Munich Personal RePEc Archive

The European Union: Eastern Enlargement and Taxation

van der Hoek, M. Peter

Erasmus University Rotterdam

2004

Online at https://mpra.ub.uni-muenchen.de/5907/
MPRA Paper No. 5907, posted 24 Nov 2007 01:37 UTC

The European Union: Eastern Enlargement and Taxation

M. PETER VAN DER HOEK*

Abstract

The European Union has not defined its limits in geographical terms. Each enlargement has led and will lead to a decrease of the European Union's per capita GDP. After the collapse of the Soviet Union, the transition countries went through a long and deep recession. However, they have reached a stage of positive growth and their tax levels are approaching the lower limit of the range of tax/GDP ratios in European Union countries. Differences exist in tax capacity and tax effort. In some countries, greater efforts are possible to improve tax revenues. Further examination of the timing of tax administration reform may shed light on tax effort in transition countries. The paper also suggests the existence of a negative relationship between tax effort and corruption. (JEL P27, H20); Atlantic Econ. J., 32(2): pp. 75-88, June 04. © All Rights Reserved

Introduction

It is quite common to talk about Europe, the European Union, Western Europe, Central and Eastern Europe, and South-Eastern Europe. However, it is not quite clear what most of these terms mean. The exception is the European Union, which is not a geographical notion but a well-defined political concept resulting from its membership of 25 countries (as of May 1, 2004). The other terms—Europe, Western Europe, Central and Eastern Europe, and South-Eastern Europe—are geographic rather than political in character and are less clear than they seem at first sight. For example, Israeli and Turkish football clubs participate in European soccer competitions. The Eurovision Song Festival also includes participants from Israel and Turkey. This suggests that Israel and Turkey are European countries. However, it seems likely that many people would not consider these countries part of Europe. Yet, Turkey is a candidate-member country of the European Union even though most of it's territory is located in Asia [van der Hoek, 2003a, p. 44].

The European Union has not defined its limits in geographical terms. The Treaty on European Union says in Article 49 that "any European State which respects the principles set out in Article 6(1) may apply to become a member of the Union." Article 6(1) states that "the Union is founded on the principles of liberty, democracy, respect for human rights and fundamental freedoms, and the rule of law, principles which are common to the Member States." The European Union has granted Bulgaria, Romania, and Turkey the status of candidate-member countries. Bulgaria and Romania are expected to join the European Union in 2007, whereas Turkey hopes to receive a preliminary entry year by the end of 2004. If so,

*Eramus University—Netherlands and Academy of Economic Studies—Romania. This research is supported in part by San Jose State Unversity (SJSU) during the author's stay at SJSU as 2003-04 International Tax Policy Research Fellow. An earlier version of this paper was presented at a seminar at SJSU. The author gratefully acknowledges useful comments received from seminar participants.

this will most likely be a year in the mid 2010s. Moreover, the European Union has identified the countries of the West Balkans region, including former Yugoslav republics, as potential candidates.

The Copenhagen European Council has made the principles set out in Article 6(1) of the Treaty on European Union more concrete. These so-called Copenhagen criteria comprise a political criterion, an economic criterion, and the ability to take on the *acquis communautaire*:

1) Stability of institutions guaranteeing democracy, the rule of law, human rights, and respect for and protection of minorities;
2) The existence of a functioning market economy, as well as the ability to cope with competitive pressures and market forces within the EU;
3) The ability to take on the obligations of membership, including adherence to the aims of political, economic, and monetary union.

Enlarging the European Union

Following the definition used by the European Bank for Reconstruction and Development (EBRD), this paper refers to regions in Europe that comprise the following countries: Central and Eastern Europe: Croatia, Czech Republic, Hungary, Poland, Slovakia, and Slovenia; South-Eastern Europe: Albania, Bulgaria, Yugoslavia, Macedonia, and Romania; Baltic States: Estonia, Latvia, and Lithuania; and Newly Independent States: the 12 former Soviet Republics excluding the Baltic States.

Table 1 shows some basic characteristics of the ten accession countries in Central and Eastern Europe in the mid 1990s, that is, at the time of their applications for European Union membership. Their combined population amounted to 28 percent of that of the European Union of 15 member states. However, their combined GDP amounted to only 4 percent of that of the EU-15 at current prices, or 9 percent at purchasing power standards. GDP per capita in the applicant countries amounted to 13 percent at current prices or 32 percent at purchasing power standards. Thus, the applicant countries are poor relative to European Union member states. Though their population is sizeable, their economic weight is very small.

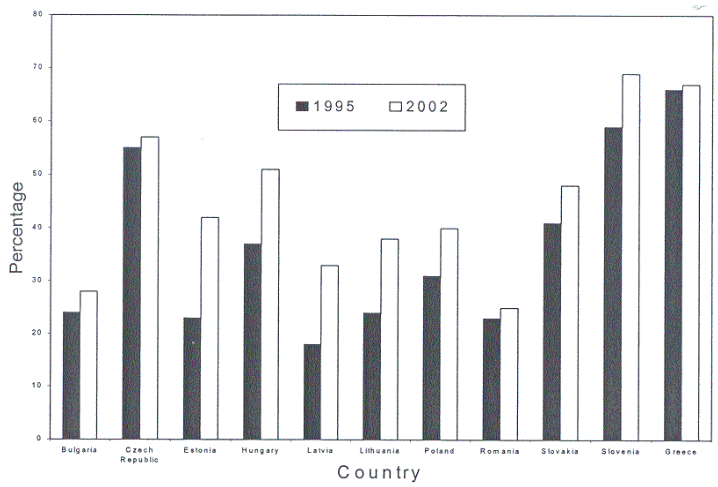
TABLE 1
CEE-10 in % of the EU, 1995

Area	Population	Total GDP (current prices)	GDP per capita (current prices)	Total GDP (purchasing power)	GDP per capita (purchasing power)
33	28	4	13	9	32

Source: European Commission, 1997, p. 68.

Figure 1 shows GDP levels in the individual accession countries in Central and Eastern Europe and South-Eastern Europe relative to the European Union average, both in 1995 and 2002. It includes the level of the poorest European Union member state (Greece) as a benchmark. Obviously, Slovenia is the richest of the accession countries, while Romania is the poorest. However, relative positions changed considerably during the period 1995-2002. Former Soviet republics, the Baltic States, which started the reforms at relatively low GDP levels, showed the strongest growth. In 1995, Latvia was the poorest applicant country with a per capita GDP of 18 percent of the European Union average in 1995, followed by Estonia and Romania with a per capita GDP of 23 percent. In 2002, however, Estonia's GDP per capita had almost doubled to 42 percent of the European Union average, whereas Romania's per capita GDP had barely risen to 25 percent.

FIGURE 1
GDP Per Capita in Purchasing Power Standards as % of EU-average, 1995 and 2002



Source: European Commission [1997, p. 68; 2003, p. 42]

The European Economic Community, one of the European Union's predecessors, was founded in 1957 by six countries: France, Germany, Italy, and the Benelux countries (Belgium, the Netherlands, and Luxembourg). Several enlargements occurred since 1957. Table 2 compares the 2004 enlargement with previous enlargements:

1) The 1973 enlargement when Denmark, Ireland, and the United Kingdom joined the European Union and European membership increased to nine countries;
2) The southern enlargement in the 1980s (Greece in 1981 and Portugal and Spain in 1986) increased the European Union membership to twelve member states;
3) The 1995 enlargement increased the membership to fifteen countries when Austria, Finland, and Sweden joined the European Union.

TABLE 2
Impact of Successive Enlargements of the European Union (based on 1995 data)

	Increase in area	Increase in population	Increase in total GDP	Change in per capita GDP	Average per capita GDP (EU-6=100)
EU-9/EU-6	31%	32%	29%	-3%	97
EU-12/EU-9	48%	22%	15%	-6%	91
EU-15/EU-12	43%	11%	8%	-3%	89
EU-26/EU-15	34%	29%	9%	-16%	75

Source: European Commission, 1997, p. 24.

Table 2 ignores the enlargement of 1990 when the former German Democratic Republic (East Germany) joined the European Union as a result of the reunification with the Federal Republic of Germany (Western Germany). Though Cyprus is also included in Table 2, it does not make a difference compared to the ten accession countries in Central and Eastern Europe given Cyprus' small size.

On May 1, 2004, the fourth major enlargement occurred when ten countries joined the European Union all at once: the three Baltic States (Estonia, Latvia, and Lithuania), five countries in Central and Eastern Europe (the Czech Republic, Hungary, Poland, Slovakia, and Slovenia), and two Mediterranean mini-states (Cyprus and Malta). In terms of area and population, this enlargement is comparable to that of 1973. However, it is unprecedented in terms of the number of accession countries, their diversity, and their level of economic development relative to that of the European Union. Although each enlargement has led to a decrease of the European Union's per capita GDP, the 2004 enlargement will result in the biggest decrease ever. Both in 1973 and 1995, total GDP increased somewhat less than the European Union's population leading to a decrease of GDP per capita by 3 percent. However, the southern enlargement of the 1980s involved countries that were substantially poorer than the European Union countries. Therefore, the increase of the European Union's total GDP was much smaller than the population increase. As a result of the southern enlargement, the European Union's GDP per capita fell by 6 percent to 91 percent of that of the original six member states. In magnified form, the same thing occurred after the eastern enlargement of 2004. GDP per capita in the European Union decreased by 16 percent to a low of 75 percent of that of the original six member countries.

Post-communist Europe

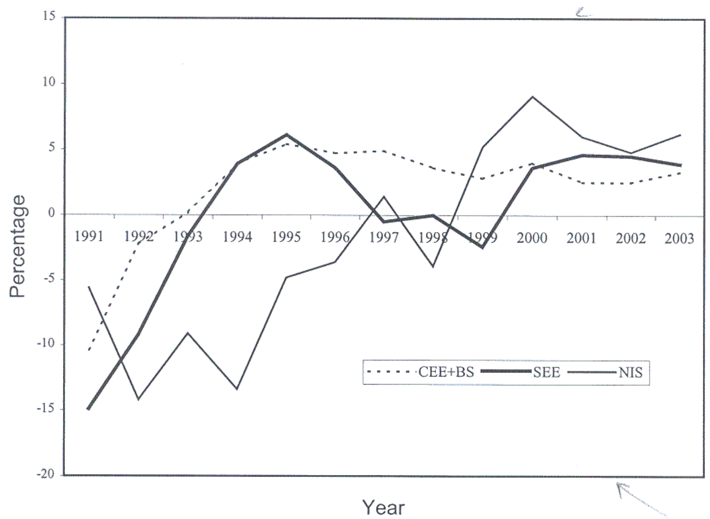
In the late 1980s and early 1990s, Europe changed considerably in a short span of time. The end of the Cold War era was definite by the fall of the Berlin Wall in 1989 and the collapse of the Soviet Union in 1991. These changes took place with breathtaking speed [van der Hoek, 1998]. The government of the Federal Republic of Germany honored East Germany's president Erich Honecker on an official visit in 1987, whereas only a couple of years later the same government filed a suit against Erich Honecker and arrested him. Freed from the ideological monopoly of communism and Soviet domination, Central and Eastern European countries turned their minds and societies towards the West. Given the uncertain future, the prospect of stability, security, and prosperity under the umbrella of the European Union was highly attractive to them. The countries of Central and Eastern Europe and the Newly Independent States began their journey from centrally planned to market economies and embarked on reforms including macroeconomic stabilization policies, expenditure reforms, and tax reforms.

The European Union encouraged this approach because it wanted to secure economic and political stability in its own backyard. It stimulated the process of European unification, in particular, by concluding Europe Agreements that formed the legal basis for bilateral relations between the European Union and associated countries [Schoors and Gobbin, 2004]. As early as December 1991—only a few months after the collapse of the Soviet Union—the European Union signed the first Europe Agreements with Poland and Hungary. These agreements offered trade concessions and other benefits normally associated with full membership of the European Union. The aim of the agreements was to establish a free-trade area between the European Union and the associated countries and, ultimately, to enlarge the Union toward the East. In the next phase, Europe Agreements were also concluded with Bulgaria, the Czech Republic, Romania, and Slovakia (1993); Estonia, Latvia, and Lithuania (1995) and Slovenia (1996). Croatia filed an application in 2003, while other countries in the West Balkans will undoubtedly follow.

Initially, the transition triggered a long and deep recession. As a result, GDP decreased sharply as Figure 2 shows. The transition recession has been longest and deepest in the Newly Independent States and South-Eastern Europe. In the mid 1990s, Central and Eastern

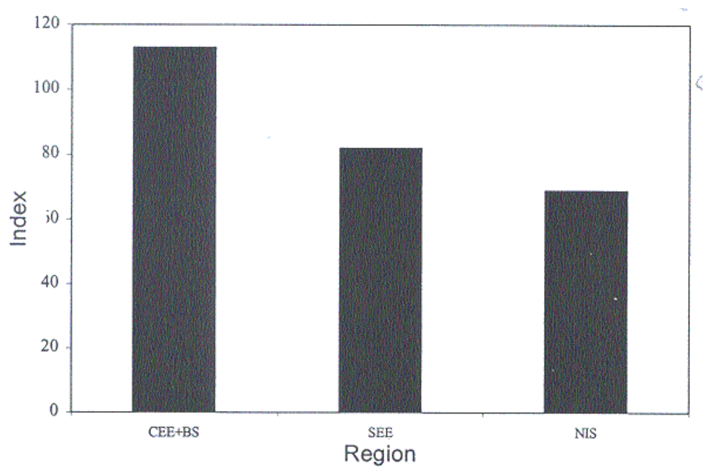
Europe and the Baltic States, as well as South-Eastern Europe, turned to positive GDP growth. In Central and Eastern Europe and the Baltic States, a period of continued growth followed. However, South-Eastern Europe was unable to sustain this growth and suffered a backlash in the late 1990s. At the turn of the century, however, South-Eastern Europe shows positive growth again. The transition recession in the Newly Independent States lasted throughout the 1990s. However, they reached a period of positive growth rates from 1999.

FIGURE 2
Real GDP Growth (%), 1991-2003



Source: EBRD

FIGURE 3
GDP levels in 2002 (1989=100)

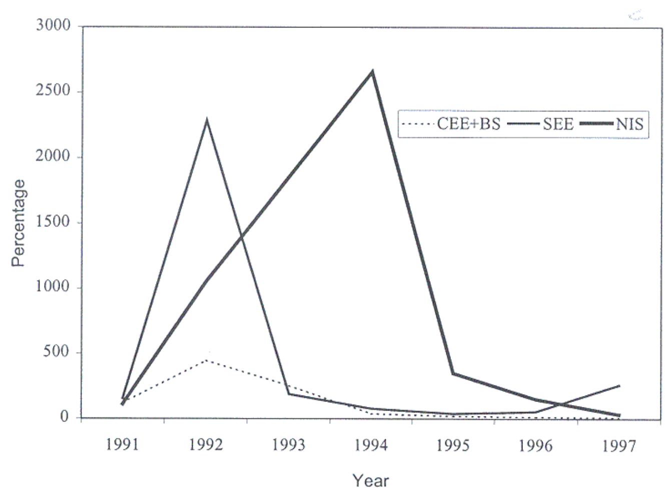


Source: EBRD

As a result of a sustained growth in Central and Eastern Europe and the Baltic States, GDP in this region now exceeds its 1989 level as displayed in Figure 3. In the other regions, GDP is still considerably lower than it was in 1989. Two observations follow. First, given the notorious allocative inefficiency of the centrally planned economies, a fall of real GDP is not the same as a decline in well-being. A decrease in the production of weapons and barbed wire, for example, does not necessarily reduce the welfare of individuals. Second, the regions are far from homogeneous and the variation is large. GDP levels in Central and Eastern Europe and the Baltic States, for example, range from 77 in Latvia and Lithuania to 130 in Poland. In South-Eastern Europe GDP levels range from 50 in Serbia and Montenegro to 121 in Albania. In the Newly Independent States, they range from 38 in Georgia to 106 in Uzbekistan. However, it is questionable to what extent the data are reliable [The World Bank, 2002, p. 8].

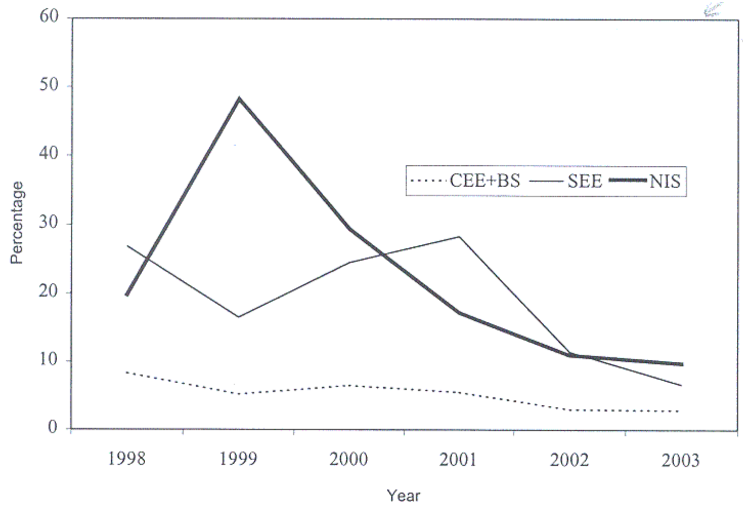
Central and Eastern European countries have managed the transition better than countries in South-Eastern Europe and certainly better than the Newly Independent States. Improvements have largely been accomplished by market-oriented policy reforms and the creation of a better social safety net—though still inadequate to the European standard—while at the same time moving toward a more broad-based tax system. Initially, inflation reached very high levels. As Figure 4a shows, in particular, hyperinflation occurred in South-Eastern Europe and the Newly Independent States comparable to the inflation in Germany prior to World War II. However, in Central and Eastern Europe and the Baltic States, inflation rolled back to controllable levels by the mid 1990s while South-Eastern Europe followed suit. It took the Newly Independent States longer to get inflation under control. However, Figure 4b shows that by the late 1990s they managed to do it. Recently, they seem to have reached single digit inflation levels. Again, individual countries vary widely. Inflation rates in Central and Eastern Europe and the Baltic States in 2003 ranged from -0.8 percent in Lithuania to 8.5 percent in Slovakia. In South-Eastern Europe, they ranged from 1.5 percent in Macedonia to 14.5 percent in Romania. Finally, in the Newly Independent States, they ranged from 2.1 percent in Azerbaijan to 29 percent in Belarus.

FIGURE 4a
Inflation Rates, 1991-97



Source: EBRD

FIGURE 4b
Inflation Rates, 1998-2003

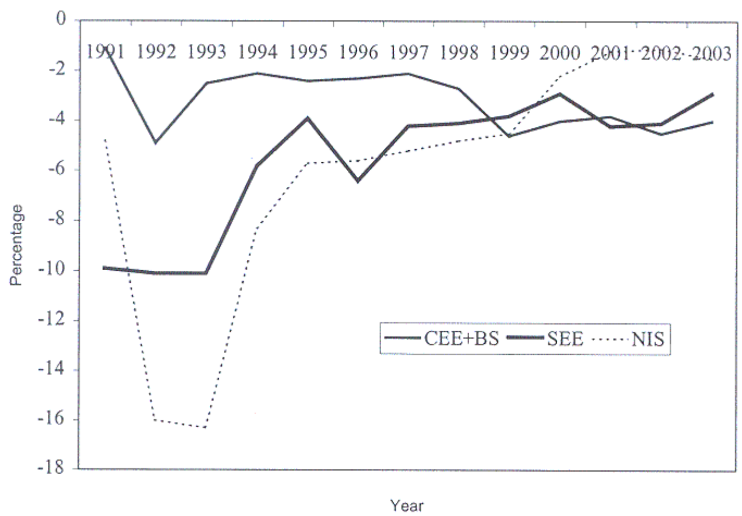


Source: EBRD

Providing public goods and services and a social safety net while maintaining macroeconomic stability requires the ability to raise revenues efficiently and equitably. Figure 5 shows that budget deficits were very high in the Newly Independent States immediately after the collapse of the Soviet Union. They were high in South-Eastern Europe and modest—at least to the current American standard—in Central and Eastern Europe and the Baltic States. However, from the mid 1990s, the deficits have been reduced. In the late 1990s, budget discipline relaxed a little bit in Central and Eastern Europe (not in the Baltic States, though the graph does not make this distinction). Surprisingly, the budgetary performance seems in reverse order: the Newly Independent States are doing the best and Central and Eastern Europe are doing the worst. Deficits in Central and Eastern Europe now exceed the 3 percent cap set by the Economic and Monetary Union's Stability and Growth Pact. The variation among individual countries is also wide in this respect. General government balances in Central and Eastern Europe and the Baltic States in 2003 ranged from 0.5 percent of GDP in Estonia to -8.3 percent in the Czech Republic. In South-Eastern Europe, they ranged from -0.7 percent in Bulgaria to -5.8 percent in Albania. Finally, in the Newly Independent States, they varied from 2 percent in Russia to -4.8 percent in the Kyrgyz Republic.

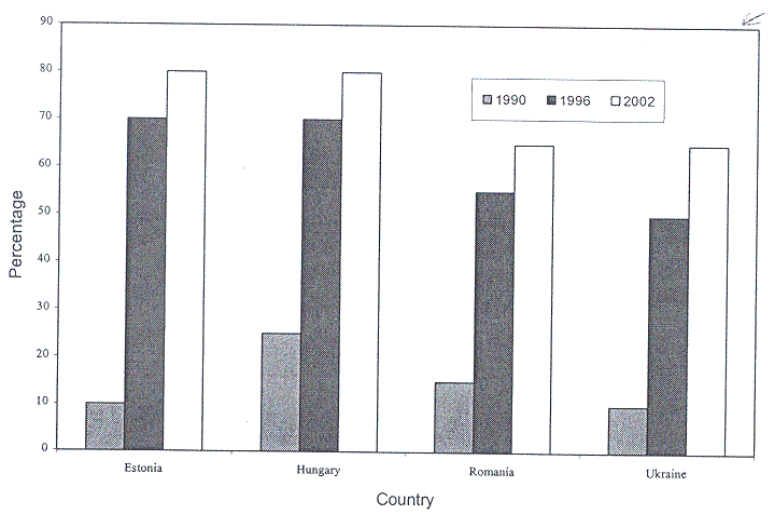
Also, there has been a privatization process which has been pushed very hard by international organizations including the International Monetary Fund and the World Bank. Figure 6 shows the results of the privatization process for four individual countries each representing a region. Estonia represents the Baltic States; Hungary represents Central and Eastern Europe; Romania represents South-Eastern Europe; and Ukraine represents the Newly Independent States. Central and Eastern Europe and the Baltic States made considerable progress with privatization while South-Eastern Europe and the Newly Independent States lag behind. However, the reliability of this kind of data seems questionable. In Russia, for example, privatization has been relatively successful in terms of private sector share in GDP (70 percent in 2002). However, this is actually the result of what could also be called the biggest robbery of the state in the twentieth century. Under president Yeltsin, a few oligarchs grabbed the assets of very large state-owned companies in exchange for political support.[1] Moreover, under communist rule, there was hardly any private ownership, though it did exist according to the EBRD data. However, many economists in Romania do not consider the data for their country to be credible, neither for the first year after the upheavals nor for later years.

FIGURE 5
General Government Balances (in % of GDP), 1991-2003



Source: EBRD

FIGURE 6
Private Sector Share in GDP



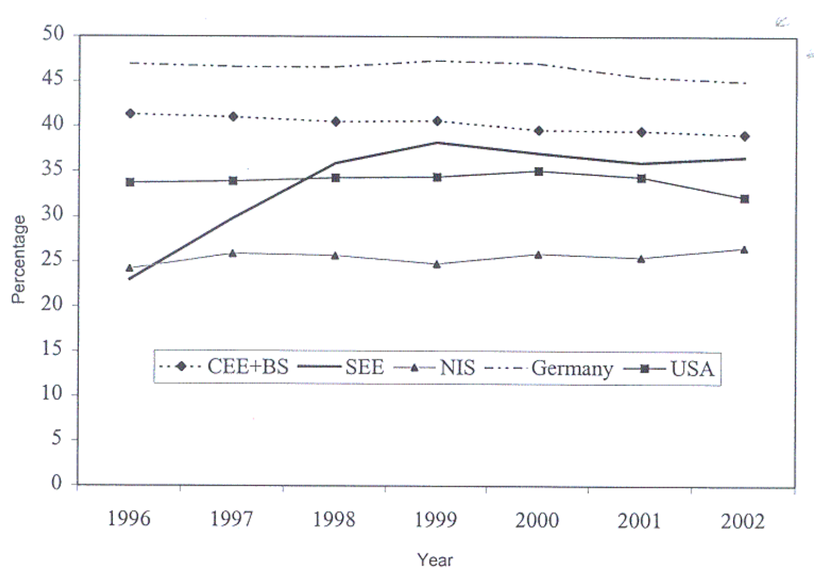
Source: EBRD

Taxation in Central and Eastern European Countries

While most countries in the region struggle to deal with continued budget deficits, the question arises as to how much revenue a country can expect to raise. At what point should the emphasis be placed on reducing expenditure rather than raising revenue? Answering this question involves evaluating a country's tax capacity and tax effort. Tax capacity is defined as the ability of a government to raise tax revenue based on structural factors such as the level of economic development and the number of tax handles available, and the ability of the population to pay taxes [Chelliah, 1971, p. 293]. Tax effort is defined as a measure of how well a country is using its taxable capacity, that is, tax effort is the ratio of actual tax collections to taxable capacity [Bahl, 1971, p. 582]. Indices of tax effort provide a tool for measuring differences between countries in how effectively they are using their potential tax bases. These indices may indicate the appropriate policy for dealing with a fiscal imbalance. For example, countries with a high tax effort index may need to look at reducing expenditures rather than raising taxes [Stotsky, 1997].

Figure 7 shows average total taxation as a percentage of GDP over the period 1996-2002 in different regions and includes Germany and the U.S.A. as benchmarks. It is expected that the Newly Independent States have the greatest taxation problems. They have been under communist rule for over 70 years. The state financed itself through state-owned companies rather than taxation, so the Newly Independent States have very little experience with taxation and markets. Nonetheless, they are approaching the (relatively low) level of taxation in the U.S.A. and the lower limit of the range in European Union countries, which is roughly 30-55 percent of GDP [van der Hoek, 2003b, p. 22]. Tax levels in Central and Eastern Europe and the Baltic States and South-Eastern Europe are on average within the range of European Union countries.

FIGURE 7
General Government Revenue (in % of GDP), 1996-2002



Source: EBRD

After more then a decade of transition and in view of the European Union's eastern enlargement of 2004, it seems relevant to know how well the accession countries are utilizing their tax capacity. Musgrave [2000] identifies several factors that determine a country's taxable capacity: the stage of development, often measured by per capita income; the existence and extent of tax handles; and efficacy of tax administration. Each of these factors contribute either to a country's potential taxable base (for example, the greater the level of economic development the higher the income tax base) or to the accessibility to that tax base by the government. For example, an economy characterized by an established manufacturing sector has more easily identifiable and accessible taxpayers than an economy that is largely agrarian or comprised of small traders. A strong manufacturing sector signifies the existence of a tax handle. A simple measure of tax effort across countries might compare countries' share of tax revenue to GDP. However, such comparisons ignore differences in tax capacity across countries. Countries differ with respect to their economic situations, for example, per capita income, structure, resources, and other factors. These differences must be accounted for when measuring tax effort.

Another approach is to use regression analysis across countries to predict a country's tax to GDP share [Bahl, 1971; Chelliah, 1971; Stotsky and WoldeMariam, 1997; Tait, Gratz, and Eichengreen, 1979; and Tanzi, 1968, 1992]. A tax effort index can be developed as the ratio of actual tax share to the predicted tax share. An index of one means the country's tax effort is at the expected level, given the structural factors of that country. In other words, the country is using its taxable capacity at a level consistent with the average of the other countries in the sample. By comparing tax effort across similar countries, it may be possible to identify countries which have the potential to increase tax revenues through increased tax effort. Alternatively, countries may be identified where tax effort is already relatively high and it would be more obvious to closely examine the expenditure side of the budget.

A recent study [Mertens, 2003] uses a regression approach covering the period 1992-2000 and includes data for ten countries in Central and Eastern and South-Eastern Europe: Albania, Bulgaria, Croatia, the Czech Republic, Hungary, Macedonia, Poland, Romania, the Slovak Republic, and Slovenia. Notably, this sample does not include all European Union accession countries. Rather, it comprises seven accession countries and three countries in the West Balkans that are already or will become applicant countries. A very interesting dimension of this study is that it presents a ranking based on each country's deviation between its actual and predicted tax to GDP ratio. The results are summarized in Table 3. The value of −14.9 percent for Romania in 2000 means that the country's actual revenue share was 14.9 percent lower than that predicted by the model.

TABLE 3

Deviation of Actual Tax Share from Predicted, as a Percentage of Predicted

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Albania	-4.7	17.2	15.4	14.8	-12.2	-10.6	3.3	0.4	12.0
Bulgaria	-3.5	-19.1	-8.9	-15.8	-	-6.9	-1.4	-10.1	-13.4
Croatia	-	-	21.0	22.8	21.6	17.7	25.7	10.6	7.9
Czech Republic	-	11.0	8.6	7.7	5.4	-2.0	-4.4	-2.0	-
Hungary	4.4	9.1	2.3	10.4	5.6	1.9	1.0	-	-
Macedonia	-	-	-	-	-4.1	-7.0	-10.6	-8.7	-
Poland	-3.1	3.6	-2.3	-4.2	-6.1	-8.3	-11.6	-14.7	-16.6
Romania	8.8	5.1	-5.9	-3.5	-9.8	-14.6	-15.7	-10.1	-14.9
Slovakia	-	-	-5.3	3.7	2.1	-5.9	-9.2	-14.3	-
Slovenia	-	11.6	9.7	8.0	5.5	3.7	4.0	6.2	1.7

Source: Mertens (2003), p. 548.

The results of the Mertens study indicates that greater efforts are possible in several Central and Eastern and South-Eastern European countries—especially Bulgaria, Poland, Romania, and Slovakia - to improve tax revenues *via* increasing tax effort. This kind of information may be used by the European Commission, in particular with regard to Poland and Slovakia, now that these countries have joined the European Union. The accession countries will have to accept the principles of Economic and Monetary Union. Since they cannot opt out, they will have to meet the well-known Maastricht-criteria on inflation, real interest rates, budget deficits, public debt, and exchange rate stability. The European Commission may use the data pertaining to tax effort, in particular, in relation to the Stability and Growth Pact's budget deficit criterion.

Future research

The study cited above [Mertens, 2003] points out some possible avenues for further research. Countries in Central and Eastern Europe and South-Eastern Europe have had myriad tax law changes as well as major tax reform efforts over the 1990s. Reviewing these events may shed light on what is happening with tax effort in Central and Eastern Europe and South-Eastern Europe. For example, Slovenia and Croatia consistently have tax effort indices above one, and both have positive deviations from predicted tax shares for each year. These two countries share many common factors including a steady approach to tax reform. Slovenia introduced income tax laws in 1994, a tax administration law in 1997, and the VAT in 1999. Croatia began creating its tax service in 1993, introduced income taxes in 1994, and the VAT in 1998. Like Croatia and Slovenia, Poland and Hungary have had more systematic tax reform efforts in the sense that they have made few major revisions of tax laws already enacted. One major difference is the timing of tax administration legislation: Hungary has yet to enact a major reform of its tax administration; and Poland undertook tax administration reform in 1997, five years after income tax reform and four years after the introduction of the VAT. Since tax administration is an important component in tax effort, further examination of these relationships is warranted.

Another factor that warrants further examination is corruption. Although it is a phenomenon that is not easy to study, data are available about perceived corruption levels in a large and growing number of countries. *Transparency International* publishes an annual Corruption Perceptions Index (CPI) for a growing number of countries. Table 4 shows the amount of perceived corruption over time in selected countries. The scores range between 10 (highly clean) and 0 (highly corrupt) and relate to perceptions of the degree of corruption as seen by business people and risk analysts. Respondents expressed their perceptions in surveys assessing a country's performance. At least three surveys are required for a country to be included. Therefore, in its most recent index, *Transparency International* could include only 133 of the more than 200 sovereign nations.

It seems plausible that negative relationships exist between corruption and economic development and between corruption and tax effort. The low scores for countries in Central and Eastern Europe and South-Eastern Europe indicate that doing business in these countries is subject to normal business risks and to additional risks resulting from corruption. As a result, businesses face additional uncertainties. Particularly worrying is that the amount of perceived corruption generally does not diminish over time. Rather, it remains stable or even grows. Politicians increasingly pay lip-service to the fight against corruption but fail to clamp down on corruption to break the vicious circle of poverty and graft. Corruption seems a self-sustaining phenomenon since anti-corruption measures tend to be adopted where they are needed least: in countries which do not have particularly serious corruption problems [Steves and Rousso, 2003, p. 28]. Transition countries with low levels of administrative corruption have been more likely to adopt intensive anti-corruption programs than countries with high levels of administrative corruption.

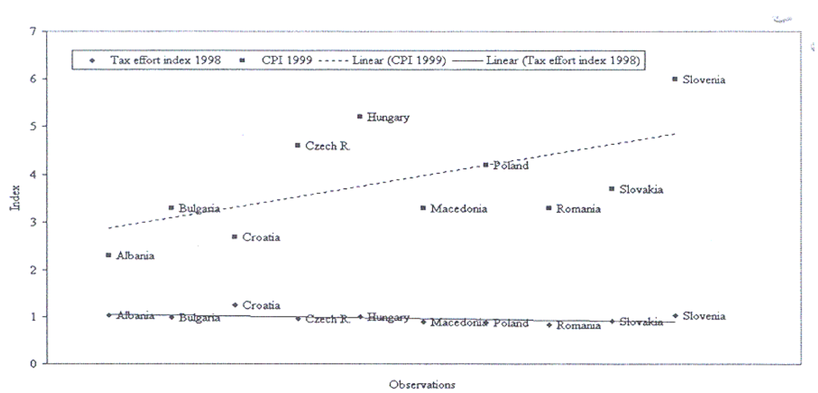
TABLE 4
Corruption Perceptions Index, 1995-2003

		1995	1996	1997	1998	1999	2000	2001	2002	2003
1.	Finland	9.1	9.1	9.5	9.6	9.8	10.0	9.9	9.7	9.7
7.	Netherlands	8.7	8.7	9.0	9.0	9.0	8.9	8.8	9.0	8.9
18.	USA	7.8	7.7	7.6	7.5	7.5	7.8	7.6	7.7	7.5
29.	Slovenia	-	-	-	-	6.0	5.5	5.2	6.0	5.9
35.	Italy	3.4	3.4	5.0	4.6	4.7	4.6	5.5	5.2	5.3
40.	Hungary	4.1	4.9	5.2	5.0	5.2	5.2	5.3	4.9	4.8
50.	Greece	4.0	5.0	5.4	4.9	4.9	4.9	4.2	4.2	4.3
54.	Bulgaria	-	-	-	2.9	3.3	3.5	3.9	4.0	3.9
54.	Czech Republic	-	5.4	5.2	4.8	4.6	4.3	3.9	3.7	3.9
59.	Croatia	-	-	-	-	2.7	3.7	3.9	3.8	3.7
	Slovak Rep.	-	-	-	3.9	3.7	3.5	3.7	3.7	3.7
64.	Poland	-	5.6	5.1	4.6	4.2	4.1	4.1	4.0	3.6
83.	Romania	-	-	3.4	3.0	3.3	2.9	2.8	2.6	2.8
86.	Russia	-	2.6	2.3	2.4	2.4	2.1	2.3	2.7	2.7
92.	Albania	-	-	-	-	2.3	-	-	2.5	2.5
106.	Macedonia	-	-	-	-	3.3	-	-	-	2.3
133.	Bangladesh	-	-	-	-	-	-	-	1.2	1.3

Source: Transperancy International.

There is some evidence supporting the hypothesis of a negative relationship between corruption and tax effort. Admittedly, a quick view of the data suggests there is no relationship between tax effort and corruption at all (see Figure 8a). However, that is actually caused by three pairs of observations (pertaining to Albania, Bulgaria, and Croatia).

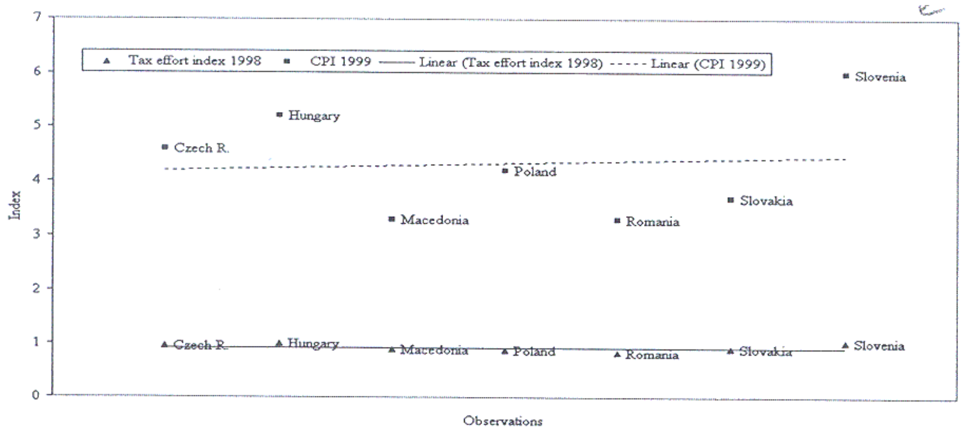
FIGURE 8a
Tax Effort and Corruption



Notes: CPI data rescaled to one-sixth of their original values. Sources: Transparency International and Mertens [2003].

Figure 8b ignores these three countries and concentrates on the next seven pairs of observations. It becomes clear that these observations do suggest a correlation between corruption and tax effort. This is certainly an avenue for future research. However, a serious problem is the lack of data since time series are very short. Sometimes, data are available for just one year and not in a time series. In addition, data on tax effort are scarce. Obviously, this is a challenge for students of taxation in transition countries.

FIGURE 8b
Tax Effort and Corruption



Notes: CPI data rescaled to one-sixth of their original values. Sources: Transparency International and Mertens [2003].

Footnotes

[1]Interestingly, a partial and seemingly erratic cancelation seems to unravel under Yeltsin's successor Putin. The owners of the Russian holding company Menatep, controlling Russia's biggest oil company Yukos, have offered their share in Yukos—an estimated 44 percent—to the Russian government in exchange for the release of Michail Chodorkovski, the former CEO and president of Yukos. Chodorkovski was arrested on October 25, 2003 on charges of fraud and tax evasion (*NRC Handelsblad*, February 16, 2003).

References

Bahl, R. W. "A Regression Approach to Tax Effort and Tax Ratio Analysis," *IMF Staff Papers*, 18, 3, November 1971, pp. 570-612.

Chelliah, R. J. "Trends in Taxation in Developing Countries," *IMF Staff Papers*, 18, 2, July 1971, pp. 254-331.

European Bank for Reconstruction and Development, Annual Transition Report, London: EBRD, various years.

European Commission, *Agenda 2000 - Volume II - Communication: The Effects on the Union's Policies of Enlargement to the Applicant Countries of Central and Eastern Europe (Impact Study)*, Brussels, 1997.

European Commission. *Continuing Enlargement; Strategy Paper and Report of the European Commission on the Progress Towards Accession by Bulgaria, Romania and Turkey*, [http://europa.eu.int/comm/enlargement/report_2003/pdf/strategy_paper2003_full_en.pdf], Brussels, 2003.

Mertens, J. B. "Measuring Tax Effort in Central and Eastern Europe," *Public Finance and Management*, 3, 4, 2003, pp. 530-63.

Musgrave, R. "Tax Reform in Developing Countries," in *Public Finance in a Democratic Society. Volume 3. The Foundations of Taxation and Expenditure*, Cheltenham and Northampton: Elgar, 2000, pp. 467-90.

Schoors, K.; Gobbin, N. "Enlargement," Chapter 25 in M. Peter van der Hoek, *Handbook of Public Administration and Policy in the European Union*, New York: Dekker, Inc., 2004 (forthcoming).

Steves, F.; Rousso, A. *Anti-corruption Programmes in Post-communist Transition Countries and Changes in the Business Environment, 1999-2002*, EBRD Working paper, London: December 2003.

Stotsky, J. G.; Wolde Mariam, A. "Tax Effort in Sub-Saharan Africa," IMF Working Paper No. 97/107, Washington, DC: IMF, 1997.

Tait, A. A.; Gratz, W. L. M.; Eichengreen, B. J. "International Comparisons of Taxation for Selected Developing Countries, 1972-76," *IMF Staff Papers*, 26, 1, March 1979, pp. 123-56.

Tanzi, V. "Comparing International Tax 'Burdens': A Suggested Method," *Journal of Political Economy*, 76, 5, September-October 1968, pp. 1078-84.

—. "Structural Factors and Tax Revenue in Developing Countries: A Decade of Evidence," in Ian Goldin; L. Alan Winters, eds., *Open Economies: Structural Adjustment and Agriculture*, Cambridge, New York and Melbourne: Cambridge University Press, 1992, pp. 267-85.

The World Bank, *Transition: The First Ten Years; Analysis and Lessons for Eastern Europe and the Former Soviet Union*, Washington, DC: The World Bank, 2002.

Transparency International, *Corruption Perceptions Index*, Berlin: Transparency International, various years.

van der Hoek, M. P. "From Nation to State: A Difficult Process," *Public Administration and Management: An Interactive Journal*, 3, 4, 1998.

—. "Europe: The 1990s and Beyond," *Journal of European Economy*, 2, 1, March 2003a, pp. 43-56.

—. "Tax Harmonization and Competition in the European Union," *eJournal of Tax Research*, 1, 1, 2003b, pp. 19-36.

Copyright of Atlantic Economic Journal is the property of International Atlantic Economic Society and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.