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Does a reflection of the fiscal discipline requirement exist during the euro implementation on tax systems?

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Abstract

While previous states of the EU-15 could decide if they would accept the common European currency or not, newly entering states are committed to accepting the EUR. The first country that accepted the EUR (apart from the EU-15, of which 12 countries have the common currency) was Slovenia (2007), and afterwards Cyprus and Malta (2008), and from 1.1.2009 the EU was joined by Slovakia. Countries have to fulfill defined criteria to enter the EU, so it can be assumed that there are indirect but doubtless interconnections: taxes → state budget revenues → state budget balances → Maastricht criteria accomplishment (before the country enters the euro zone), or fulfilling the Stability and Growth Pact. The aim of this paper is to evaluate the possible influence of EUR implementation on tax systems in the selected countries. The author deals with the evaluation of EUR implementation consequences in the first 12 countries by means of a macro-economic characteristic analysis in the first part of the paper, and in the second part offers more detailed analyses of Slovenia, Cyprus, and Malta.

Keywords

Euro zone, euro implementation, stability and growth pact, taxes, tax quota.

JEL Classification: E62, F33, H20,

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1. Introduction

The EU formation is a result of the long-term integration development of European Union member states. The EUR common currency implementation has a cardinal importance for European Community development and helps to fill four freedoms: free movement of goods, services, labour, capital and payments (Baele et al., 2004, or Cattoir, 2004).

On 1.1.2002, the EUR was implemented into cash circulation in twelve[1] European Union states. While previous states of the EU-15 could decide if they accepted the common European currency or not,[2] newly entering states[3] do not have this option and they commit to give up (sooner or later) their national currency and to accept the common currency. The first state who extended into the EUR was Slovenia (from

[1] In Belgium (BE), Finland (FI), France (FR), Ireland (IE), Italy (IT), Luxemburg (LU), Germany (DE), Netherlands (NL), Portugal (PT), Austria (AT), Greece (EL) and Spain (ES).

[2] Denmark and Great Britain exploited the possibility of the common currency non acceptation, Sweden has a temporary exception.

[3] Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovakia, Slovenia (from 1.5.2004), Bulgaria and Romania (from 1.1.2007).

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1.1.2007), from 1.1.2008 Cyprus and Malta approved the common currency and from 1.1.2009 Slovakia became the 16th member of the euro area.

While in the European Community the monetary policy is set a clear aim, i.e. common currency implementation, such a common base is not set in the tax field (James and Nobes, 1999 or Salanie, 2003).

These current barriers exist for particular types of taxes in the European Union (Steiner and Woods, 2000):

- personal income taxes stay in the competence of national governments,
- indirect taxes immediately influence the functioning of the single market and stay at the centre of attention and effort of its harmonization,
- corporation taxes should help to free movement of capital and should not cause harmful competition among individual countries,
- social and pension systems should eliminate the discrimination of inhabitants of individual countries and should not be a barrier to free settlement and investment in every European Union member state.

The aim of this paper is to evaluate the possible influence of EUR implementation on tax systems in the selected countries. We also try to answer the question if EUR implementation (or preparing for its implementation) as a result of the public policy and necessary filling of the fiscal discipline will have a relevant reflection in parameters to the changes of tax systems of individual countries.

The following section contains methodological analysis. In the third part of the paper, the reached results are divided into the changes of tax quantities in Euro zone countries and the changes in selected states. The interaction of the tax and fiscal policy and possible impacts of euro implementation affecting tax field is also summarized there.

2. Methodology and used methods

Analyze of the impact of the euro implementation on tax systems was done on two levels:

- analysis of the original 12 euro zone countries and its development by means of macro-economic characteristics (in period 2000–2005, thus not only the period before they entered the euro zone, but also analysis of the years following the euro zone entry),
- comparison of Slovenia tax characteristics which introduces the country that entered the euro zone in 2007 and at the same time the first country with a transforming economy that accepted the euro (in period 2005–2008).

The methodology can be described:

$$\Delta\varepsilon_1 = \Delta\left(TQ; IT/GDP; DT/GDP; SI/GDP\right)i, \quad (1)$$

where $\Delta\varepsilon_1$ is the change induced in the period of the euro implementation, ΔTQ is the change of the tax quote, $\Delta IT/GDP$ the change of the particular tax quote (indirect taxes to gross domestic product), $\Delta DT/GDP$ the change of the share of direct taxes to gross domestic product, $\Delta SI/GDP$ the share of social insurance to gross domestic product, i – the number of countries of the original euro area ($i = 1, 2, \ldots, 12$),

$$\Delta\varepsilon_2 = \Delta\left(PIT_{TR}; PIT_{TB}; CIT; VAT\right)j, \quad (2)$$

where $\Delta\varepsilon_2$ is the change induced in the period of the euro implementation, ΔPIT_{TR} the change of tax rates of the personal income tax, ΔPIT_{TB} the change of tax brackets of the personal income tax, ΔCIT the change of corporate tax rates, ΔVAT the change of the value added tax, j number of new euro zone countries (j_1 = Slovenia, j_2 = Cyprus, j_3 = Malta).

3. Results

3.1 Tax quote development

The comparison of individual taxes in selected countries does not have a high predicative ability (Široký and Maková, 2007, and Široký, 2006) for reasons of different tax construction (except for harmonized parameters of indirect taxes). The tax quote indicator enables this comparison.

It is evident from Figures 1 to 4 (for figures and respective numerical values see appendix) that the implementation of EUR circulation from 1.1.2002 did not have a fundamental influence on the tax quote of these 12 countries, in the analyzed period between 2000–2005. A change of the tax quote by more than 3% was only seen in four countries (Finland, Ireland, Germany and Greece). The average ($\Delta\varepsilon A_{1\text{-}12}$) change was 1.75 percentage points. Partial tax quotes also did not record any significant movement in the year of EUR acceptance, which is shown in Table 1. In the analyzed period, the lowest changes were in social insurance (0.56) according to the premises, on the contrary a bigger change in direct taxes (1.35) than in indirect taxes (0.79) is slightly surprising. Partial tax quotes also did not record any significant movement in the year of EUR acceptance, which is shown in Table 1.

Table 1 The change of chosen macroeconomic tax indexes in percentage points (the difference between the highest and lowest divergence in period 2000–2005)

	$\Delta\varepsilon_{BE}$	$\Delta\varepsilon_{FI}$	$\Delta\varepsilon_{FR}$	$\Delta\varepsilon_{IE}$	$\Delta\varepsilon_{IT}$	$\Delta\varepsilon_{LU}$	$\Delta\varepsilon_{DE}$	$\Delta\varepsilon_{NL}$	$\Delta\varepsilon_{PT}$	$\Delta\varepsilon_{AT}$	$\Delta\varepsilon_{EL}$	$\Delta\varepsilon_{ES}$	$\Delta\varepsilon A_{1\text{-}12}$
ΔTQ	0.6	3.3	1.3	3.2	1.2	1.2	3.1	2.7	1.4	2.7	3.5	2.1	1.75
$\Delta IT/GDP$	0.6	0.8	0.5	1.3	0.9	1.3	0.4	0.6	1.2	0.5	2.8	1.0	0.79
$\Delta DT/GDP$	0.6	3.6	1.2	1.8	1.3	1.9	2.3	1.0	1.4	2.2	2.0	0.9	1.35
$\Delta SI/GDP$	0.5	0.3	0.3	0.4	0.6	0.8	0.6	2.3	1.0	0.1	1.3	0.2	0.56

Source: Own Calculation

Table 2 Development of deductible items at personal income tax in Slovenia in period 2005–2008[4]

	2005 (SIT)	2006 (SIT)	2007 (EUR)	2007 (SIT conv.)	2008 (EUR)	2008 (SIT conv.)
Basic deductible item	564,400	591,900	2,800	670,992	2,959.60	709,239
Deductible item for taxpayers older than 65 years	275,300	281,081	1,205	288,766	1,273.69	305,227
Deductible item for the first child	474,900	484,873	2,066	495,096	2,183.76	523,316

Table 3 Personal income tax rates in Slovenia in 2005

Annual taxable income (SIT)	Tax from the lower sum (SIT)	Rate from the exceeding sum (%)
to 1,300,000	0	16
1,300,000 – 2,540,000	208,000	33
2,540,000 – 5,140,000	617,200	38
5,140,000 – 10,330,000	1,579,200	42
over 10,330,000	3,707,100	50

Table 4: Personal income tax rates in Slovenia in 2006

Annual taxable income (SIT)	Tax from the lower sum (SIT)	Rate from the exceeding sum (%)
to 1,327,300	0	16
1,327,300 – 2,593,340	212,368	33
2,593,340 – 5,247,940	630,161	38
5,247,940 – 10,546,930	1,612,363	42
over 10,546,930	3,784,949	50

Table 5 Personal income tax rates in Slovenia (2007)

Annual taxable income (EUR)	Tax from the lower sum (EUR)	Rate from the exceeding sum (%)
to 6,800	0	16
6,800 – 13,600	1,088	27
13,600 and more	2,924	41
Annual taxable income (SIT conv.)	Tax from the lower sum (SIT conv.)	Rate from the exceeding sum (%)
to 1,629,552	0	16
1,629,552 – 3,259,104	260,728	27
3,259,104 and more	700,707	41

Table 6 Personal income tax rates in Slovenia (2008)

Annual taxable income (EUR)	Tax from the lower sum (EUR)	Rate from the exceeding sum (%)
to 7,187.60	0	16
7,187.60 – 14,375.20	1,150.02	27
over 14,375.20	3,090.67	41
Annual taxable income (SIT conv.)	Tax from the lower sum (SIT conv.)	Rate from the exceeding sum (%)
to 1,722,436	0	16
1,722,436 – 3,444,873	275,591	27
3,444,873 and more	740,648	41

[4] Source: Kesti (2006, 2007), Cowley et al. (2008) and own calculations.

3.2 The development of the most important taxes in the "new" euro zone countries

Slovenia

The Slovene tax system consists of direct income taxes including wage tax paid by the employer, social security contributions, property tax and indirect taxes. These basic characteristics of the tax system were not changed by Slovenia's EU entry.

The general rate of corporate tax had the following values: 25% in 2005 which was gradually lowered by about one percentage point every year, in 2008 it was 22%. A lowered tax rate, in the amount of 10%, will be used by companies conducting business in the special economic areas of Koper and Maribor.

The EUR acceptance did not cause any discontinuous innovation in the system of corporation taxation, the gradual lowering of the tax burden probably ensues from the effort of adjusting the nominal rate to diminishing trends in other countries. Also tax incentives have been kept after EU entry.

Individuals are taxed separately in the field of personal income tax with the exception of particular incomes from agriculture, where the common taxation of a household is possible. The tax base includes the total sum of all income categories lowered by accepted expenses, personal deductions and social security contributions. Then the tax is calculated with the aid of sliding progressive rates.

Taxpayers can deduct deductible items from the tax base. Table 2 shows the development of these deductible items in the last three years. The conversion between Slovenian tolar (SIT) and the EUR was done by the official rates for conversion on the date of EU entry – 239.640 SIT for 1 EUR.

In Tables 3 – 6 are summaries of tax brackets and tax rates in period 2005–2008.[5]

The Slovenian entrance into the EU was not interconnected with the increase of the taxpayers' tax burden, more to the contrary the tax bracket boundaries were increasing and the highest tax rate was decreasing.

The rates of value added tax have not been changed after the Slovenian entrance into the EU (20% and 8.5%), the tax exemption for small enterprises according to the overall turnover has been increased from 5 million SIT in 2006 to 25,000 EUR in 2007 (5,991,000 SIT conversion).

It can be claimed that the Slovenian entrance into the EU, did not have any fundamental impact on the Slovene tax system, both company tax rates and personal income tax have been increased, while on the contrary the limit for the compulsory registration of a subject as a value added tax payer has been increased.

Cyprus

The Cyprus tax system consists of corporate tax, personal progressive income tax and value added tax. Excise duties, defense contribution and social insurance payments are also important tax deliveries, on the contrary there are no property taxes levied in Cyprus. These basic characteristics of the tax system were not changed when Cyprus entered into the EU.

Companies, other than statutory, have to pay corporate tax in the amount of 10% and this tax rate was not changed in the analyzed period 2005–2008.

Tax rates and tax brackets in the analyzed period are shown in Table 7 and 8.[6]

Table 7 Tax rates and tax brackets of the personal income tax (2005 – 2007)

Taxable income (CYP)	Tax rate (%)
to 10,000	0
10,001 – 15,000	20
15,001 – 20,000	25
over 20,000	30

Table 8 Tax rates and tax brackets of the personal income tax (2008)

Taxable income (EUR)	Taxable income (CYP conversion)	Tax rate (%)
to 19,500	to 11,413	0
19,500 – 28,000	11,414 – 16,388	20
28,000 – 36,300	16,389 – 21,245	25
over 36,300	over 21,245	30

In Cyprus, the legislative form of value added tax was not changed in the analyzed period, the basic tax rate is 15%, the lowered tax rates are in the amount of 8% and 5%. In 2008, the registration duty rises when turn-over exceeds 15,600 EUR, in 2005–2007 it was 9,000 CYP (15,377 EUR).

In Cyprus, EUR acceptance was related to a slight increase to the tax brackets of personal income tax, however the rates of corporate tax and value added tax were not changed (the registration limit was slightly increased in the VAT). The changes made were either positive or neutral for taxpayers.

Malta

The Maltese tax system has its origin in the former British system, which means that company profit is

[5] Source: Kesti (2006, 2007), Cowley et al. (2008).

[6] Source: Kesti (2006, 2007), Cowley et al. (2008).

subject to income tax, but there is no individual or separate company tax. Important components of the Maltese tax system were harmonized with the tax law of the European Community during the access period.

The rate of corporate tax is 35% and it did not change during the analyzed period 2005–2008. In Malta there are dual rates of personal income tax: partly for spouse splitting and partly for separate taxation.

Changes in tax rates are shown in Tables 9–11.[7]

In Malta, the legislative form of value added tax was not changed in the analyzed period, the basic tax rate is 18%, the lowered tax rate is in the amount of 5%.

In Malta, EUR acceptance was related to a slight increase of the tax brackets of personal income tax while the number of tax brackets was lowered (about two before entrance to the EU), rates of corporate tax and value added tax were not changed. The changes made were either positive or neutral for taxpayers.

Changes in the period of the euro acceptance in Slovenia, Cyprus and Malta

There were no dramatic changes in the characteristics of the main taxes in the three mentioned countries of the EU, as summarized in Table 12. The changes made were positive for taxpayers. The reason for the enlargement of tax brackets could be attributed to the anxiety of the price level increase caused by the EUR acceptance.

3.3 Interaction of the tax and fiscal policy

The analysis of the interaction is based on the premise that the European Union states revise public budget revenues with an aim to fill the fiscal criteria for the EU entry by virtue of taxes that represent a fiscal policy tool.

The so called Maastricht criteria (Van den Berg and Lewer, 2007) approved in 1992 show the readiness of the member state for adopting the common currency and deal with:

- price stability – the inflation rate should not exceed more than 1.5% of the inflation rate of the three states that achieved the best results in this field in the preceding year,
- budget deficit – deficit has to be under 3% of the GDP level,
- debt – the limit is set at 60% GDP,
- long term money rates – rates should not exceed by more than two percentage points the rates of the three member states that achieved the lowest inflation rate in the preceding year,
- stability of exchange rates – the exchange rate should stay at a fixed term interval for two years.

The Stability and Growth Pact obliges the EU states to respect the principle of a balanced or almost balanced budget, governments should have sufficient financial reserves to keep deficits under 3% of the GDP level.

Thus fiscal rules of the EU impose the condition on tax systems that tax lowering has to be done with respect to the public sector size. Tax lowering has to be subordinated to reductions on the expenditure side of budgets on an annual basis due to the rules.

3.4 Next possible impacts of the euro implementation that influence the tax field

The principle of the intact citizen is valid in the course of EUR implementation, it means that the rounding off of sums in the course of EUR conversion is done to the benefit of the citizen. Council Regulation (EC) No. 1103/97 on EUR implementation regulations from 17th June 1997 deals with the rounding off of sums issue during the transition to EUR currency (the Regulation assumes that a general law about EUR implementation will be agreed and it will contain concrete methodology for rounding).

State fees and taxes will be rounded down on the basis of this law during the course of EUR conversion, contrary to the tax returns, where the amounts of tax revenues sent to the receivers according to the budgetary assignment of tax revenues and state payments to citizens will be rounded up. The citizen is not only an individual, but all subjects of the private sector according to the regulation (Schadler, 2005).

This implies that it will generally be necessary to round the financial sums down in the field of public budgets revenues. Rounding will cause budget revenues (especially taxes and duty) to decrease in the year of EUR implementation in comparison with the last year of the national currency functioning as legal tender. Contrarily in the case of budget expenditures, it will be necessary to round up the financial sum converted into EUR in the interest of the intact citizen. Thus annual budget expenditure (salaries, social insurance benefits paid and the state social support) will increase in comparison with the year before EUR implementation.

4. Conclusion

The EUR implementation has no direct impact on the taxation area, not only from an economic point of view, but also from the view of empirical results.

[7] Source: Kesti (2006, 2007), Cowley et al. (2008).

Based on economic theory, there are no regularities presented which should cause changes in taxation on a macro and micro economical level in the course of currency exchange. From that point of view the tax policy is considered to be autonomous (which can be considered generally, not only in connection with EU implementation, but also for example in the case of Czechoslovakia splitting).

The entrance of 12 member states into the EU (from the previous EU-15) was not connected with a tax rate increase but on the contrary with a slight fall.

Although the currency integration dramatically increased the capital mobility and the tax competition in this field, it did not lead to the tax burden shifting, relevant changes in the tax quote or the partial tax quote or the tax burden of particular economic factors.

The example of Slovenia, Cyprus and Malta confirms that.

The tax competition among individual states in the EU is determined especially by national interests, there cannot be any relevant bigger impact determined on the entrance of countries into the EU or on tax competition in the EU.

It is possible to suppose that the eventual EUR implementation in the next countries should not lead to an increase of the tax burden, because it did not happen in the states entering into the EU either.

The impact of the EUR implementation can be implicitly shown in the tax policy by means of public finance, partly by the effort to fulfill the criteria for EU entry and partly by the effort to fill the requirements of the Stability and Growth Pact.

Table 9 Tax rates (2005 and 2006)

Spouse splitting		Separate taxation	
taxable income (MTL)	rate (%)	taxable income (MTL)	rate (%)
to 4,300	0	to 3,100	0
4,301 – 6,000	15	3,101 – 4,100	15
6,001 – 7,250	20	4,101 – 5,000	20
7,251 – 8,500	25	5,001 – 6,000	25
8,501 – 10,000	30	6,001 – 6,750	30
over 10,000	35	over 6,750	35

Table 10 Tax rates (2007)

Spouse splitting		Separate taxation	
taxable income (MTL)	rate (%)	taxable income (MTL)	rate (%)
to 4,500	0	to 3,250	0
4,501 – 8,000	15	3,251 – 5,500	15
8,001 – 10,000	25	5,501 – 6,750	25
over 10,000	35	over 6,750	35

Table 11 Tax rates (2008)

Spouse splitting		Separate taxation	
taxable income (MTL)	rate (%)	taxable income (MTL)	rate (%)
to 11,400	0	to 8,150	0
11,401 – 20,500	15	8,151 – 14,000	15
20,501 – 28,000	25	14,001 – 19,000	25
over 28,001	35	over 19,001	35
taxable income (MTL conversion)	rate (%)	taxable income (MTL conversion)	rate (%)
to 4,894	0	to 3,499	0
4,895 – 8,801	15	3,500 – 6,010	15
8,802 – 12,020	25	6,011 – 8,157	25
over 12,021	35	over 8,158	35

Table 12 Summary of changes in the most important taxes at new members of the euro area

	ΔPIT_{TR}	ΔPIT_{TB}	ΔCIT	ΔVAT	Exchange rate
$\Delta\varepsilon_{SI}$	↓	↓	↓	0	239,640 SIT/1 EUR
$\Delta\varepsilon_{CY}$	↓	↓	0	0	0.585274 CYP/1 EUR
$\Delta\varepsilon_{MT}$	↓	0	0	0	0.429300 MTL/1 EUR

Source: Own Calculations.

References

BAELE, L. (2004). Measuring Financial Integration in the Euro Area. *ECB Occasional Paper Series,* 14.

CATTOIR, P. (2004). *Tax-based EU own resources: An assessment.* Luxemburg: European Commission.

COWLEY, N., GUTIÉRREZ, C., KESTI, J., SOO, M., editors (2008). *Global Corporate Tax Handbook 2008*.

COWLEY, N., GUTIÉRREZ, C., KESTI, J., SOO, M., editors (2008). *Global Individual Tax Handbook 2008*.

JAMES, S., NOBES, CH. (1999) *The Economics of Taxation.* London: Pearson.

KESTI, J., editor (2006). *European Tax Handbook 2006.* Amsterdam: IBFD.

KESTI, J., editor (2007). *European Tax Handbook 2007.* Amsterdam: IBFD.

PLAZA, V. (1999). The Euro as a Political Communication Process: Quality Requirements. *Journal of Consumer Policy* 22, 135–147. http://dx.doi.org/10.1023/A:1006183113008

SALANIÉ, B. (2003). *Economics of Taxation.* Cambridge: MIT Press.

SCHADLER, S. (2005). Adopting the Euro in Central Europe: Challenges in the next step in European Integration. *IMF Occasional Paper*, 234.

STEINER, J., WOODS, L. (2000). *Textbook on EC Law.* 7. ed. London: Blackstone Press.

ŠIROKÝ, J. (2006). The Tax Proggressivity and the Effective Tax Rate. *Acta Aerarii Publici* 3, 191–198.

ŠIROKÝ, J., MAKOVÁ, K. (2007). Theoretical Approaches to Measuring of the Tax progressiveness (with the practical application). In *2007 Labsi International Conference on Political Economy and Public Choice: Theory and Experiments.* Siena: University of Siena.

VAN DEN BERG, H., LEWER, J. (2007). *International Trade and Economic Growth.* London: Sharpe.

Additional sources

European Commission (2008). *Taxation Trends in the European Union.* Luxembourg: European Commission & EUROSTAT, 2008.

Appendix 1

Development of the tax quote and partial tax quotes in the first 12 countries of the euro area [*)]

Figure 1 Tax quote development in selected countries in period 1995 – 2005

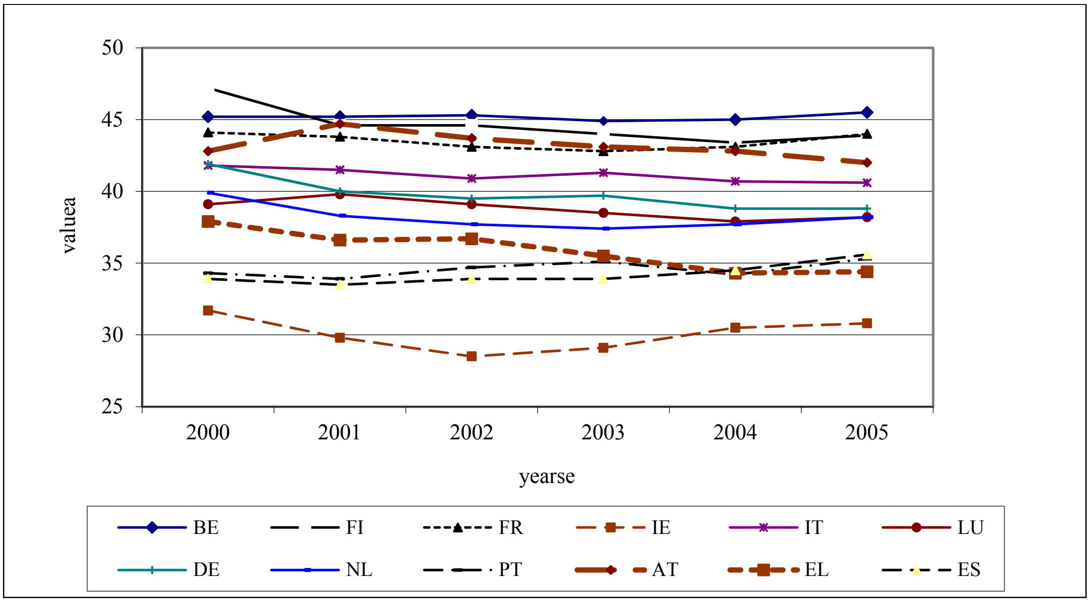
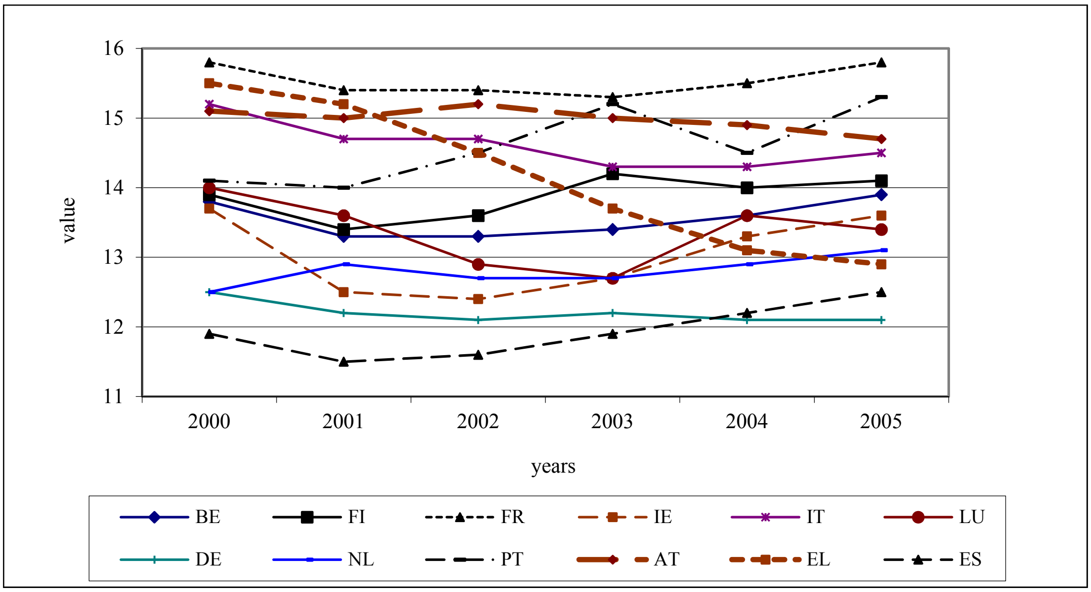


Figure 2 Development of indirect taxes as % of GDP in selected countries in 2000 – 2005



[*)] *Source: European Commission.* Taxation Trends in the European Union*. Luxembourg: EC, 2008. Available at http://europa.eu.int/comm/index_en.htm +own calculations.*

Figure 3 Development of direct taxes as % of GDP in selected countries in 2000 – 2005

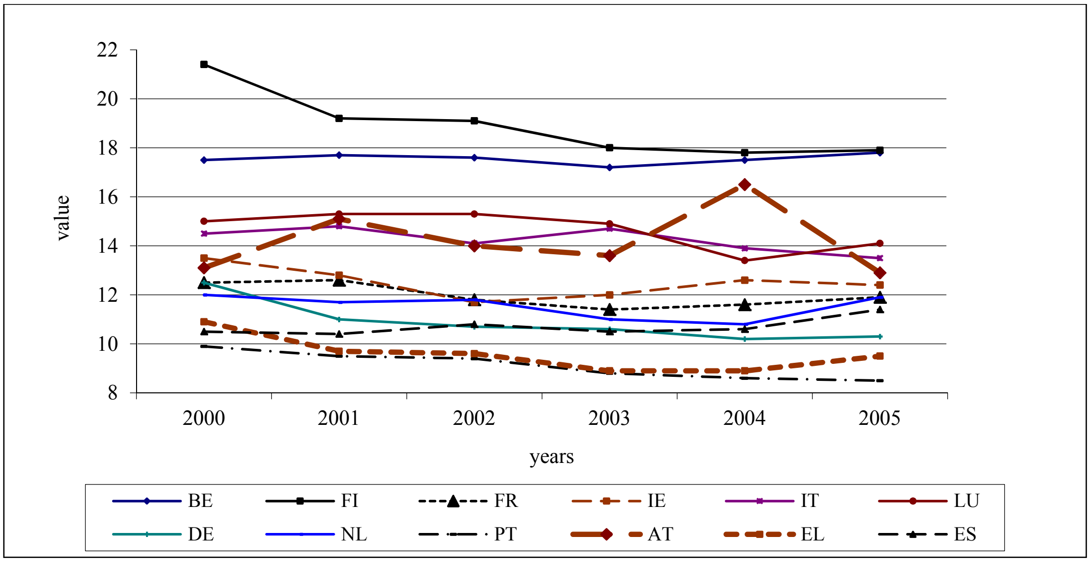
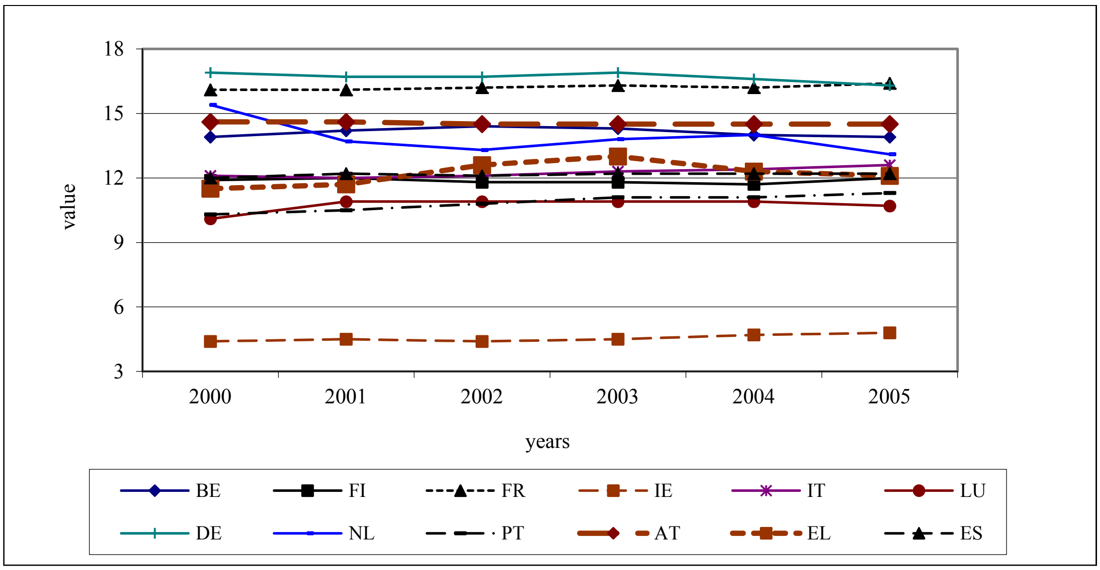


Figure 4 Development of social security contributions as % of GDP in selected countries in 2000 – 2005



Appendix 2

Development of basic tax macro-economic indicators in first 12 countries of the euro area*)

BELGIUM						
	2000	2001	2002	2003	2004	2005
Tax quote	45.2	45.2	45.3	44.9	45.0	45.5
2002 = 100	99.78	99.78	100.00	99.12	99.34	100.44
Partial taxes as % of GDP						
Indirect taxes	13.8	13.3	13.3	13.4	13.6	13.9
2002 = 100	103.76	100.00	100.00	100.75	102.26	104.51
Direct taxes	17.5	17.7	17.6	17.2	17.5	17.8
2002 = 100	99.43	100.57	100.00	97.73	99.43	101.14
Social security contribution	13.9	14.2	14.4	14.3	14.0	13.9
2002 = 100	96.53	98.61	100.00	99.31	97.22	96.53
FINLAND						
	2000	2001	2002	2003	2004	2005
Tax quote	47.2	44.6	44.6	44.0	43.4	43.9
2002 = 100	105.83	100.00	100.00	98.65	97.31	98.43
Partial taxes as % of GDP						
Indirect taxes	13.9	13.4	13.6	14.2	14.0	14.1
2002 = 100	102.21	98.53	100.00	104.41	102.94	103.68
Direct taxes	21.4	19.2	19.1	18.0	17.8	17.9
2002 = 100	111.46	100.52	100.00	94.24	93.19	93.72
Social security contribution	11.9	12.0	11.8	11.8	11.7	12.0
2002 = 100	100.85	101.69	100.00	100.00	99.15	101.69
FRANCE						
	2000	2001	2002	2003	2004	2005
Tax quote	44.1	43.8	43.1	42.8	43.1	44.0
2002 = 100	102.32	101.62	100.00	99.30	100.00	102.09
Partial taxes as % of GDP						
Indirect taxes	15.8	15.4	15.4	15.3	15.5	15.8
2002 = 100	102.60	100.00	100.00	99.35	100.65	102.60
Direct taxes	12.5	12.6	11.8	11.4	11.6	11.9
2002 = 100	105.93	106.06	100.00	96.61	98.31	100.85
Social security contribution	16.1	16.1	16.2	16.3	16.2	16.4
2002 = 100	99.38	99.38	100.00	100.62	100.62	101.23
IRELAND						
	2000	2001	2002	2003	2004	2005
Tax quote	31.7	29.8	28.5	29.1	30.5	30.8
2002 = 100	111.23	104.56	100.00	102.11	107.02	108.07
Partial taxes as % of GDP						
Indirect taxes	13.7	12.5	12.4	12.7	13.3	13.6
2002 = 100	110.48	100.81	100.00	102.42	107.26	109.68
Direct taxes	13.5	12.8	11.7	12.0	12.6	12.4
2002 = 100	115.38	109.40	100.00	102.56	107.69	105.98
Social security contribution	4.4	4.5	4.4	4.5	4.7	4.8
2002 = 100	100.00	102.27	100.00	102.27	106.82	109.09

*) *Source: European Commission.* Taxation Trends in the European Union*. Luxembourg: EC, 2008. Available at http://europa.eu.int/comm/index_en.htm +own calculations.*

ITALY						
	2000	2001	2002	2003	2004	2005
Tax quote	41.8	41.5	40.9	41.3	40.7	40.6
2002 = 100	102.20	101.47	100.00	100.98	99.51	99.27
Partial taxes as % of GDP						
Indirect taxes	15.2	14.7	14.7	14.3	14.3	14.5
2002 = 100	103.40	100.00	100.00	97.28	97.28	98.64
Direct taxes	14.5	14.8	14.1	14.7	13.9	13.5
2002 = 100	102.84	102.78	100.00	104.26	98.58	95.74
Social security contribution	12.1	12.0	12.1	12.3	12.4	12.6
2002 = 100	100.00	99,17	100.00	101.65	102.48	104.13
LUXEMBURG						
	2000	2001	2002	2003	2004	2005
Tax quote	39.1	39.8	39.1	38.5	37.9	38.2
2002 = 100	100.00	101.79	100.00	98.47	96.93	97.70
Partial taxes as % of GDP						
Indirect taxes	14.0	13.6	12.9	12.7	13.6	13.4
2002 = 100	108.53	105.43	100.00	98.45	105.43	103.88
Direct taxes	15.0	15.3	15.3	14.9	13.4	14.1
2002 = 100	98.04	100.00	100.00	97.39	87.58	92.16
Social security contribution	10.1	10.9	10.9	10.9	10.9	10.7
2002 = 100	91.74	100.00	100.00	100.00	100.00	98.17
GERMANY						
	2000	2001	2002	2003	2004	2005
Tax quote	41.9	40.0	39.5	39.7	38.8	38.8
2002 = 100	106.08	101.27	100.00	100.51	98.23	98.23
Partial taxes as % of GDP						
Indirect taxes	12.5	12.2	12.1	12.2	12.1	12.1
2002 = 100	103.31	100.83	100.00	100.83	100.00	100.00
Direct taxes	12.5	11.0	10.7	10.6	10.2	10.3
2002 = 100	116.82	102.80	100.00	99.07	95.33	96.26
Social security contribution	16.9	16.7	16.7	16.9	16.6	16.3
2002 = 100	101.20	100.00	100.00	101.20	99.40	97.60
NETHERLANDS						
	2000	2001	2002	2003	2004	2005
Tax quote	39.9	38.3	37.7	37.4	37.7	38.2
2002 = 100	105.84	101.59	100.00	99.20	100.00	101.33
Partial taxes as % of GDP						
Indirect taxes	12.5	12.9	12.7	12.7	12.9	13.1
2002 = 100	98.43	101.57	100.00	100.00	101.57	103.15
Direct taxes	12.0	11.7	11.8	11.0	10.8	11.9
2002 = 100	101.69	99.15	100.00	93.22	91.53	100.85
Social security contribution	15.4	13.7	13.3	13.8	14.0	13.1
2002 = 100	115.79	103.01	100.00	103.76	105.26	98.50
PORTUGAL						
	2000	2001	2002	2003	2004	2005
Tax quote	34.3	33.9	34.7	35.1	34.2	35.3
2002 = 100	98.85	97.69	100.00	101.15	98.56	101.73
Partial taxes as % of GDP						
Indirect taxes	14.1	14.0	14.5	15.2	14.5	15.3
2002 = 100	97.24	96.55	100.00	104.83	100.00	105.52
Direct taxes	9.9	9.5	9.4	8.8	8.6	8.5
2002 = 100	105.32	101.06	100.00	93.62	91.49	90.43
Social security contribution	10.3	10.5	10.8	11.1	11.1	11.3
2002 = 100	95.37	97.22	100.00	102.78	102.78	104.63

AUSTRIA						
	2000	2001	2002	2003	2004	2005
Tax quote	42.8	44.7	43.7	43.1	42.8	42.0
2002 = 100	97.94	102.29	100.00	98.63	97.94	96.11
Partial taxes as % of GDP						
Indirect taxes	15.1	15.0	15.2	15.0	14.9	14.7
2002 = 100	99.34	98.68	100.00	98.68	98.03	96.71
Direct taxes	13.1	15.1	14.0	13.6	13.5	12.9
2002 = 100	93.57	107.86	100.00	97.14	96.43	92.14
Social security contribution	14.6	14.6	14.5	14.5	14.5	14.5
2002 = 100	100.69	100.69	100.00	100.00	100.00	100.00
GREECE						
	2000	2001	2002	2003	2004	2005
Tax quote	37.9	36.6	36.7	35.5	34.3	34.4
2002 = 100	103.27	99.73	100.00	96.73	93.46	93.73
Partial taxes as % of GDP						
Indirect taxes	15.5	15.2	14.5	13.7	13.1	12.9
2002 = 100	106.90	104.83	100.00	94.48	90.34	88.97
Direct taxes	10.9	9.7	9.6	8.9	8.9	9.5
2002 = 100	113.54	101.04	100.00	92.71	92.71	98.96
Social security contribution	11.5	11.7	12.6	13.0	12.3	12.1
2002 = 100	91.27	92.86	100.00	103.17	97.62	96.03
SPAIN						
	2000	2001	2002	2003	2004	2005
Tax quote	33.9	33.5	33.9	33.9	34.5	35.6
2002 = 100	100.00	98.82	100.00	100.00	101.77	105.01
Partial taxes as % of GDP						
Indirect taxes	11.9	11.5	11.6	11.9	12.2	12.5
2002 = 100	102.59	99.14	100.00	102.59	105.17	107.76
Direct taxes	10.5	10.4	10.8	10.5	10.6	11.4
2002 = 100	97.22	96.30	100.00	97.22	98.15	105.56
Social security contribution	12.0	12.2	12.1	12.2	12.2	12.2
2002 = 100	99.17	100.83	100.00	100.83	100.83	100.83