2	33,0	33,6	33,9	33,5	33,9	33,9	34,5	35,6	33,7	2,9
France	42,7	43,9	44,1	44,0	44,9	44,1	43,8	43,1	42,8	43,1	44,0	43,7	1,3
Italy	40,1	41,8	43,7	42,5	42,5	41,8	41,5	40,9	41,3	40,7	40,6	41,6	0,5
Cyprus	26,7	26,4	25,8	27,7	28,0	30,0	30,9	31,2	33,1	33,5	35,6	29,9	8,9
Latvia	33,2	30,8	32,1	33,7	32,0	29,5	28,5	28,2	28,5	28,5	29,4	30,4	-3,8
Lithuania	28,6	27,9	31,0	32,0	31,8	30,1	28,7	28,4	28,2	28,3	28,9	29,4	0,3
Luxembourg	37,1	37,6	39,3	39,4	38,3	39,1	39,8	39,1	38,5	37,9	38,2	38,6	1,1
Hungary	41,6	40,6	39,0	39,0	39,1	38,5	38,9	38,5	38,4	38,6	38,5	39,2	-3,1
Malta	27,3	25,8	27,5	25,3	27,1	28,2	30,4	31,9	31,8	34,2	35,3	29,5	8,0
Netherlands	40,2	40,2	39,7	39,4	40,4	39,9	38,3	37,7	37,4	37,7	38,2	39,0	-2,0
Austria	41,3	42,6	44,0	44,0	43,7	42,8	44,7	43,7	43,1	42,8	42,0	43,2	0,7
Poland	37,1	37,2	36,5	35,4	35,3	34,0	33,6	34,3	33,4	32,6	34,2	34,9	-2,9
Portugal	31,9	32,8	32,9	33,1	34,1	34,3	33,9	34,7	35,1	34,2	35,3	33,8	3,4
Romania	x	x	x	x	x	x	27,8	28,2	27,6	27,3	28,0	27,8	x
Slovenia	40,2	39,1	38,0	38,8	39,2	38,6	38,9	39,3	39,5	39,6	40,5	39,2	0,2
Slovakia	39,6	38,0	35,0	35,6	34,2	32,9	31,6	31,9	30,9	29,7	29,3	33,5	-10,3
Finland	45,7	47,0	46,3	46,1	45,8	47,2	44,6	44,6	44,0	43,4	43,9	45,3	-1,8
Sweden	49,0	51,5	52,0	52,7	53,3	53,4	51,4	49,7	50,2	50,5	51,3	51,4	2,2
United Kingdom	35,6	35,1	35,7	36,7	37,1	37,6	37,3	35,8	35,6	35,9	37,0	36,3	1,4
EU-27 weighted average	39,7	40,4	40,7	40,5	41,0	40,7	40,0	39,3	39,3	39,2	39,6	40,0	-0,1
EU-27 arithmetic average	37,7	37,7	37,9	38,0	38,2	37,7	36,8	36,7	36,7	36,8	37,4	37,4	-0,4
EA-13 weighted average	39,9	40,9	41,3	41,1	41,6	41,3	40,4	40,0	39,9	39,6	39,9	40,5	0,0
EA-13 arithmetic average	38,6	39,2	39,5	39,6	39,9	39,9	39,3	39,0	38,8	38,7	39,1	39,2	0,5

Source: European Commission

Note: x - data not available
EU-27 European Union (27 Member States)

EA-13 Euro area (Belgium, Germany, Ireland, Greece, Spain, France, Italy, Lithuania, Netherlands, Austria, Portugal, Slovenia, Finland)

Table B. The structure of the tax revenues by major type of taxes (as% of Total Taxation)

	Indirect taxes		Direct taxes		Social contributions	
	1995	**2005**	**1995**	**2005**	**1995**	**2005**
Belgium	29,4	30,5	37,9	39,0	32,7	30,5
Bulgaria	x	52,8	x	17,9	x	29,3
Czech Republic	33,9	32,9	26,5	25,6	39,6	41,5
Denmark	34,9	35,6	63,5	62,5	2,2	2,2
Germany	30,2	31,3	27,5	26,6	42,3	42,1
Estonia	36,6	43,7	28,9	22,8	34,5	33,5
Ireland	43,9	44,2	41,2	40,3	15,0	15,4
Greece	44,1	37,4	23,8	27,5	32,1	35,1
Spain	32,6	35,1	31,4	32,0	36,0	34,1
France	37,6	36,0	19,7	27,1	43,5	37,2
Italy	31,0	35,8	37.5	33,2	31,5	31,0
Cyprus	42,7	48,1	32,9	28,7	24,4	23,2
Latvia	42,4	43,9	21,5	27,2	36,1	28,9
Lithuania	43,5	40,0	30,4	31,6	26,1	28,6
Luxembourg	31,9	35,0	41,6	36,9	26,5	28,1
Hungary	42,8	41,0	21,3	23,6	35,9	35,3
Malta	46,1	45,4	31,1	34,4	22,8	20,3
Netherlands	29,3	34,4	31,2	31,2	39,5	34,4
Austria	35,8	35,0	28,3	30,7	35,9	34,4
Poland	38,3	40,6	31,6	20,5	30,5	40,0
Portugal	43,5	43,3	26,6	x	29,9	32,1
Romania	x	46,3	x	19,1	x	34,6
Slovenia	39,5	40,5	17,7	23,0	43,0	36,6
Slovakia	38,0	44,3	29,0	20,8	35,6	36,9
Finland	31,0	32,1	38,2	40,7	30,8	27,2
Sweden	32,8	33,8	40,8	39,3	26,4	27,0
United Kingdom	39,6	35,8	43,1	45,4	17,3	18,8
EU-27 weighted average	33,8	35,0	31,4	33,1	35,0	32,2
EU-27 arithmetic average	37,3	39,1	32,1	31,1	30,8	30,3
EA-13 weighted average	32,8	34,4	28,5	30,0	38,9	35,9
EA-13 arithmetic average	35,4	36,2	31,0	32,4	33,7	32,2

Source: European Commission

Table C. The structure of the tax revenues by economic function (as % of Total Taxation)

	Consumption		Labour		Capital	
	1995	2005	1995	2005	1995	2005
Belgium	24,6	24,9	55,6	52,3	19,8	22,8
Bulgaria	x	51,3	x	33,0	x	15,8
Czech Republic	31,6	31,4	48,2	49,2	20,3	19,4
Denmark	31,6	31,9	55,9	49,3	13,0	19,0
Germany	25,9	26,1	60,0	57,4	14,0	16,5
Estonia	32,9	41,8	55,8	49,9	11,3	7,9
Ireland	39,2	37,1	40,9	34,2	19,8	28,7
Greece	41,3	34,9	36,1	40,8	22,6	24,3
Spain	27,3	27,5	50,0	45,1	22,7	28,6
France	28,2	25,8	53,8	53,0	18,8	21,3
Italy	25,9	24,8	45,1	50,3	29,0	24,9
Cyprus	37,4	41,4	38,6	31,8	24,0	26,8
Latvia	36,5	42,0	52,0	48,3	11,2	9,6
Lithuania	40,6	37,9	46,8	50,7	12,6	11,6
Luxembourg	27,1	28,5	41,8	40,7	31,1	30,7
Hungary	41,9	37,8	49,9	50,8	8,3	11,6
Malta	43,0	40,9	34,0	31,3	23,1	27,8
Netherlands	28,0	31,8	54,2	46,5	17,9	21,7
Austria	28,1	28,9	57,2	55,4	14,7	15,8
Poland	34,2	35,8	45,9	40,7	20,3	24,6
Portugal	39,4	x	41,6	x	19,0	x
Romania	x	44,3	x	39,1	x	16,5
Slovenia	38,5	34,5	56,3	53,6	5,4	12,0
Slovakia	36,8	42,7	41,9	43,0	24,0	16,2
Finland	30,3	31,2	57,1	53,1	12,6	15,7
Sweden	27,5	25,5	62,5	60,8	10,0	13,7
United Kingdom	34,7	30,9	39,3	39,0	26,0	30,1
EU-27 weighted average	28,5	28,1	52,6	49,8	19,1	22,3
EU-27 arithmetic average	33,3	34,3	48,8	46,1	18,1	19,8
EA-13 weighted average	27,3	26,8	54,1	52,0	18,8	21,4
EA-13 arithmetic average	31,1	29,7	50,0	48,5	19,0	21,9

Source: European Commission

Table D. The ITR by type of economic activity in EU-27 and EA-13 (arithmetic average)

Implicit tax rates (%) on:	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
- Consumption											
EU-25	21,5	21,1	21,3	21,3	21,6	21,2	20,8	21,2	21,3	21,7	22,1
EA-13	20,9	21,0	21,3	21,5	22,0	21,6	21,2	21,4	21,3	21,6	21,8
- Labour											
EU-25	35,8	35,8	36,2	36,4	36,3	36,4	36,1	35,9	35,7	35,3	35,6
EA-13	36,0	36,4	36,6	36,8	36,6	36,8	36,4	36,3	36,5	36,2	36,8
- Capital											
EU-25	24,2	24,7	25,5	26,0	27,2	26,5	25,0	25,0	24,6	25,3	27,3
EA-13	23,4	25,2	26,1	26,7	28,9	29,4	28,2	28,2	28,1	28,4	30,4

Source: European Commission

Table E. The ITR by type of economic activity in EU Member States

	Implicit tax rates (%) on					
	Consumption		Labour		Capital	
	1995	2005	1995	2005	1995	2005
Belgium	20,6	22,2	43,8	42,8	25,3	34,5
Bulgaria	x	24,6	x	34,2	x	x
Czech Republic	22,1	22,1	40,5	41,3	26,4	23,2
Denmark	30,5	33,7	40,1	37,3	30,0	46,5
Germany	18,8	18,1	39,4	38,7	22,4	23,3
Estonia	20,6	23,8	39,2	33,1	24,7	8,1
Ireland	24,9	27,2	29,7	25,6	25,9	41,4
Greece	17,6	17,0	34,1	38,0	11,8	15,4
Spain	14,6	16,3	28,9	30,1	20,3	36,0
France	21,5	20,2	41,2	42,1	31,2	38,9
Italy	17,4	16,9	37,8	43,1	25,9	29,0
Cyprus	12,1	19,3	23,1	24,6	x	x
Latvia	19,3	20,4	39,2	36,2	x	x
Lithuania	17,7	16,5	34,5	35,9	15,1	11,4
Luxembourg	21,1	24,3	29,3	29,5	x	x
Hungary	30,9	26,5	42,6	40,5	x	x
Malta	15,4	19,2	19,0	22,1	x	x
Netherlands	23,2	25,4	34,4	30,7	21,2	21,2
Austria	20,3	21,3	38,7	40,9	25,6	23,1
Poland	21,3	19,8	35,9	35,5	21,5	22,2
Portugal	19,1	x	28,1	x	18,8	x
Romania	x	18,5	x	26,7	x	x
Slovenia	25,1	24,5	38,9	38,5	x	x
Slovakia	27,1	21,9	39,5	33,7	33,5	14,4
Finland	27,6	27,6	44,3	42,0	28,5	26,7
Sweden	27,9	28,1	48,4	46,4	17,5	x
United Kingdom	20,1	18,7	25,8	25,5	33,3	37,6

Source: European Commission

Table F. Current flat taxes (%)

Country	Year of the last reform	Personal income tax			Corporate income tax		
		Before reform	After reform	In 2008	Before reform	After reform	In 2008
Estonia	1994	16-33	26	22	35	26	22
Lithuania	1994	18-33	33	24	29	29	15
Latvia	1997	10-25	25	25	25	25	15
Slovakia	2004	10-38	19	19	25	19	19
Romania	2005	18-40	16	16	25	16	16
Czech Republic	2008	12-32	15	15	24	22	22
Bulgaria	2008	20-24	10	10	10	10	10

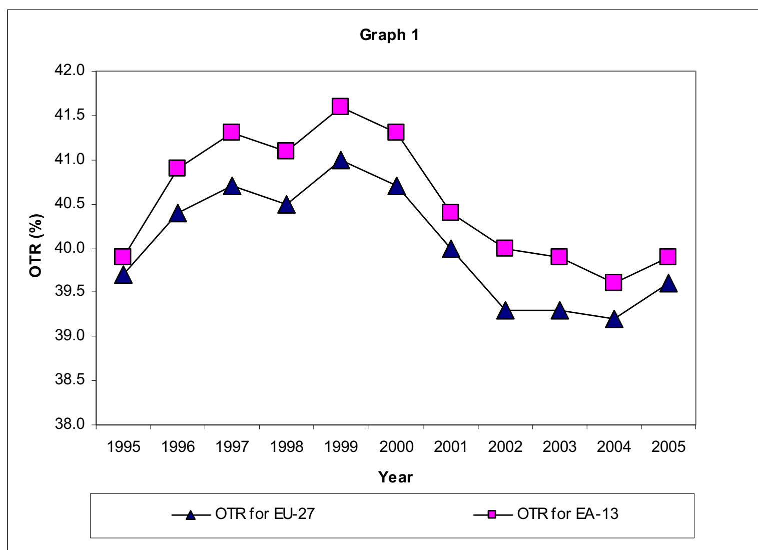
Source: Keen, Michael, Yitae, Kim, and Varsano, Ricardo. 2007. The "Flat Tax(es)": Principles and Evidence. *International Tax and Public Finance Journal* No 4/2007

Part I. The overall tax ratio and the structure of the tax revenues by major type of taxes in the European Union

The European Union (EU) is a high tax area compared with other international regions. In 2005 ***the overall tax ratio*** (OTR) in the 27 Member States (EU-27) amounted to 39.6 %, up from 39.2% in 2004.

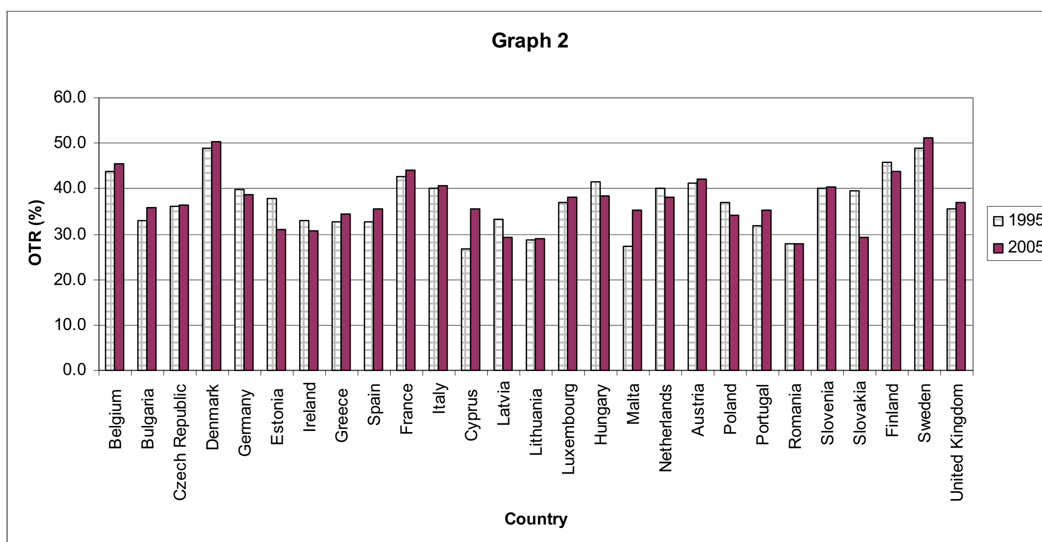
The EU-27 tax ratio is nearly the same as in 1995 (39.7%); nevertheless, the ratio is lower than the peak of 41.0% in 1999.

The downtrend which had started in 1999 in most countries stopped in 2005. In 2005 the overall tax ratio in the Eurozone (EA-13) was 39.9%, up from 39.6% in 2004. Since 1995 taxes in the Eurozone have followed a similar trend to the EU-27, although at a slightly higher level **(Table A** and **Graph 1)**.



Cyclical factors contributed to slow the decline of the tax ratios after 2002. Particularly from 2004, growth in the EU reaccelerated, boosting the revenue of pro-cyclical taxes; in addition, Member States strove to reduce their deficits, which probably led them to postpone tax cuts. The 2005 upturn in taxation, however, coincided with a temporary slowdown in the pace of the recovery: EU-25 growth amounted to 1.7 % versus 2.4 % in 2004. This was only a pause as in 2006 growth again reaccelerated to around 2.8 %. The latest EU Commission forecasts project that total general government revenue will increase further in 2006 by a fairly significant 0.7 % of GDP in the weighted average and then decline slightly (by 0.3 points) in 2007. Growth has been following broadly the same trend in the euro area as in the EU as a whole.

As illustrated by **Table A** and **Graph 2**, there are wide differences in overall tax ratio levels across the European Union.



Note: Data for Bulgaria are from 2000 and 2005, and for Romania from 2001 and 2005

As a general rule, the overall tax ratio tends to be significantly higher in the ‘old’ EU-15 (Sweden has the highest overall tax ratio: 51.3 %) than in the 12 new Member States that joined the EU since 2004 (Romania has the lowest: 28.0 %). Given the usually significantly lower tax ratios in the accession countries, EU enlargement 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.

There are substantial differences in the overall tax ratio not only between the EU-15 and the new Member States but also within this group. Between the new Member States one may distinguish two groups of countries:

- Slovenia (40.5 %) and Hungary (38.5 %) with a level exceeding the EU-27 average (37.4 %);

- the remaining new Member States with a level below the EU-27 average: 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 one might say 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 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.

Several facts result from a long-term comparison (1995-2005) of the overall tax ratio [1]:

▪ countries with higher-than-average tax ratios (i.e. essentially the old Member States) have tended to carry out limited adjustments;

▪ the most forceful changes tend to appear among low-tax countries;

▪ more countries have increased their tax ratios than reduced it;

▪ only four above average countries (Finland, Germany, Hungary and the Netherlands) have managed to reduce their overall tax ratio;

▪ more low-average Member states have increased their tax ratio than reduced it; Interestingly, low-tax countries tend to display large adjustments in either direction, upwards or downwards, whereas above the average the picture appears much more static;

▪ amongst the new Member States, trends are quite diversified with further decreases in some Member States, increases in others. However, the divergence appeared after 1999; before that date, there was a common downward movement in the ratios; four Member States have shown much larger variation than the others: Cyprus and Malta (upwards) and Slovakia and Estonia (downwards);

▪ Cyprus and Malta represent the major exceptions to the decline in tax ratios common to most of the new Member States; these two countries in fact witnessed large increases in the ratio (with 8 until 9 percentage points), albeit from a very low base as these Member States started from the two lowest tax ratios in 1995. They now rank 17th and 18th of 27 respectively in terms of the tax ratio, still below average by around 2 points of GDP;

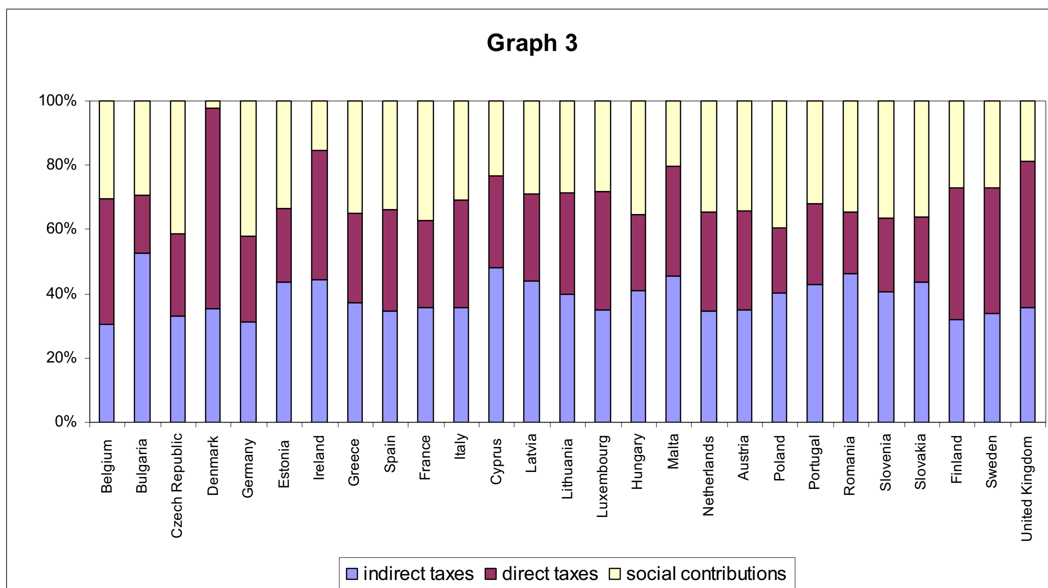
▪ In Slovakia the tax ratio, already low by 1999, fell by a further 3.6 points from 2000 to 2005. Overall, over the entire 1995-2005 period, Slovakia stands out as the Member State that has carried out the most profound; restructuring of its tax system, with the tax ratio declining by over one quarter. The country thus changed its ranking significantly, from being essentially in line with the old Member States average in 1995 at 40.5 % of GDP, to having the third-lowest ratio in the EU-27 in 2005;

▪ In Estonia the bulk of the reduction in the tax ratio took place from 1995 to 2001; the ratio has remained roughly constant since;

▪ As for Bulgaria and Romania, data since the beginning of the series (i.e. 2000 for the former and 2001 for the latter) show respectively a trend increase (+2.9 points) and substantial stability (+0.2) to 2005;

▪ Amongst the old Member States, no dramatic changes in the tax ratio have taken place, although one might mention that the further decline in Ireland's tax ratio is noteworthy, given the already low starting point.

As for the ***structure of the tax revenues by major type of taxes*** (i.e. direct taxes, indirect taxes and social contributions), there are some differences too between Member States (see **Table B and Graph 3**).



Note: Direct taxes for Portugal are from 2004.

Generally, the new Member States have a different structure compared to the EU-15 countries; 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. The lowest shares of direct taxes are recorded in Bulgaria (merely 17.9 % of the total), Romania (19.1 %) and Poland (20.5 %). In the new Member States the share of direct taxes has diminished by one third since 1995. One of the reasons for this difference can be found in the generally lower tax rates applied in the new Member States on corporate (CIT) and personal income (PIT). A growing number of these states are moving away from graduated taxes on income, where marginal rates increase with income levels, toward systems in which personal income is subjected to a single (usually low) flat rate (often also applied to corporate income). As we see in **Table F**, the flat PIT rates are moving closer to the lowest pre-reform tax rate. In five cases from seven, the CIT is charged at the same rate as that on labor income. In Slovakia, VAT is also charged at the same rate.

Revenue effects of reforms have been mixed. Next table reflects changes in revenues in the next year after the reform [2].

Country	REVENUE EFFECTS			
	PIT revenue	CIT revenue	Indirect revenue	Total revenue
Estonia	decrease	decrease	increase	increase
Lithuania	increase	decrease	increase	increase
Latvia	increase	increase	decrease	increase
Slovakia	decrease	decrease	decrease	decrease
Romania	decrease	decrease	increase	decrease

Source: M. Keen, Y. Kim and R. Varsano, The "Flat Tax(es)": Principles and Evidence, International Tax and Public Finance, 2007

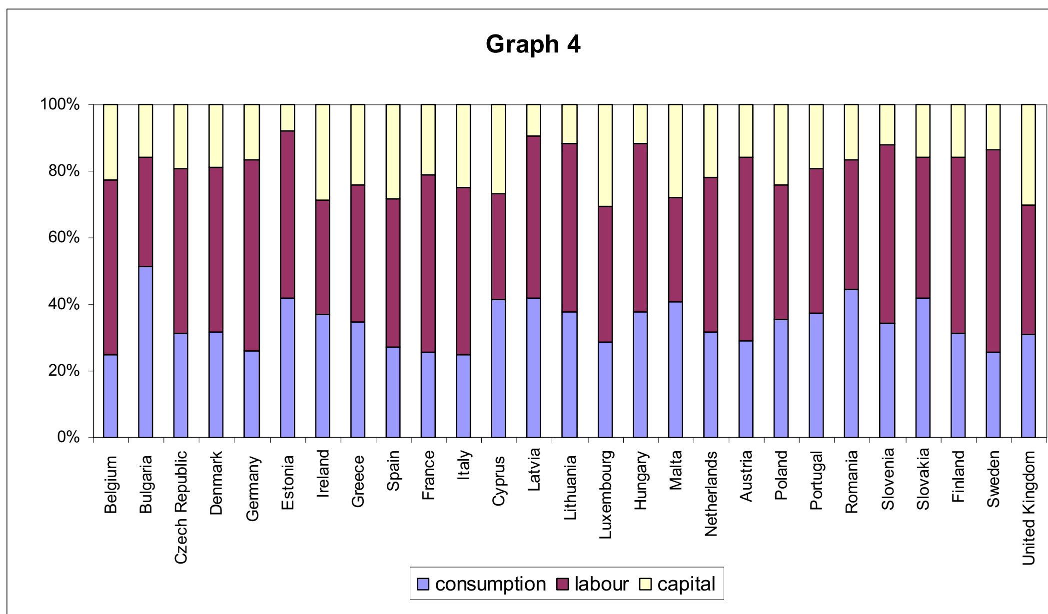
The low share of direct taxes in the new Member States is counterbalanced by generally higher shares of indirect taxes and social contributions on total tax revenues. The highest shares of indirect taxes are found in Bulgaria and Cyprus, where they account for about half of revenues; Romania and Malta are not far behind. As for social contributions, high shares, close to the 40 % mark, are found in the Czech Republic and Poland.

Amongst the old Member States, however, there are some noticeable differences. The Nordic countries (i.e. Sweden, Denmark and Finland) rely primarily on direct taxation, whereas some southern countries (in particular, Portugal and Greece) have relatively high shares of indirect taxes. Denmark stands out in another respect; most welfare spending is financed out of general taxation instead of social contributions; therefore, the share of direct taxation in total tax revenues in Denmark is in fact the highest in the Union, while social security revenue is very low. Germany shows the opposite pattern: it has the highest share of social contributions in the total tax revenues. Germany's share of direct tax revenues, on the other hand, is the lowest in the EU-15. France also has a relatively high share of social contributions and a corresponding relatively low share of direct tax revenues, compared to the EU-15 average.

Part II. Distribution of taxation by economic functions

The tax-to-GDP ratio and the breakdown of taxes into standard categories such as direct taxes, indirect taxes and social contributions tell little about the effective distribution of the tax burden amongst different categories of taxpayers (so-called *tax incidence*). Part II of this paper presents a broad classification of taxes into three economic functions: consumption, labour and capital (see **Table C**). This is an important result given the policy relevance of information about the balance of taxes on the two factors (labour and capital) and given the distributional consequences of consumption taxation.

Graph 4 displays a breakdown of the overall tax burden by economic function for the year 2005.



Note: Data taxes for Portugal are from 2004.

Taxes levied on **labour income** (employed or non-employed), mostly withheld at source (i.e. personal income tax levied on wages and salaries income plus social contributions), clearly represent the most prominent source of tax revenue in most Member States: labour taxes contribute around half of total tax receipts in the Member States.

The graph 4 shows a correlation between overall tax levels and reliance on labour taxation: Member States with a relatively high tax-to-GDP ratio also tend to collect a relatively high amount of labour taxes, and conversely. This is notably the case in old Member States such as Ireland, the United Kingdom, Greece and Portugal where both overall and labour taxes are low.

Taxation of the other economic functions typically yields less revenue. In the Union, **taxes on capital** usually account for one fifth of total tax receipts, while **consumption taxes** account for around one third. There are some differences in structure between old and new Member States. In the latter, consumption taxes usually account for a higher share of total tax revenues, while taxes on capital play, on average, a smaller role. The nine Member States with the highest share of consumption taxes on the total are all recently accessed countries. Bulgaria in particular is the only country where consumption taxes yield more than 50 % of the total; Romania displays the second highest share at 44.3 %, exactly ten points above the EU-27 arithmetic average. Differences in the shares of consumption taxes between Member States have been growing quite markedly in the past few years.

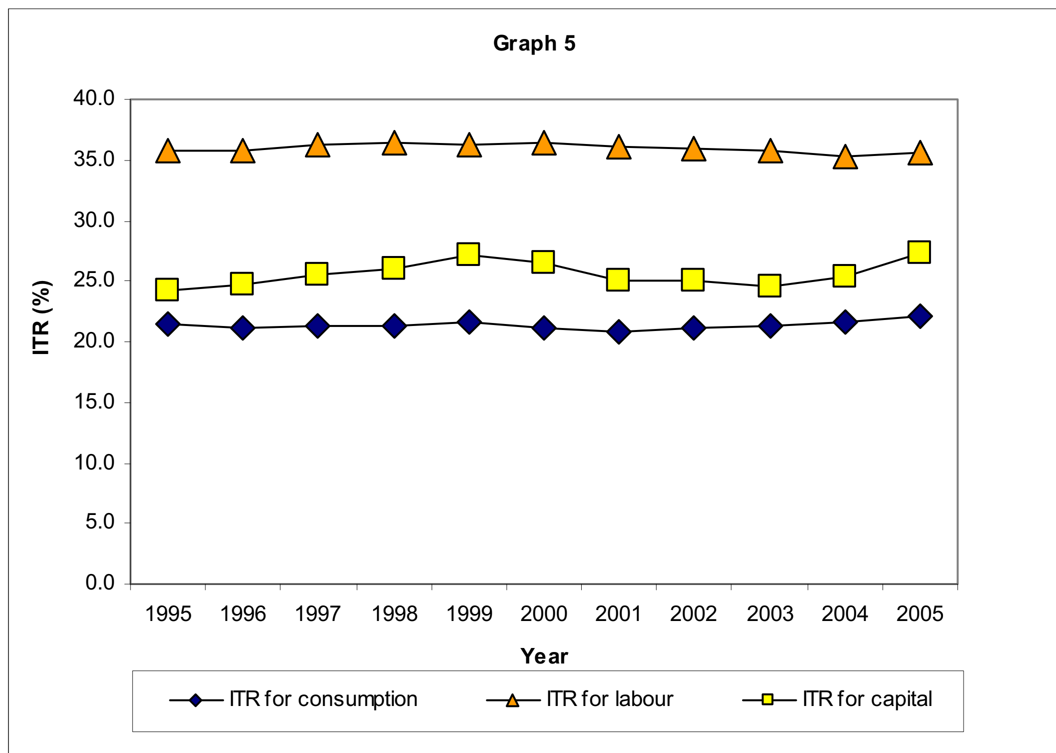
The share of revenue yielded by capital taxes is large in Luxembourg, the United Kingdom, Ireland, Spain, Malta, and Cyprus, where they contribute over one quarter of total taxes, and noticeably small in the Baltic Republics, Hungary, and Slovenia.

As for the composition of capital taxes, taxes raised on capital and business income are generally more important than taxes on the stocks of capital (wealth); one important exception is France, where high taxes on wealth lead to broadly equal proportions between the two types. The highest levels of taxes raised on stocks (wealth) of capital, as a share of GDP, are observed in France, the United Kingdom, Belgium, Spain and Luxembourg. In the recently accessed Member States, these taxes generally yield a lower share of revenue than in the EU-15; this might be linked to a lower aggregate value and productivity of the capital stock.

The distribution of the overall tax burden by economic function has undergone some important changes since the mid-1990s, and the pattern is rather mixed across Member States. The most striking feature of the past developments has been an increase in capital taxes as a percentage of GDP, and a slight decline of labour taxes since the late 1990s; labour taxes have indeed significantly increased only in five Member States.

Table D and Graph 5 display the evolution of all three main implicit tax rates, that on labour, on consumption and capital for EU-27, between 1995 and 2005. These ITRs are juxtaposed to highlight three main facts:

- average effective tax rates on labour remain well above those for consumption and capital;
- the decline in labour taxation is slow and has shown signs of slowing down;
- there seems to be some convergence between the ITRs as that on consumption and that on capital show signs of an increasing trend since their 2001 trough.



Despite a wide consensus on the desirability of lower taxes on labour, adjusted ITR on **labour** data confirm the persistent and widespread difficulty in achieving this aim. Although the

tax burden on labour is off the peaks reached around the turn of the century, the downward trend came to a halt in 2005.

In 2005, reductions exceeding one percentage point in the ITR on labour are visible only in four countries, all of them new Member States (Bulgaria, Estonia, Slovakia and Romania). Overall, despite the presence of a number of low taxing countries, taxation on labour is, on average, much higher in the EU than in the main other industrialized economies.

In most Member States, social contributions account for a greater share of labour taxes than the personal income tax. On average, in 2005 about two thirds of the overall ITR on labour consists of non-wage labour costs paid by both employees and employers. Only in Denmark, Ireland and the United Kingdom do personal income taxes form a relatively large part of the total charges paid on labour income. In Denmark, the share of social contributions in government receipts is very low as most welfare spending is financed by general taxation.

Since the second half of the 1990s, **corporate income tax** rates in Europe have been cut forcefully. The tendency has continued also in 2007, as shown by a 0.8 percentage point drop in the EU-27 average. The cut was even stronger in the euro area (1 point), where rates remain nevertheless significantly higher (the EA-13 average is at 28.5 %, four points above the average for the Union as a whole). Amongst countries cutting the corporate tax rate it is worth mentioning Bulgaria (which, upon accession to the EU, cut the tax rate by one third), Netherlands (down 4.1 points to 25.5 %), Greece (minus 4.0 points to 25 %), Spain (minus 2.5 points to 32.5 %) and Slovenia (down 2.0 points to 23 %). Belgium, which levies a relatively high rate (34 %), has not cut its rate, but has introduced an allowance for notional interests (also known as allowance for corporate equity), which, compared to traditional tax systems, leads to significantly lighter taxation.

Although the downward trend has been quite general, corporate tax rates still vary substantially within the Union. The adjusted statutory tax rate on corporate income varies between a minimum of 10 % (in Bulgaria and Cyprus) to a maximum of 38.7 % in Germany. As in the case of the personal income tax, the lowest rates are typical of countries with low overall tax ratios; consequently, the new Member States typically figure as having low rates (with the exception of Malta, whose 35 % rate is the third highest in the Union). The top positions in the ranking are occupied by Germany and Italy, whose overall tax ratios are not amongst the highest but traditionally impose relatively high CIT rates.

Data for the ITR on **consumption** confirm that taxation of consumption is, in most Member States, on an uptrend since 2001. The EU-25 arithmetic average went up by some 1 ½ percentage points since that year and by half a point in 2005. The trend is particularly visible in the smaller Member States; several of these are new Member States, which in the last years have been increasing excise duties to conform to the EU minima. The larger Member States in contrast generally show slightly declining taxation of consumption.

The trend towards an increase is quite broad; compared to 1995 levels, only ten countries have experienced declines. Since 2001 the trend has been even more general as only seven Member States have not experienced any pick-up; moreover, the only sizeable decline in the ITR took place in Greece (-2.5 percentage points since 2001), followed by more modest ones (less than one point) in Lithuania, Germany, Italy, the United Kingdom, and Austria.

A decomposition of the ITR on consumption into its constituent elements reveals that the role played by taxes other than VAT is usually quite important; taxes on energy (typically, excise duties on mineral oils) and on tobacco and alcohol contribute substantially to the overall revenue from consumption taxes; differences amongst Member States are, however, quite marked in this respect.

A comparison between the standard VAT rate and the VAT component of the ITR on consumption also highlights the significant differences amongst Member States in the extent of exemptions (either in the form of base reductions or of reduced rates) from VAT; in some Member States, their impact on the ITR is only equivalent to a couple of percentage points, but at the other extreme the impact reaches up to ten points.

Part III. Tax reforms in the European Union

As part of its efforts to counter harmful tax competition, the EU has adopted a series of measures in the last decade or so. Of particular importance in this context was the adoption by EU Ministers of Finance (the Council) in June 2003 of a "**tax package**" to tackle harmful tax competition and promote tax coordination, consisting of four elements [3].

First, a political *code of conduct* to eliminate harmful business tax regimes. The underlying report identified 66 tax measures with harmful features which member states agreed to revise or replace. Low statutory rates were not considered harmful; instead, criteria for the existence of harmful features included:

- a significantly lower level of effective taxation than that which generally applies in the country concerned;
- tax advantages reserved to nonresidents only;
- tax benefits available absent real economic activity;
- tax incentives for activities isolated from the domestic economy (ring-fenced);
- nontraditional rules for taxation of multinational companies (departing from principles set by the OECD);
- lack of transparency of tax provisions (including covert relaxation of rules at the administrative level).

The code remains "soft law" which does not bind member states.

Second, a legislative measure to ensure an effective minimum level of taxation of savings income of individuals. The directive on *taxation of savings* is intended to avoid distortions to the movement of capital and allow effective taxation of cross-border flows of interest payments to individuals, thereby limiting the evasion of capital tax by individuals who place their savings in other member states or third countries where there is no taxation. The provisions applied as of July 1 2005 in all 25 member states, as well as in 10 dependent or associated territories of member states. Equivalent measures applied to five European third countries (including Switzerland).

Third, a legislative measure to *eliminate source taxes on cross-border payments of interest and royalties between associated companies*. The "I + R directive" eliminates any taxes, including withholding taxes, on interest and royalty payments within a group of companies arising in a member state, where the beneficiary is a company or permanent establishment (subject to corporate tax in the EU and of a type listed in the annex to the directive) in another member state.

Finally, guidelines on the application of *state aid rules* (first adopted by the Commission in November 1998—98/C384/03) to measures relating to direct business taxation. These are based on the treaty's competition rules which have the force of law. They seek to restrict member state competition through subsidy of business and have been held by the European Court of Justice to apply to indirect subsidies like tax breaks. In this way, these provisions "circumvent" the unanimity rule that applies on tax harmonization initiatives.

The Tax Package has brought major advances in matters of tax policy at EU level. Besides stimulating thought and discussion on tax competition, it has raised awareness among the Member States of the interdependence of their tax policies and of the potential benefits of cooperation at EU level [4].

Concerning ongoing tax policy discussions in the EU, the attempts to move forward the idea of a **common corporate consolidated tax base** (CCCTB) is of particular interest. At the ECOFIN meeting in 2004, a large majority of member states agreed that it would be useful to progress toward common tax base for companies operating in more than one member state to provide these companies with a consolidated corporate tax base for their EU-wide activities, but on an optional basis. More generally, proponents of the CCCTB argue that the proposal will be beneficial for two key reasons:

- it will reduce the costs of learning and operating with multiple tax codes to companies that operate in two or more tax jurisdictions
- it will reduce the opportunities for tax shifting by companies seeking to minimize their tax liabilities.

The EU commissioner for taxation, Laszlo Kovacs, is expected to introduce a legislative proposal on the CCCTB by the end of 2008 (possibly with effect from 2011). The commission has no plan to harmonize the rates or to impose statutory minimum corporate tax rates, because most empirical studies find welfare gains of tax coordination somewhere between zero and 1 percent of GDP.

On 22 November 2007, the Council adopted the ***Fiscalis 2013*** programme for the period 2008-2013 which will continue the works undertaken under the previous Fiscalis programme. It will continue to stimulate cooperation between tax authorities and assist them in developing an appropriate balance between efficiency of controls and burdens on taxable persons**.**

Main objectives of the Fiscalis 2013 programme are [5]:

- Enhancing the fight against tax fraud, in particular against VAT carrousel fraud;
- Reducing the administrative burden on administrations and taxable persons;
- Ensuring a performing exchange of information between national tax administrations as well as with traders through e.g. trans-European tax IT systems.

Since the mid-1990s, a number of Member States have implemented reforms to their tax systems.

Reforms of the personal income tax code have mainly consisted of lowering statutory rates, reducing the number of tax brackets and increasing the minimum level of tax-exempt income. Member States have also often increased family allowances, in particular for the tax relief for families with children. Some Member States have replaced tax allowances with individual tax credits. A number of Member States have introduced additional (earned) tax credits (or tax allowances) that are exclusively earned on labour income. Most of these credits or allowances phase in for lower incomes and phase out for higher incomes.

Reforms of taxes on capital income often aimed at improving the functioning of capital markets. Another aim was to create incentives for risk-taking, and support venture and intangible capital. Some Member States have fundamentally changed the taxation of capital income or capital gains in the personal income tax, often broadening the income tax base. Member States have also implemented reductions in statutory corporate income tax rates, but at the same time have reduced special incentive schemes, or cut back depreciation allowances.

Reforms are more diverse in the area of indirect taxation. In the second half of the 1990s, a number of Member States have implemented comprehensive green tax reforms (Sweden, Denmark, the Netherlands, Germany, Italy, Austria and the United Kingdom). Existing indirect taxes were increased and new environmentally related taxes were introduced, often to finance, at least partly, the reduction of taxes on labour income. The Nordic countries were the forerunners in introducing green tax reforms. Most Member States apply reduced rates on labour intensive service sectors. Other Member States implemented increases in the standard VAT rate, while others implemented general VAT reductions or targeted reductions for certain products and/or

sectors. Some Member States increased certain excise duties (e.g. on tobacco, diesel fuel or petrol), while others were being reduced.

Some Member States implemented general reductions in social contributions across the board. In line with similar measures taken in personal income taxation, a number of Member States have implemented targeted reductions of non-wage labour costs at the low end of the pay scale.

Conclusions

EU tax levels are generally high in comparison with the rest of the world, with the EU-27 tax ratio exceeding those of the USA and of Japan by some 13 percentage points. However, the tax burden varies significantly between Member States, ranging in 2005 from less than 30% in Romania (28.0%), Lithuania (28.9%), Slovakia (29.3%) and Latvia (29.4%) to more than 50% in Sweden (51.3%) and Denmark (50.3%).

In the past decade significant changes in tax ratios have taken place in several Member States. The largest falls were recorded in Slovakia, where the overall tax burden dropped from 39.6% in 1995 to 29.3% in 2005, and Estonia (from 37.9% to 30.9%). The highest increases were observed in Cyprus (from 26.7% to 35.6%) and Malta (from 27.3% to 35.3%).

The increase in tax ratios in 2005 involved a large majority of EU countries. This implies that, in Europe, the preferred avenue to deficit reductions remains an adjustment on the revenue side. The observation that many of the Member States that have cut tax ratios drastically during the 1990s seem to be on a slightly increasing trend in the last few years, also adds to this point; as does the fact that the latest European Commission forecasts project a further marked increase in general government revenues after 2005.

Since the mid-1990s, a number of Member States have implemented reforms to their tax systems. The reforms vary in coverage and depth, but they were often aimed at reducing the tax burden on labour, particularly at the low to middle end of the pay scale, at achieving a general reduction in corporate income tax rates and at improving the functioning of capital markets. Reforms of indirect taxation have been more diverse in nature. Increases in indirect taxation in some countries were driven by green tax reforms, often as counterpart to the reduction in the taxation of labour. Some Member States also implemented measures that resulted in increases in the shares of total taxes that accrue to state governments. The measures were sometimes part of a reform-package that was stretched out over several years. As for the future tax reform initiatives, there are a number of routes that these may follow:

- The experimentation with structural changes to the corporate tax will continue, probably combined with further rate lowering in some countries. Rate reductions will, though, be tempered by revenue needs, and the basic question is where the “equilibrium” level of the rate is. Similar considerations apply both to the PIT.
- The number of countries adopting flat tax reforms, in which the single income tax rate chosen is low, is likely to increase over the years. However, if considered in the context that pressures to reduce taxes on capital income are likely to increase, that the value of low flat rates as a signal is likely to diminish as more countries undertake flat tax reforms, and that currently buoyant economic conditions around the world will not last forever, significant fiscal strains may emerge, leading some countries to move away from flat tax systems.
- The VAT will be further scrutinized to find ways to limit the “frictions” it causes for cross-border movements of goods and services, and the very substantial revenue losses from fraudulent trade operations. The European Union will probably continue to spearhead the search for operational solutions.

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