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Fiscal Issues in the New EU Member Countries – Prospects and Challenges

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Abstract

The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the IMF or IMF policy. This paper describes research in progress by the author and is published to elicit comments and to further debate.

This paper examines the fiscal challenges that the new EU member states in Central and Eastern Europe (NEW-8) are facing that arise from both EU membership and from developments that are essentially independent of EU membership. While the direct fiscal strains caused by EU membership may appear to be only short term and of minor importance, they are more challenging when regarded in the context of the impact on the NEW 8 of globalization (locational competition) and country-specific structural characteristics. It is argued that there is an urgent need for fiscal reforms in these countries that requires both determination with respect to restructuring the budget and innovativeness in regard of increasing the efficiency of public spending and collecting tax revenues. Several reform options are discussed.

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I. INTRODUCTION

On 1 May 2004, ten countries of Central and Eastern Europe and the Mediterranean joined the European Union (EU). Eight of these countries (NEW-8) are former communist countries that have been engaged in a transition process over the past 15 years, making the switch from a planned to a market economy, involving fundamental institutional and structural changes in the economies concerned. To prevent severe setbacks in this transformation process and fasten the development and catch-up process vis-à-vis the more highly developed western market economies, these countries decided to strive for early EU membership. In doing this, they placed great hopes in greater financial aid by the EU, in larger FDI flows and a quicker implementation of the necessary structural reforms (hoping that pressure from outside through the EU convergence criteria could help to overcome political resistances to these reforms).

These expected advantages of striving for an early EU membership had to be bought at the cost of stronger challenges (in particular fiscal ones) in the following years. The decision for an early EU membership meant in particular, apart from its advantages, (i) additional expenditures as well as more severe adjustment and austerity measures, and (ii) quicker exposure to international competition (globalization) which led not only to chances but also to dangers with respect to a revenue shortfall through competitive pressure (tax competition) and to higher risk of financial crises. This must be seen against the background of long-term structural problems in the NEW-8, such as rapidly aging populations and the general need to upgrade infrastructure. The various fiscal challenges arising from these developments and requirements can jointly lead to politically and socially painful crisis processes in these countries that will tend to deepen and that can only be prevented through intelligent and unwavering economic policy. For this, early policy reforms are required. This paper examines these various fiscal challenges, shows the linkages between them and evaluates their relative importance. Furthermore, it discusses the economic policy reforms necessary to master these challenges.[2]

The remainder of the paper is organized as follows. Section II investigates the direct fiscal challenges of the EU membership for the NEW-8 over the next years. The fiscal challenges that have so far been in the (political) spotlight are the increase in expenditures and revenues that the NEW-8 can expect from EU membership in the near future. Section III analyzes further fiscal challenges that have not yet been in the (political) spotlight as much, but seem to be even more important for the development of these countries. These are the challenges that will affect these countries through their exposure to globalization and the need to upgrade their infrastructure and react to their rapidly aging populations. Section IV deals with the economic policy reforms necessary to master all these fiscal challenges. Section V concludes.

Section II argues that though, in general, the net fiscal effects from EU membership are likely to be positive in the medium term, there will most likely be fiscal strains on the NEW-8 in the short term, as the positive indirect effects on the budget (via improvement of institutions, or deregulation) will emerge only gradually and/or preceded EU entrance. Section III argues that globalization and specific structural characteristics in the NEW-8 lead in particular (i) to a tendency toward a decrease in tax revenues and (ii) to a need to upgrade infrastructure and

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[2] The paper is guided by the basic idea that the new member countries should not pursue a short-sighted policy course. That is, they should focus their attention not so much on how to join the European Monetary Union (EMU) as soon as possible to become a “full” member of the euro club. Instead, they should concentrate in the next few years on carrying out the major policy adjustments necessary for mastering the challenges mentioned above, without high costs, later on in the EMU (without the instruments of flexible exchange rates and autonomous monetary and fiscal policies).

improve the quality of institutions, and thus to an imminent finance gap that should be met early in advance. EU membership will tend to increase the need to reduce this finance gap as there is the threat of a conflict with the obligations from EU membership (Maastricht criteria and the Stability and Growth Pact). On the other hand, there are vague expectations with respect to EU/EMU membership leading to an increase in economic growth and possibly to expansionary fiscal consolidation.
Section IV emphasizes that the need for fiscal reforms requires determination with respect to restructuring the budget and innovativeness with regard to increasing the efficiency of public spending and collecting tax revenues, and discusses several options.

II. Fiscal Challenges of EU Membership

The NEW-8 can expect to receive significant transfers from the EU, but will also face pressures on public spending during the next years. They will have to co-finance EU-funded projects, and implementation of EU regulations will involve fiscal costs. Additional fiscal costs will come from EU membership contributions and alignment with EU customs and taxes. Altogether, the net fiscal effects in the coming years are not straightforward, and there can be small gains or losses for the individual NEW-8 countries. In general, the net fiscal effects from EU membership are likely to be positive in the medium term. In the short term, however, there will most likely be fiscal strains on the NEW-8. All the authors that have recently estimated the net direct budgetary effects of EU membership (e.g., Schadler et al., 2004, Kopits and Székely, 2004, Antczak, 2003) have come up with a negative direct net effect during the first years of the membership. Their estimates range between -1 and -4.75 percent of GDP per year (for the details of a pessimistic estimate see Table 1).

A. Expenditures

Compliance with EU regulations (the Acquis Communautaire) has resulted in additional public expenditure in the NEW-8.[3] Further public expenditures will be necessary in the coming years to fully implement these regulations.[4] For the reform of public administration due to EU membership Kopits and Székely (2004) have calculated costs up to 1.5 % of GDP (Table 1). A further challenge for the NEW-8 is that they will need to co-finance project-based EU transfers (with variation across countries, see Table 2).[5] A significant part of the appropriations will be project-related. It is probable that some projects will not be able to be realized[6] since there is still a lack of professional, administrative and financial capacities

[3] There are various compliance costs, among them the costs of environmental protection, and transport that have to be regarded as major expenditure items (EPC, 2003a; EBRD, 2004).
[4] However, Hallet (2004) argues that the "largest part of the cost will fall on the private sector and should not trigger substantial public expenditure" (p. 15).
[5] The area of the NEW-8 belongs, for the most part, to areas classified by the EU as covered by "Objective I". In such areas, the quota for co-financing transfers for rural development from the European Agricultural Guidance and Guarantee Fund is 25% (COUNCIL REGULATION (EC) No 1257/1999, Chapter IV, Article 47). The quota for transfers from the Structural Fund is 25-15% (COUNCIL REGULATION (EC) No 1260/1999, TITLE III, Chapter I, Article 29), for transfers from the Cohesion Fund 20-15% (COUNCIL REGULATION (EC) No 1164/94, Article 7). Further specifications in special cases hold for all these quotas. (The Council Regulations are taken from the Official Journals of the European Communities L 130 05/25/1994, L 160/80 06/26/1999, and L 161/1 06/26/1999.)
[6] There are estimates that the actual transfers might be only around 60 percent of the appropriations with variation across countries (Richter, 2003). Furthermore, those project-related transfers that are channelled to the budget (part of these transfers are channelled directly to private sector recipients) have to be pre-financed by the government.

reducing the new member countries' ability to completely absorb and use effectively the post-accession grants from the EU's cohesion and structural funds (EBRD, 2004).[7]

Another major challenge for the NEW-8 is that they will need to pay their **membership dues** to the EU from the beginning. The NEW-8 must pay contributions to the EU budget (roughly € 3.13 billion in 2004, and € 5.31 billion in 2005)[8] under the same rules as the old members. Their total contributions for the period 2004-06 are estimated to be around € 16 billion (Antczak, 2003). To prevent a deterioration in the net budgetary balance vis-à-vis the EU, the Czech Republic and Slovenia will be granted temporary compensation of close to € 1 billion until the end of the current financing period. In addition, all the NEW-8 will be provided with funds from a cash-flow facility (in total € 2.4 billion up to the end of 2006).

Furthermore, both the **Maastricht criteria** (including the 3 percent of GDP deficit ceiling and the 60 percent of GDP public debt limit) and the **Stability and Growth Pact (SGP)** are part of the Acquis Communautaire and will apply immediately upon accession. This will result in significant challenges in reducing fiscal deficits. However, the SGP may be less significant for the NEW-8 as long as they do not adopt the euro. The reason is that before euro adoption neither the EU Commission nor the European Council can impose sanctions against any of the NEW-8 that do not fulfill the rules of the SGP. However, this does not exclude sanctions by the financial markets.
Before euro adoption, the only real challenge will be fulfillment of the Maastricht criteria as the formal precondition for euro adoption. Currently, the most critical criterion for the NEW-8 is the deficit criterion which is violated by many of them. The larger NEW-8 (the Czech Republic, Hungary, Poland, and the Slovak Republic) far exceeded the deficit reference value of 3 percent of GDP in the last years. By contrast, the small NEW-8 (the Baltic States and Slovenia) have experienced only minor deficits for years (see Figure 1). Reducing the budget deficit to a sufficient extent and, simultaneously, meeting the need for infrastructure investments to promote real convergence may prove difficult, particularly for the larger NEW-8.

The **mobility of production factors** is also an integral part of the Acquis Communautaire. However, the fiscal implications of this may be rather limited during the initial years of EU membership since capital mobility has already been implemented almost completely in the NEW-8 before EU membership,[9] and full labor mobility will likely not to be implemented until 2011 against the background of administrative constraints ("transition arrangements") legally built up by the incumbents.[10] Nevertheless, the new as well as the old members of the EU today already need to take into account the challenges from labor migration. With the exception of Slovenia, the wage gap vis-à-vis old member countries is huge, compared even

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[7] In the medium term, the implementation of the EU Social Charter may also induce considerable fiscal costs (for the private and the public sectors) in the NEW-8. The EU Social Charter prescribes a weekly maximum working time, minimum recreation periods, minimum safety standards, minimum time for maternity leave, rules for the employment of minors, equal treatment of gender, dismissal protection rules for pregnant women and many additional workers' rights. However, in the short term, various country-specific transition arrangements will tend to dampen these effects.

[8] See the Official Journal of the European Union C 105, Vol. 47, 30 April 2004, and the "Preliminary Draft of the General Budget of the European Communities for the Financial Year 2005", published by the Directorate General Budget of the European Commission.

[9] Removal of the few remaining barriers to capital trade in the coming years was a precondition for entry of the acceding countries into the EU.

[10] The old members may reject the immigration of workers from the NEW-8 for up to five years (plus a two-year extension). Access to the labor markets will still only be possible with a work permit during this period. Almost all the EU-15 countries will follow this line. The United Kingdom will also restrict entitlements to social benefits, although this is a difficult issue under Union law.

to the "poorer" member countries of the EU-15 (see Figure 2), and there is also large unemployment in several of the NEW-8, particularly in Poland and the Slovak Republic (Figure 3). This may cause a strong incentive for workers to migrate from East to West Europe. However, the extent of labor migration to be expected as a consequence of EU enlargement is uncertain.[11]

But EU membership may also have some positive expenditure effects in the sense of a **decrease in government expenditures**. According to the Acquis Communautaire **production subsidies must be eliminated** which is estimated to have a positive budgetary effect for the NEW-8 (in Poland even up to 2% of GDP, see Table 1). However, the NEW-8 were allowed rather long periods for the phasing-out of production subsidies so that the fiscal implications will be very limited in the near future.[12] A further decrease in government expenditures occurs due to **reduced interest rate risk premia**. The EU served as an external institutional anchor for the NEW-8 even before they entered the EU, with the consequence of a considerable progress in terms of institutions, transparency etc. From investors' perspectives, this progress made the accession countries a more secure place to do business. This led to lower risk premia in these countries. This development may continue after EU accession (when acceding to the euro zone) because the pressure on the NEW-8 for further institutional reforms remains.

B. Revenues

The NEW-8 will receive **significant transfers from the EU budget**. Until the end of 2006, the new EU member countries are entitled to receive € 21.7 billion in structural aid and € 9.8 billion in the framework of the EU agricultural policy in addition to € 9.3 billion in the frameworks of internal policies, administration, and budgetary compensations (see Table 3).[13] Total receipts as a percentage of the GDP of recipient countries will vary inversely with the level of GDP. Structural aid will mainly go to public infrastructure, transport, the business sector, and to education. How much of the transfers that the NEW-8 will actually receive depends crucially on their capacities to absorb project-related transfers, which must be co-financed (see above). It is feared in the NEW-8 that with absorption rates being too low, some NEW-8 could even become financial net losers (Antczak, 2003). The dilemma appears that from avoiding the net loser position there accrues expansionary pressure on the NEW-8's national budgets because a higher absorption of EU transfers implies more co-financing.

Minor budgetary savings to the NEW-8 arise from **tax harmonization** that matters in the field of value added tax (VAT) only. It is estimated that there will be a small revenue gain, at most 0.5 percent of GDP (Table 1). However, according to EU requirements (maximum standard rate 25 percent, minimum standard rate 15 percent, reduced rate 5 percent) VAT rates in the NEW-8 were already harmonized before entrance into the EU. On the other hand, most accession countries had higher **customs duties** than the EU-15 members, and the loss in this revenue item can be up to 0.5 percent of GDP for some NEW-8 (Table 1). However, in

[11] Different languages and cultures, as well as remaining institutional hindrances in the labor markets, may prevent many people leaving their native countries despite the existing wage differences in Europe. But differences in language and culture may not be such a big problem for the skilled portion of the younger generation in the NEW-8, and hopes for quick real convergence may be disappointed. This means, it may be the young skilled workers who will migrate if real convergence only proceeds slowly, and this would lead to a brain drain and thus to slower real convergence in the NEW-8.

[12] See Funck (2002), Kopits and Székely (2004), and Römisch (2003) for further discussion.

[13] What will be beyond 2006 is uncertain as for this period the EU budget has not yet been agreed. However, it is not unlikely that the NEW-8 could then be eligible to receive relatively large grants on a per capita basis.

general, the loss of revenues from this item tends to be marginal as these duties were already very low before EU entrance in most entering countries.

Furthermore, an **increase in tax revenues** as a share of GDP is often expected **due to EU membership** leading to higher economic growth in the new member countries.[14] More generally, there is also evidence of a positive correlation between the level of per capita income and revenue ratios. However, as trade between the NEW-8 and the EU-15 had already been substantially liberalized since the 1990s, the growth related gains from EU accession arising from further trade integration will be limited.[15] Nevertheless, the overall growth effect of EU accession in the NEW-8 is, while difficult to assess exactly, with a high probability positive if we assume that further institutional improvements, further import of macroeconomic stability, further trade integration (although not excessive) and a further decrease in interest rate risk premia foster economic growth (Facchini and Segnana, 2003). Given that the tax systems contain elements of tax progression, this will also tend to lead to higher tax revenues. But this latter condition does not need to be fulfilled in the light of strong locational (tax) competition (see the following section III). As the design of tax systems and welfare systems remains under the autonomy of the single member countries, apart from the VAT requirements, EU membership has no direct influence on tax incomes in the NEW-8.[16]

III. Fiscal Challenges through Structural Changes

The net fiscal effects of EU membership described in section II do not appear to be (per se, in terms of magnitude) the decisive fiscal challenge for the NEW-8 over the coming years. However, the burden of EU membership may prove troublesome against the background of additional fiscal challenges in these countries. These additional challenges are the (largely medium-term) effects induced by the structural characteristics of these countries. In this section I shall analyze two major developments that can trigger much larger fiscal challenges for the new member countries than the direct effects of EU membership. These two effects are based on

(1) The fact that the NEW-8 had to open their markets at an early stage and face up to the challenge of international competition ("globalization"). This forces them to confront tax competition and upgrade infrastructure. Furthermore, the fact that the NEW-8 are still emerging market economies, and are still in transition, makes them vulnerable to financial crises against the background of open markets, especially in the run-up to euro adoption. This forces them to further upgrade their financial and institutional infrastructure in particular.

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[14] The projected increases in growth affected by EU accession are estimated to be between 1 and 2 percentage points per year (for several years) in the NEW-8 (cf. EEAG, 2004). By contrast, the old members can only expect slight growth effects from EU enlargement (alone due to the small economic weight of the NEW-8 in the EU) (see, e.g., Heijdra et al., 2002).

[15] Under the Europe Agreements, goods trade has largely been deregulated over the past few years, with tariffs and import quotas being almost entirely abolished. The free movement of capital has been a reality for some time, too. What has been new from May 2004 onwards is freedom to provide services and freedom of establishment. However, there are transition arrangements for this, as well as with respect to freedom of movement for persons, border controls, and application of EU laws on competition and state aid.

[16] Of course, the extent of the fiscal implications derived in this and the following sections depends on the binding of the rules set up in the EU Treaty and in other commitments. One has to be aware that rules and even constitutional laws can be changed. This means that these legal frameworks are endogenous for the NEW-8 insofar as they can expect to have influence (by creating political majorities) on the decision-making process within the EU. This may affect the binding of the Maastricht criteria (as an entrance barrier for euro adoption), the reform of the SGP, the extent of transfers after 2006, a well as tax and other regulations.

(2) Unfavorable structural characteristics. The NEW-8 still have a substantial need to upgrade their whole infrastructure. Moreover, they suffer from the mounting problem of rapidly aging populations. Even if this demographic shift is a medium- to long-term development in the NEW-8, it has far-reaching short- to medium-term consequences, insofar as early political reactions aiming at speedy structural reforms are necessary to master this long-term challenge. It forces these countries to install affordable pension systems today and to undertake painful structural cuts in health care payments and other fringe benefits, in order to prevent increasingly dramatic fiscal burdens from arising.

A. Globalization

Globalization is a major challenge for all countries. For the NEW-8, however, it is a rather new challenge generated by the system transformation and further enhanced by EU-accession. One may suppose that the NEW-8 countries are affected by globalization to varying degrees, depending on how deeply they are already integrated in the world economy. One classic measure for the degree of globalization within a country is the degree of openness. It is generally assumed that smaller countries are more open. And indeed Poland, as by far the largest NEW-8 country, has the lowest degree of openness (Table 4). Another classic measure for the degree of globalization is financial market integration. This integration has increased significantly in all NEW-8 countries over the last years, since a complete opening of the capital markets was a precondition for EU entrance, however with some remaining variance across the single countries with respect to progress in financial market reform (see Table 5 for credit ratings as one possible measure of financial market integration in the NEW-8, and Table 6 for some financial market reform indicators).

Danger of fiscal gaps due to locational competition

Potential problems

With their decision to transform to a market economy (and thus to open trade and capital flows), the former planned economies have chosen to face the **competition imposed by the globalization process**. Globalization leads to higher mobility of factors of production and increases the locational competition for mobile production factors among regions and countries (Wagner, 2001). Even without becoming an EU/EMU member, the NEW-8 would have to face the new (locational or systems) competition[17] to attract the capital they need for development. Major locational competition factors that make a country or region an attractive location for investment and that can be influenced by the government are tax levels, subsidies, and infrastructure expenditures.[18]

Fiscal incentives in the form of low tax rates, high subsidies and infrastructure expenditures to influence these locational decisions tend to lead to an increase in the budget deficit, at least in the short run. This fiscal challenge need not be a bad thing because, like a private firm, a government competes for good customers (here, mobile factors of production), and to be

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[17] For the concepts of "locational competition" or "(new) systems competition" see, in more detail, Siebert (1996) or Sinn (2003).

[18] Further factors are the level of education, regulation systems (property rights, contract enforcement), and macroeconomic and political stability. Other major locational factors that are not directly influenced by the government are wages, motivation and flexibility of workers, social harmony, and innovativeness. All these factors have a considerable influence on the returns an investor can expect to earn in a specific country or region. Cf. Wagner (2001).

successful in the locational competition, it has to make advance payments and take investment or development credits. There would, however, be a problem for the NEW-8 if such a locational or system competition led to a vicious circle or were ruinous. This is often argued to be the case with respect to **tax competition**. For some academics and policy makers, increasing mobility of capital has been a cause for concern because governments often compete for investment through tax incentives that ignore the detrimental effect on other countries or regions. The main argument is that if all countries offer such incentives, their effect on capital movement will be eliminated, but all governments will be worse off as their revenue will be reduced. In the vast literature on tax competition,[19] this fiscal externality leads to too low tax rates and the under-provision of public goods in equilibrium ('race to the bottom').[20] In other words, it is considered a threat to the modern welfare state (see also Box 1).[21]

Box 1: Tax competition

The basic argument on which most of the literature on tax competition is based asserts that a small open economy can have no interest in putting a source tax on internationally mobile capital since capital can always shift the tax burden. The source tax would drive away mobile capital so that the domestic product and the marginal productivity (and hence the income) of the immobile factors of production both fall.[22]

This basic argument is illustrated in Figure I, which describes the decision situation of a single country. We suppose that the country produces a homogeneous output using capital K and labor L, where F(K,L) is a linearly homogeneous production function. We further suppose that capital is internationally mobile and available in any amount at the net world market return r, whereas the amount of labor is fixed and provided by domestic residents.

The downward sloping line in Figure I describes the marginal product of capital. Firms invest up to the point where the marginal product of capital equals the net world market return. Without a tax, firms are assumed to invest up to the point where $F_K = r^*$. Here, the factors labor and capital receive incomes ADE and $D0K_0E$, respectively. If the government imposes a source tax on capital equal to t = BD, the amount of capital used will fall to K_1. Capital will leave the country until its net marginal product after tax is again equal to the net world market return r: $F_K - t = r^*$.

Wage income will fall to ABC. Assuming that tax revenues BDFC are paid to the wage earners, the total rent of the immobile factor amounts to ADFC. Thus, despite this income redistribution, labor suffers losses of CFE. Whether the mobile capital is domestic or foreign is irrelevant for this argument.

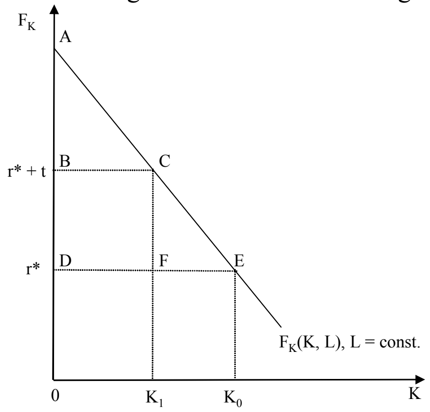

Figure I. Erosion of source taxes in tax competition

[19] This branch of literature was originated by Zodrow and Mieszkowski (1986) and Wilson (1986), and surveyed by Wilson (1999).

[20] The race-to-the-bottom hypothesis asserts that competition for a mobile tax base produces sub-optimally low taxes, with the mobile factor bearing too little of the tax burden.

[21] For a broad analysis of this argument see, e.g., Sinn (2003).

[22] See MacDougall (1960) and Richman (1963).

However, as argued above, tax incentives are not the only way through which the governments of the NEW-8 countries can compete for internationally mobile capital. Another important fiscal incentive is the **provision of infrastructure goods**,[23] which has, at least partly, to be financed by tax revenues. In other words, what matters for the competitiveness of the NEW-8 regions or countries is the optimal mix of public infrastructure (including social infrastructure) and taxation. Therefore, there seems to exist a natural barrier that weakens the erosive powers of tax competition: If taxes are regarded as the price that has to be paid for the publicly provided infrastructure, the investors will accept them. However, the main problem with this reasoning lies in the fact that it abstracts from the public good character of infrastructure. Public infrastructure may be described as a public good for which there is only a limited rivalry in use. With small marginal usage costs the taxes on mobile capital generate too low revenues. In a closed economy (with no transborder capital mobility) it may be possible to impose taxes on capital such that each capital unit pays taxes equivalent to the average costs of providing public infrastructure. In an open economy (with transborder capital mobility), however, locational competition prevents the government from equating taxes on the mobile factor with the supply costs of public infrastructure. As already explained above, if not all factors of production are mobile, the burden of taxation can (theoretically) be shifted to the more immobile factors of production, which usually includes labor. In the extreme, there could be no taxation of capital (the mobile factor) whereas all the tax burden would lie on labor (the less mobile factor). In practice, this extreme solution will not be implementable in democracies because of political reasons (workers are voters). But nonetheless tax competition may lead to inefficiently low levels of public services and/or too high budget deficits.

Furthermore, the NEW-8 will face some **further tax competition induced by factor mobility incentives.** Since the relevant effective taxes in the NEW-8 are usually lower than in the former EU-15 members, it is sometimes argued that the downward pressure on the tax rates of the former is likely to be small or non-existent. However, against the preceding discussion, this appears to be incorrect. For attracting further FDI, the NEW-8 may need to establish even lower taxation of production factors since their provision of relatively weaker infrastructure is a locational disadvantage that has to be compensated by offering other locational advantages, such as lower taxes and/or lower wages. Therefore, in the short run there may arise a conflict between the need for lower taxes, leading to lower tax incomes, and the need to finance further infrastructure investment to foster real convergence. However, in the medium term, by attracting FDI and thus fostering growth and real convergence, lowering taxes may increase tax incomes. In addition, in the medium term, infrastructure also tends to be improved and areas of industrial concentration tend to be created so that tax competition may become less important for attracting FDI (see the following).

Qualifications

There are also other factors relevant for the location of a firm that have been argued to counterbalance the downward pressure on capital tax rates due to tax competition. Among them are **areas of industrial concentration**. In this context, an important insight of the economic geography models is that agglomeration forces can turn mobile factors (capital) into quasi-fixed factors (Baldwin et al., 2003). Agglomeration forces mean that spatial concentration of economic activity generates forces that favor further spatial concentration.

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[23] As various surveys have confirmed, FDIs can particularly be attracted either by offering foreign companies comparatively low direct costs (wages or taxes in particular), or comparatively good infrastructure because better infrastructure can mean lower costs and/or higher productivity for companies (cf. UNCTAD, 2003, Chap. III, and OECD, 2004, Chap. 3).

This branch of literature argues that a race to the bottom in capital tax rates does not need to take place even though capital is becoming increasingly mobile. When capital mobility increases, the capital tax rate is expected (in this branch of literature) to fall in countries with low concentrations of production, while in countries with high concentrations of production, a higher level of capital income taxation should be able to be sustained.
In the NEW-8, there seem to already exist a number of areas of industrial concentration. Figures 4.a-4.d show the degree of regional industrial concentration in the Czech Republic, Hungary, Poland, and the Slovak Republic, measured by the number of employers for different branches, whereas Figures 5.a-5.d show the degree of regional concentration with regard to R&D expenditures.

Furthermore, it is sometimes argued that, even if there is a race to the bottom in tax competition, this need not necessarily be disastrous. The welfare-decreasing effects of tax competition derived in the traditional tax competition literature are partly based on the assumption of benevolent governments. By contrast, the **Leviathan view of government**, taken by the public choice literature, assumes that policy makers are self-interested and governments are rent-seeking institutions that accumulate resources for the pursuit of their own ends and therefore tend to set taxes too high.[24] As a consequence, the Leviathan government hypothesis asserts that the race to the bottom in tax competition may actually be welfare-enhancing in the sense that it may yield a second best improvement. The basic argument is that competition curbs rent-seeking activities of politicians. Therefore, in the extreme, even no tax revenue might benefit voters because the potential loss in public good provision may be outweighed by an increase in private consumption.

It is further argued that globalization-driven locational competition can contribute to **fiscal discipline** by forcing governments to more transparency, and thus to implement sound macroeconomic policies and reforms consistently to improve their investment climate in order to attract foreign direct investments (IMF, 2003b, p. 6). Thus it does "act as a force for stability by limiting the scope for countries to pursue policies that are incompatible with medium–term financial stability" (Citrin and Fischer, 2000, p. 27). On the whole, this could increase budgetary efficiency and reduce unproductive government expenditures. In doing this it could partly counteract the above mentioned tendency towards an increase in the budget deficit due to fiscal incentives in the context of locational or systems competition. However, despite of the theoretical plausibility of this "disciplinary effect", it is apparently not easy to find strong and robust empirical evidence (cf. Tytell and Wei, 2004). Moreover, this effect is questioned by some economists on the basis of the so-called Selection Principle. This principle states that "ideal market conditions tend to exist in private competition but not in competition between states, and this raises doubts as to the efficiency of systems competition even if national governments are too ignorant or selfish to actively pursue a policy of national welfare maximization" (Sinn, 2003, p. 9).[25] Moreover, even if the disciplinary effect described above takes place, this may take a while:[26] as long as the migration responses of the mobile factors of production are slow, a long period of time can pass before a country is forced to react to a policy move of another country.[27]

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[24] Voters must allow politicians some rents for them to seek re-election. This, however, has the consequence that the closed economy entails too high taxes for the first best solution to be achieved.
[25] See also Sinn (1997).
[26] Particularly for the NEW-8 countries, this may be a problem, as they still may be regarded as newly built (and hence impatient) democracies. Nonetheless, over time, fiscal discipline should improve the budgetary situation and enable governments to finance better infrastructure and thus to attract more FDIs and avoid outflows of domestic capital (and labor).
[27] However, those smaller NEW-8 countries which have a high degree of openness and flexible market structures might (be forced to) react sooner than a large and hence (perhaps) more inflexible country.

Risk of financial crises

As early as the mid-nineties (i.e., only a few years after the end of the communist regime), the NEW-8 states applied for EU membership. When they started negotiations, the states had to commit themselves to fully opening their capital markets, i.e. to lifting any capital controls, before they joined the EU. This quick exposure to financial globalization was profitable for these countries because they received urgently needed (additional) foreign direct investments (see Figure 6). However, in the short to medium term, as long as these countries keep their own currencies, this early exposure of the NEW-8 to globalization involves some danger of instability, because of the fact that these countries are still in transition and are emerging market economies. As the recent literature suggests (see Box 2), emerging market countries face greater exposure to a sudden end of capital inflows and to liquidity crises. This may create large fiscal challenges for the NEW-8 in the event of a crisis in the run-up to euro adoption.[28]

Box 2: Risk of Sudden Stops in Emerging Market Economies

A common pattern in emerging market economies is that capital mobility is associated with high volatility of capital flows. After capital account liberalization, emerging market economies in the wake of macro stabilization typically experience a large upsurge of capital inflows. According to traditional explanations, such inflows tend to be driven, to a large extent, by the attractiveness of short-term profit opportunities from speculative positions, due to the fact that, just after capital account liberalization, country risk and/or inflation tend to keep domestic interest rates high relative to international rates. But the traditional approach cannot explain the second phenomenon that is often observed in emerging market economies: the sudden reversal in capital inflows (“sudden stop”). The evolving literature on sudden stops does not yet have a clear explanation of the factors triggering sudden stops either (cf. BIS, 2003). However, it appears to be uncontested that the risk of sudden stops can be favored by weak fiscal and financial institutions and weak fiscal policy in emerging market economies (Calvo and Mishkin, 2003). Sudden stops could also be a major source of fiscal unsustainability in emerging market economies (cf. Alvarado et al., 2004). Because sudden stops in capital inflows make it necessary to adjust the current account deficit which requires a large depreciation of the real exchange rate, this may have serious consequences for serving foreign debt and hence result in financing problems.[29]

The **danger of sudden stops** cannot be excluded either in the NEW-8, since these are also still emerging market economies. Figure 7 shows the net capital inflows into the NEW-8 since 1995. Both, large fiscal deficits (such as in some of the larger NEW-8, see Figure 1a) and wide current account imbalances (such as in the Baltic States, see Figure 8) could create major financing needs and potential vulnerabilities. In the NEW-8, fiscal deficits persistently much larger than three percent of GDP can be regarded as not acceptable in view of the countries’ envisaged accession to the European Monetary Union and the convergence criteria requirements associated with this accession.[30] With respect to the NEW-8, many economists

[28] Further challenges emerging market economies face are low credibility of monetary institutions and dollarization/euroization of liabilities (Calvo and Mishkin, 2003; Eichengreen et al., 2003). However, these challenges are less relevant for the NEW-8. By joining the EU, the NEW-8 have committed themselves to strict coordination of their monetary policies with the ECB. Furthermore, “the Bank for International Settlements (BIS) data indicate that their (Emerging Europe’s) lending in domestic currency has increased substantially” (IMF, 2004b, p. 40).

[29] Moreover, preliminary evidence suggests that such developments spread via “contagion”, so that there is a high degree of bunching of sudden stops across emerging market economies. Here, expectation processes may play a crucial role as a driving force; see, for example, Chang and Velasco (2000, 2001), and, with special reference to the contagion process, Berger and Wagner (2005).

[30] Nor can large fiscal deficits be sustained without, sooner or later, violating the debt convergence criterion (cf. Hughes Hallet and Lewis, 2004). Here the situation is worst in Hungary, Poland, the Slovak Republic and the

argue that in the context of an intermediate exchange rate regime, such as ERM II,[31] high capital inflows and outflows could shake the exchange rate in single NEW-8 countries and lead to dangerous speculative attacks there (and possibly then spread to other NEW-8 countries) (see, e.g., Gibson and Tsakalotos, 2004; see also Begg et al., 2003). However, one has also to take into account that the exchange rate band of the ERM-II regime is rather broad (+/- 15%), and the ECB is obligated to help ERM-II-member countries out of crises if this does not violate its main obligation of securing price stability in the EMU. Nonetheless, the question of a rather broad ERM band is not yet finally decided,[32] and, moreover, high short-term external debt ratio in Lithuania, the Slovak Republic, the Czech Republic and Poland can be interpreted as a matter of concern (see Figure 9; see also Hughes Hallet and Lewis, 2004).

Concentrating on external sources of finance, which may lead to wide current account imbalances (such as in the Baltic countries), also creates risks. Evidence from a number of currency crises in emerging market countries suggests that the composition of capital inflows matters. Reliance on short-term borrowing to finance large current account deficits tends to be a crucial ingredient precipitating currency crises in emerging market economies. In contrast, FDI is often regarded as providing a safer and more stable way to finance development or convergence, because it supposedly reduces the risk of currency crises. Figure 10 displays the composition of capital inflows in the NEW-8. The fraction of FDI in the Czech Republic, Lithuania and Slovenia lies above 60%, whereas portfolio investment presents a rather small fraction of foreign capital inflows in the NEW-8 (with the exception of Hungary in particular). Thus the composition of capital inflows in the NEW-8 mitigates the risk of currency crises.

But this does not imply that FDI investors, since they lose from a currency crisis, will be unwilling to speculate against the country. Once rumors of devaluation spread, FDI investors have a strong incentive to hedge against capital losses due to the decrease in the international value of their assets in the country. Hence, they will take a short position against the currency and/or the stock market index in the country. Thus FDI investors can also contribute to massive volatility in short-term capital flows. This may translate into asset price volatility (Wagner and Berger, 2004) affecting fiscal revenue (via capital gains taxes and wealth-based taxes, via capital transaction taxes and via wealth effects on consumption and hence indirect taxes) and thus increasing the volatility of fiscal balances.[33]

To minimize these risks, there is an urgent need to further upgrade financial and institutional infrastructure and improve the fiscal policy course in the NEW-8 (see below).

B. Adverse structural characteristics

The fiscal challenges derived above become even more critical against the background of the existence of unfavorable structural characteristics in the NEW-8. The most important issues

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Czech Republic (Figure 1). These countries show the largest deficit rates as well as the greatest debt rates within the NEW-8.

[31] ERM II participation is required for the NEW-8 in the two-year period prior to actual euro adoption.

[32] There are also other interpretations assuming a narrow ERM band of 2.25% (articulated by the former EU Monetary Affairs Commissioner Pedro Solbes et al.).

[33] In addition, asset price changes can undermine private sector financial balance sheets to such an extent that the government is forced to bail out severely hit companies and financial institutions to avoid a spreading and thus aggravation of the crisis. Finally, there are second round effects that may adversely affect public finances (Eschenbach and Schuknecht, 2002).

are the need to upgrade infrastructure and the future expenditure pressures from rapidly aging populations.[34]

Need to upgrade infrastructure

Because of **legacies from the past**, the NEW-8 have a substantial need to upgrade their infrastructure. Not only did many of these former planned economies inherit very large industrial sectors, there are general shortfalls in the quality of the infrastructure with under-provision in some sectors (e.g., roads) and overcapacity in others (e.g., rail). Especially the quality of the road network is far from an advanced level (Table 7). Moreover, the general thinking about how the economic system functions and the role of the state was very different to that in democratic market economies. Although dramatic changes have occurred concerning this, and substantial progress on the road to becoming efficient, well-functioning market economies have been made, the adjustment process is not yet over.[35] This means that entry into the EU does not signify the end of the transition process for these countries.

As the Transition Report of the EBRD (2003, pp. 18-19) emphasizes, "important gaps remain – for example, in the breadth and depth of these countries' financial markets and regarding the restructuring of strategic sectors, such as energy, heavy industry and agriculture.[36] There are also deficiencies in the quality of public administration (including the judiciary), especially at the regional and municipal levels." This assessment is strengthened by the EBRD's most recent Transition Report which states that "formidable institutional challenges remain" in the NEW-8 (EBRD, 2004, p. 15). A recent study by Deutsche Bank Research (2004) guesses that the CEECs (including Bulgaria and Romania) need to invest around EUR 500bn, if they are to achieve the level of infrastructure found in the old EU. The sectors seen there as those requiring the most investment are water/waste water and energy.[37]

Rapidly aging populations

Like many other countries (IMF, 2004b), the NEW-8 suffer from the mounting problem of adverse demographic developments. Their demographic outlook indicates that the aggregate population of these countries will decrease, fertility will be very low, and most of the NEW-8 countries will have a strong negative migration balance.[38] Moreover, challenges facing pension systems in the NEW-8 include relatively low effective retirement ages, increasing life expectancy, and expenditure pressures due to indexation rules (Lambrecht et al., 2003). Figures 11 and 12 show the forecasts for the demographic development. Compared to EU-15, the change in population as well as the increase in the old-age dependency ratio up to 2050 will be worse in the NEW-8. In view of the **fiscal challenges posed by aging populations**,

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[34] Further unfavorable structural characteristics in some NEW-8 countries are high long-term unemployment, which aggravates the challenges resulting from the adverse demographic development, and a trend toward fiscal decentralization, particularly in the Czech Republic and Poland (cf. Schadler, 2004).
[35] Transformation of societies and cultures implies a change in socialization (social thinking and behavior) that takes more than just one or two decades. This may cause difficulties in implementing necessary market-oriented reform processes in the NEW-8 (see, e.g., Wagner, 2002, 2003).
[36] For example, employment in agriculture in Poland, which is by far the biggest new member country with 38.7 million inhabitants, was 18.4 percent of total civilian employment in 2003, compared to 4 percent in the EU-15 (data from Eurostat).
[37] Other fiscal implications of these legacies from the communist period appear, for example, in the burdens resulting from remaining banking reform, economy/enterprise restructuring and privatization (see EBRD, 2004).
[38] In the NEW-8, a similar, but in the beginning less pronounced, downward trend to that in the EU-15 has occurred since 1960 (see Dickmann, 2004). A dramatic downward trend in the birthrate started only in the 1990s, after the political system change, due to increased uncertainty and change in values (cf. Dorbritz and Philipov, 2002).

the sustainability of public finances will increasingly become a core policy objective in the NEW-8 during the coming years.[39] Aging populations combined with pay-as-you-go (PAYG) defined pension systems could lead to a substantial increase in public expenditures in several NEW-8 and will tend to produce budgetary problems (see Figure 13 for the development forecasted in some of the NEW-8). Health-care expenditures as well will likely be severely affected by increasing life expectancy over the last years (see Figure 14 for the recent development of health-care expenditures in the NEW-8). Hence, the European Commission (2004) refers to the expected expenditure increases due to population aging as the major fiscal risk the NEW-8 are exposed to in the coming years.[40]

When the old-age dependency ratio[41] increases, the active labor force will decrease, and this will lower economic growth unless there is a sufficiently high increase in overall productivity to compensate for this. The main question is how to record governments' unfunded social security obligations. The increasing ratio of retirees to workers reduces the rate of returns of unfunded PAYG social security. This should induce welfare-maximizing politicians to prefer small such systems and a larger role for private savings. However, public choice considerations suggest that an aging electorate increases the relevance of pension spending on the agenda of office-seeking policy makers and tends to increase the size of unfunded pension systems. Calibrating the strength of these effects for the larger EU countries and the US, Galasso and Profeta (2004) found that the latter political aspect always outweighed the former.

A general strategy to address the budgetary implications of aging includes (with variances across countries) raising employment and participation rates through measures such as family benefits, reducing public debt, and **reforming pension and health care systems**.[42] Comprehensive reform strategies of the pension systems will contain initiatives aimed at offsetting the effects of aging through reforms of the basic parameters of public pension systems (e.g., the retirement age, the replacement rate or the contribution rate) with the aim of improving incentives to work and strengthening the link between contributions and benefits.[43] In addition, reform of the health care systems requires deep restructuring. The design of the health care system in the former communist period showed some inefficiencies due to the socialist principle of "free treatment" that is today still reflected in a high density of hospitals, an oversized medical specialist sector, and insufficient emphasis on prevention. However, a dilemma tends to arise insofar as implementation of these reforms is likely to involve **considerable budgetary costs** that could conflict with, and thus discourage, needed fiscal reform (Schadler et al., 2004). In addition, the former economic system left a set of rules and

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[39] But this will not only be a problem in the NEW-8 but also in most of the old EU member states. The results of current policy scenarios undertaken by the Ageing Working Group attached to the Economic Policy Committee of the EU Commission (EPC, 2003b) show that spending on public pensions is projected to increase by between 3 and 5 percentage points of GDP in most member states in coming decades (by 2050), if no corrective actions are taken. Public expenditure on health care and long-term care (following from demographic changes) are projected to increase by between 1.5 and 4 percentage points of GDP up to 2050.

[40] The most recent IMF World Economic Outlook (IMF, 2004b), by conducting a broad panel analysis, comes (among other things) to the following results with respect to the consequences of rapidly aging populations:

(1) "Per capita GDP growth is positively correlated with changes in the relative size of the working-age population."
(2) "Government budgets are adversely affected by population aging due to higher spending on pensions, health care, and long-term residential care."

[41] The *old-age dependency ratio* is defined as persons aged 65 or over as a percentage of the working-age population (aged 15-64).

[42] This is the strategy that has been developed by the Ecofin Council for the EU as a whole (see EPC, 2003a).

[43] The pension reform process in Poland is often regarded as the most advanced in the NEW-8 (cf. Chłoń-Domińczak and Góra, 2003).

expectations that is very difficult for the current generation to honor, but is also very difficult for the working generation to abrogate.

IV. Need for Fiscal Reforms

In the foregoing sections we have argued that the NEW-8 are likely to face several serious fiscal challenges already in the short to medium term. This is based on the short-term fiscal strains from EU membership, a potential decrease in tax income due to tax competition (globalization), and substantial future expenditure pressures, notably from rapidly aging populations and the need to upgrade infrastructure.

The question arises what the appropriate fiscal stance in the NEW-8 would be to maintain macroeconomic stability against the background of these simultaneously upcoming fiscal challenges and an environment of rapid institutional and structural change and high capital mobility.

In order to prevent deficits from getting out of control, the NEW-8 must develop strategies of fiscal consolidation early on. Basically, they have two options for this: they can reduce their public expenditures, and/or try to increase public revenues. In either alternative, quantitative as well as qualitative measures should be taken into consideration. In the following, we shall analyze the challenges and difficulties in specifying and then implementing these options of fiscal consolidation.

It might be argued that the fears of significant fiscal challenges in the NEW-8 following EU membership, which are associated with adverse structural characteristics, may be exaggerated, because there may also be scope for expansionary fiscal consolidation in the NEW-8. There is some experience in countries that previously joined the EU that suggests common institutional preconditions for such an outcome (see e.g., Giavazzo and Pagano, 1990, Giudice et al., 2003). However, with regard to the NEW-8, one has to take account of the different starting position of these countries compared to that of the successful expansionary fiscal consolidators within the EU in the 1980s and 1990s. The evidence to-date, emphasized in a recent IMF study (Schadler et al., 2004), suggests that the scope for such expansionary fiscal consolidations is likely to be quite limited in the NEW-8. The benefits in terms of lower yield spreads have already largely been accrued in these countries. In addition, the debt stock in these countries is, on average, relatively small; and this means they can expect to gain only relatively small amounts from interest savings.[44] There also seems to be little evidence that the NEW-8 experienced expansionary fiscal contractions during the 1990s, but fiscal contractions apparently did not have a significantly negative impact on growth either (see Purfield, 2003).

Therefore, fiscal consolidation will rather be a real challenge for the NEW-8. The need for fiscal consolidation requires determination with respect to restructuring the budget and innovativeness with regard to increasing the efficiency of public spending and collecting tax revenues.[45] Efficient public spending and increased efficiency of collecting tax revenues will

[44] Interest savings relative to GDP are estimated to range from about negative ½ a percentage point in the Czech Republic to 1 ½ percentage points in Hungary (see Schadler et al., 2004).

[45] It is worth mentioning that in some of the old EU member states, e. g. Germany, there is also an urgent need for fiscal consolidation. The difficulty of adjusting the budget of these countries in order to fulfill the rules of the SGP arises, to a substantial degree, from the difficulties of enforcing structural reforms in fiscally sensitive areas

be crucial not only to alleviate budgetary pressure, but also to release resources necessary to adequately support the use of EU transfers. Reducing the inefficiencies of the tax systems at any given level of expenditures would imply less distortion and generate further net benefits for society (see Box 3).

Box 3: Effects of More Efficient Public Spending and Taxing

According to theory, the net social benefits from government action are maximized when the social marginal cost of raising revenue (SMC) and the social marginal benefits of spending revenue (SMB) are equal. Figure II shows the initial efficient supply of public goods given at the quantity R_0.[46]

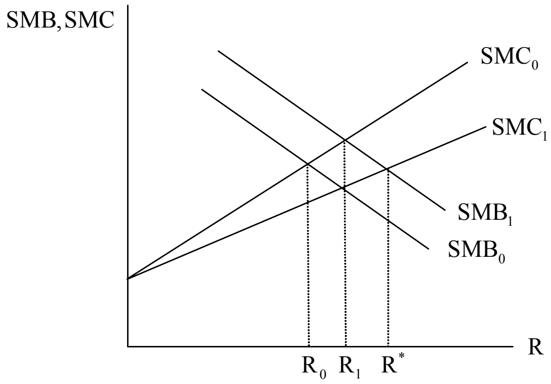

Figure II. Effects of More Efficient Public Spending and a More Efficient Tax System

Increasing the efficiency of spending shifts the SMB curve upward, thus raising efficient public spending to R_1 without imposing an additional tax burden on the economy. Reducing the inefficiencies of the tax system shifts the SMC curve downward, thus increasing the optimal level of government expenditure further to R*. The difference between R* and R_0 can be used to match EU transfers without reducing the provision of public goods and without an increase in the excess burden of taxation.

A. Expenditures

It is often argued that fiscal consolidations that rely mainly on expenditure cuts are more successful in reducing public deficits than consolidation measures that are mainly based on raising taxes (see the remarks on good quality adjustments below). Thus, a frequently made recommendation for the NEW-8 is to slim their welfare systems down in order to reduce successfully public expenditure.

In many NEW-8 countries, most notably in the larger new member states, the share of **social transfers** in public spending is comparable with current developments in the old member states (see Figure 15). With regard especially to the challenges arising from aging populations and the resulting demand for more age and health related public transfers, there is a **need to reform** (and strengthen the efficiency of) the transfers systems and social security in particular (cf. ECB, 2004, p. 17f.).[47] On the whole, the expected increases in social

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such as social insurance and labor market legislation. This suggests that fiscal consolidation is very closely linked to successfully establishing structural reforms.

[46] In Box 3, the SMB curve reflects individuals' valuation of public goods at different quantities. The positive slope of the SMC curve reflects distortions in the allocation of resources and deadweight losses of taxation (except taxation on goods that generate a negative externality) that increase with the government's revenue.

[47] In general, however, an increase in social security spending may also reflect public recognition of the existence of market failures in some insurance markets. In addition, there are also arguments supporting the view

expenditures seem to be the "major fiscal risks" in the NEW-8 (European Commission, 2004, p. 34f.). A poorly targeted and overly generous social transfer system is not only the main source of mounting public deficits, but also a strong disincentive to search for work and to create employment.

However, a reform/cutting-back of the welfare system may be particularly difficult in the NEW-8 because they may have a **different view about the role of government** due to their post-communist background (Tanzi and Schuknecht, 2000). The more functions a society expects from its government, the larger will be the level of public spending that is required, and the greater will be the willingness of the public to accept a larger tax burden to enable the government to perform those functions. The fact that, relative to non-transition economies with a comparable per capita income,[48] large welfare systems still exist in the NEW-8, particularly in the Višégrad countries, can be interpreted in this light.

Of course, the difficulties in carrying out needed but unpopular public expenditure cuts vary from country to country. Investigating under which conditions expenditure cuts can best be implemented, requires taking into account these **country-specific structures** of government expenditures and institutional conditions most suitable for streamlining government expenditures. Here, one has to bear in mind that, on the one hand, especially in the larger NEW-8, the large share of mandatory items in the budget related to social spending limits the scope for expenditure cuts (see Figure 15). This means that in these countries legal restraints might introduce excessive rigidity into government fiscal policy.[49] The governments have limited legislative policy options, making it difficult to change spending priorities without changes in institutional conditions. On the other hand, the strength of electoral cycle effects on fiscal policy in the individual NEW-8 countries has to be taken into account. Hallerberg and Souza (2002) confirm that the NEW-8's governments acted very much like their OECD counterparts, and, where possible, manipulated the economy before elections. Hence, these authors suggest the need for institutional solutions, such as installing a "strong" finance minister or negotiated fiscal contracts, to lessen the scale of fiscal political business cycles.[50]

What is most important for successful fiscal consolidation against the background of these difficulties, is promoting (i) appropriate budgetary institutions, (ii) good quality of fiscal adjustment, and perhaps (iii) social cohesion.

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that greater equity and higher levels of social protection may have a beneficial effect (up to a certain threshold) on efficiency, productivity and national competitiveness (see Fourage, 2003, DeGrauwe and Polan, 2003).

[48] A prominent hypothesis in public finance (known as "Wagner's Law") suggests that the rise in public spending is an inherent feature of the development process and that total government expenditure would grow with the rise in per capita incomes (Mueller, 1989). In the light of this hypothesis, the share of government in the NEW-8 could be expected to be lower than in the advanced eurozone countries and tend to rise in the years to come. Assuming an increasing impact of globalization in the NEW-8 over the next few years, this is supported by another hypothesis that argues that globalization implies more openness, and more open economies appear to prefer larger governments (IMF, 2004a). This preference for larger governments may reflect the fact that more open economies are more exposed to external shocks and thus may prefer larger governments, as conjectured by Rodrick (1998) and critically analyzed by Alesina and Warcziag (1998).

[49] In this context, also the danger of credit and demand booms should not be underestimated in these countries (in 2003 total credit grew by an unweighted average of 24 per cent in the NEW-8, cf. EBRD, 2004, p. 27). Since shifting the stance of fiscal policy rapidly proves difficult when discretionary spending is a rather small share of total spending, preventing overheating and other unsustainable strains on the economies requires that fiscal balances are positioned well in advance of possible credit and demand booms to exercise the necessary restraint on demand (for more details, see Schadler et al., 2004).

[50] However, given that strong finance ministers tend to work best in countries with one-party governments or in countries where there are two clearly opposing blocks of parties (see Hallerberg and von Hagen, 1999), it is likely that this solution will be difficult to put into practice in the NEW-8 countries with quite unsettled political landscapes.

(i) Empirical evidence shows that **different budget institutions may lead to different degrees of fiscal discipline**.[51] Different studies found that more hierarchical-transparent procedures are associated with more fiscal discipline.[52] In these studies, hierarchical procedures are understood as those that, in particular, attribute more power to the Treasury than to spending ministers in intra-government negotiations and that limit the role of the parliament in amending the budget proposed by the government. In particular lack of transparency may increase the cost of adhering to fiscal discipline.[53]
Caution regarding fiscal decentralization also hinges upon the common pool problem.[54] The basic problem here is that public budgeting involves an externality arising from a misperception about the true budget constraint and true shadow relative prices of public policy measures when the structure of the budget process allows decentralized spending determination. This means that clear mechanisms (e.g., borrowing ceilings on local governments) are necessary to ensure budgetary discipline at the lower levels.
Moreover, the quality of the budgetary adjustments undertaken in part is contingent on the quality of expenditure management and medium-term fiscal planning. Successful budgetary consolidation needs to be governed by policy actions ensuring long-term fiscal sustainability by anticipating, among other things, aging-related expenditures. The effect of institutions will be crucial in the enlarged EU as a properly designed budgetary process may improve the ability of policymakers to initiate and sustain expenditure restructuring.[55]

(ii) Studies of fiscal adjustment in the OECD countries show that the **size and composition of restructuring the budget are decisive factors** in enduringly reducing the primary structural deficit. Alesina and Perotti (1995) find that fiscal consolidations relying more heavily on cuts in current expenditures are more likely to succeed in reducing public deficits than those relying on tax increases. Moreover, Alesina and Ardagna (1998) confirm that the composition of adjustment is of more importance than the size: sustainable adjustments are those that concentrate, in particular, on cuts in transfers and government wages.
In addition, the overall efficiency of social spending could be improved to some extent by such measures as tightening the eligibility criteria. That is, a main emphasis should be laid on a more precise targeting of social spending toward those who really need it (decreasing the level of abuse of the social security system). Furthermore, more effort will be needed to improve the administration of the social security system. However, if a sustainable fiscal adjustment should guarantee enough room for a reorientation of government expenditure

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[51] Budget institutions are all the rules and regulations according to which budgets are prepared, approved, and implemented. Because these formal and informal rules and their enforcement mechanisms shape the behavior of organizations and individuals (e.g. taxpayers) in society, they are important determinants of fiscal outcomes.
[52] See Alesina and Perotti (1996a) with regard to OECD and Latin American countries. See also Gleich (2003) who, by exploring the linkage between the institutional design of budget processes and the aggregate fiscal performance in ten EU acceding countries, finds that countries whose institutions are more conducive to coordination and cooperation in decision making (these are the smaller acceding countries) have been more successful in lowering budget deficits and reducing debt levels.
[53] Alesina and Perotti (1996b) suggest the use of independent agencies, outside of the government bureaucracy, to check the accuracy and transparency of public budgets.
[54] This common pool problem tends to be more pronounced in larger, more decentralized economies. Correspondingly, fiscal control may simply be harder in the large NEW-8 countries. This may reflect these countries' larger problems with regard to fiscal consolidation (i.e., their higher deficit rates). It may also reflect the lower value that large countries (compared to small countries) attribute to the prospect of early euro adoption. According to the theory of optimal currency areas, the large countries benefit less from a currency union, therefore delay is a less effective deterrent.
[55] In particular, improving fiscal transparency and adopting a medium-term budget framework (MTBF) can have a positive effect on fiscal outcomes. The adoption of a medium-term budget framework is strongly advocated in chapter 7 of Feldman and Watson (2002).

toward growth-enhancing programs such as infrastructure development and education, the efficiency of collecting tax revenues must also be addressed.

(iii) In the context of implementation of fiscal reforms, the **ability to create social cohesion could play an important role**. Social dialogue can be an important supportive factor in implementing difficult fiscal reforms, especially if traditional policy mechanisms prove to be ineffective in securing long-term objectives of fiscal consolidation. The way in which social partners cooperate with the government may be crucial not only for wage moderation but also equally important for retrenching public expenditure and reducing tax burden, and slimming the welfare system. In most NEW-8, governments and social partners have been strongly involved since the very beginning of the reforms in social dialogue designed to deal with urgent and large-scale reforms. Recent research that analyzes the role of social cohesion for implementing reforms in low-income countries suggests that more social cohesion leads to better institutions and thus to higher growth.[56] However, there is no universal model for social cohesion, and the scope of arrangements for social cohesion should be adapted to national conditions and to the specific situation in the single countries. The simplest form of social cohesion (which, however, might be the least efficient one) is an informal social dialogue between different social groups.[57] But implementation of a general overhaul of social protection could be facilitated by a more active social dialogue, going beyond gathering together ad hoc working groups. An adequate legal and administrative framework conducive to effective social dialogue depends largely on the capability of the partners to discuss the substance of the agreements as well as their commitment to follow up on the agreed results.[58]

B. Revenues

Against the background of the (globalization-based) increase in competition described above, accompanied by an increase in production factor mobility, it has been argued that there is less flexibility on the revenue side with respect to raising government revenues. This tendency raises the question of how to react, particularly whether and how to restructure the sources of government revenues, and how to improve the effectiveness of revenue collection.

As argued in section III, the increase in competition and in mobility of production factors, brought about by globalization and EU-integration, may imply that the **fiscal burden has mainly to be carried by the less mobile production factor**, i.e. labor. By contrast, the more mobile production factors will need to be privileged. According to the Ramsey rule for efficient taxation, the governments are advised to set taxes inversely proportional to the supply elasticity of the tax base.[59] If the elasticity of supply of capital is high and the elasticity of supply of labor is low, the Ramsey rule implies that the tax rate on capital income should be lower than the tax rate on labor income.[60] With increasing internationalization of economic activity, the tax base, which is inelastic in a closed economy, will become increasingly elastic. Capital will become a particularly internationally mobile factor, but (to a lesser extent) so will skilled labor. This means that after joining the EU the tax systems in NEW-8 countries will

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[56] See Ritzen et al. (2000). In addition, IMF (2003c) emphasizes that successful market-based economies need institutions that will promote social cohesion and stability to reduce conflicts in the society and the consequences of economic disruption.
[57] Rychly and Pritzer (2003) argue that international experience shows that social dialogue is particularly vital when pension reforms are planned and implemented.
[58] Nevertheless, the budgetary procedures will be a crucial element of institutional design, because only an appropriately designed budget process can counterbalance the pressure of myopic political forces.
[59] See Ramsey (1927).
[60] The dual income tax (DIT) model adopted by the Scandinavian countries, leaning more on labor than on capital, is close to the spirit of the Ramsey rule (see Gordon, 2000).

become even more exposed to arbitrage pressure resulting from differences in tax rates and from the supply elasticity of the tax base. At the same time, the scope for tax avoidance and evasion will also be extended.

On average, calculations of effective tax rates on capital vs labor income for EU countries support the predictions of theoretical models that increased capital mobility leads to a shift in the tax mix away from the taxation of capital and towards taxation of wages (Haufler, 2001, p. 69). However, one has to bear in mind that against the background of the political process underlying the determination of factor taxes as analyzed in the public choice literature, the superiority of Ramsey-rule-based tax policies may be disputed (cf. Holcombe, 2002, for a discussion of this issue with respect to excise taxes).

So far, however, on the revenue side, **social security contribution rates have remained high in the NEW-8** compared to the EU-15 level, in particular in the Czech Republic, Poland and Slovenia (Figure 16). Even in the Baltic countries showing the lowest contribution rates among the NEW-8 these rates are currently still high compared to core EU member states with similar size (Figure 16). Therefore the scope for raising social security contribution rates further seems to be somewhat limited in the NEW-8. However, with regard to personal income taxes, these countries (except Lithuania) show significantly lower rates compared to the EU-15 (Figure 17). Nonetheless, further increasing taxes on labor (and thus labor costs in general) may have adverse effects.[61]

In the recent years, the tendency towards shifting the burden of taxation towards labor has become a cause for concern also in the EU-15 countries (Haufler, 2001, p. 18). This concern is supported by reasoning in the recent literature suggesting that in countries where unions can shift the burden of labor taxes to firms, such taxes may exert more distorting effects (especially in the form of possible adverse long-term labor market effects) than capital and consumption taxes would do (Daveri and Tabellini, 2000). High tax wedges on labor result in higher real wages and thus reduce the demand for labor. If firms then start to substitute capital for labor, the marginal product of capital will decrease, eliminating an important stimulus for investment and growth. Therefore, in view of high labor taxes (including social security contributions) reflecting the cost of generous welfare systems (mainly through rising pension expenditures), reforms resulting in savings on social spending could bring long-run benefits of higher employment, investment and growth. Thus, reforms aimed at a more precise targeting of social protection and/or reducing the coverage of social insurance as well as improving the administration of the social security system may have important effects on growth prospects.

In addition, there also seems to be room for maneuver with regard to restructuring revenues so that better incentives can be set for domestic and foreign investors. **Shifting the tax burden from direct to indirect taxes** may have a lasting positive effect on economic growth, provided a conducive environment for human and physical capital formation will be created (UN, 2004, pp. 124ff.). Theory suggests that direct taxes tend to have larger distorting impacts on economic decisions and thus on the economy-wide allocation of resources.[62] A tax mix relying more on consumption taxes may have several advantages, as they are rather neutral towards saving and investment decision and, by securing a symmetric treatment of labor and capital income, generate fewer disincentives to work (see Joumard, 2001, p. 17).

[61] Recently, the European Commission expressed concern that high taxes on labor may be an obstacle to a job-intensive strategy in new EU member countries (European Commission, 2002, p. 137).
[62] Progressivity in direct taxation, particularly with regard to labor income, may strengthen such impacts (see UN, 2004).

Therefore, from the viewpoint of economic efficiency, a tax system with a relatively low level of direct taxation might be favorable.[63] Accordingly, the general intention to gradually shift the tax burden from labor towards consumption was spelt out in the 2002 Pre-Accession Economic Programs (PEPs) (EPC, 2003a). Slovenia had already moved in this direction, but this was also the intention of the Slovak tax reform of 2003 with the underlying principle of introducing a flat tax rate (of 19%) throughout the whole economy.[64] If the Slovak tax reform is successful in removing exemptions and improving tax administration and thus bringing lower rates of direct taxation without significant erosion of revenues, then this may have a stimulating effect on investment in this country. Since the pressure to lower taxes on highly mobile factors will probably continue (and possibly will be extended to more mobile skilled labor) after joining the EU, the erosion of budgetary revenues can only be avoided if cuts in statutory rates are accompanied by base broadening measures ("tax-cut-cum-base-broadening") and by improving the effectiveness of tax collection.

However, there are economic counter arguments against shifting the tax burden from direct to indirect taxes. On the one hand, it may be argued that the standard VAT rates in the larger NEW-8 countries are already high by international comparison (see UN, 2004, p. 13, see also Table 8), whereas, direct taxes such as the CIT rate in the NEW-8 are rather low (Table 8). Therefore, raising effective consumption tax revenue would have to occur, to a large extent, through a broadening of the tax base (and through higher excise duties and eco-taxes).[65] In addition, the effectiveness of tax collection and tax administration needs to be improved significantly.[66]
On the other hand, there are also counter arguments based on considerations of social equity and justice. It is argued that increasing consumption taxes (resulting in higher prices) would disproportionately affect the real consumption of people with generally low incomes. Moreover, this might result in an overall reduction in final consumer demand, with negative consequences on economic growth, at least in the short term. In view of this, and the current relatively low level of revenue from direct taxation (both CIT and PIT) in the NEW-8 compared with the EU-15 countries (see Figure 18), it might be suggested that these countries should think of shifting towards higher levels of direct taxation, in order to increase tax revenues and, at the same time, achieve a higher degree of tax harmonization in the EU (see, for such a proposal, UN, 2004, pp. 142f.).
However, raising direct taxation in the NEW-8 would tend to create disincentives for the owners of mobile production factors and worsen the position of the NEW-8 in the locational competition process outlined above. Accordingly, the current trend in these countries regarding taxation appears to be in the opposite direction, i.e., towards relying more on indirect taxes.

In the **medium term**, there may be **greater scope for revenue mobilization** as growth and incomes increase. Fiscal development can be influenced by government policies to enhance growth prospects and reduce fluctuations, because growth eases government finances through

[63] See, for example, Tanzi and Zee (1997), or Stokey and Rebelo (1995).
[64] In particular, the Slovak reform aimed at improving the efficiency of resource allocation by reducing the progressivity of the tax system (UN, 2004, pp. 124ff.).
[65] In particular, reconsidering the extensive use of reduced VAT rates and exemption could raise the yield of consumption taxes, while reducing non-neutralities of the tax system.
[66] Broadening the tax base and improving the effectiveness of tax collection are of general concern. During the years of transition, in order to attract more FDI, the NEW-8 have not only reduced statutory CIT rates (from on average over 30 percent in 1999 to around 20 percent in 2003, see UN, 2004, p. 128), they have also introduced many exemptions affecting the tax base (for example zero tax rate for reinvested earnings in Estonia). In 2002, the revenues from CIT in the NEW-8 were, on average, 6.8 percent of total tax revenues, against around 9 percent in the EU-15 (UN, 2004, p.137).

higher revenues and lower transfer payments. Growth enhancing efforts should include adjustments in complicated tax structures, resulting in improvements in the environment for business investment (Tanzi and Zee, 1997). In addition, further structural reforms (particularly on the labor and product markets) are urgently needed to enhance economic growth. However, even though better growth prospects after joining the EU may alleviate budgetary pressure in the NEW-8, no sustainable improvement can be expected without addressing structural weaknesses and inefficiencies in raising revenue.

V. Conclusions

The NEW-8 are facing a range of fiscal challenges stemming from EU membership, on the one hand, and from developments essentially independent of EU membership, on the other hand. This paper has argued that the main challenge for the NEW-8 is not the direct fiscal cost of EU membership (per se) but arises from the impact of globalization (locational competition)[67] and country-specific structural characteristics or developments, such as population aging and the need for upgrading infrastructure. That is, there is an urgent need to speed up with implementing structural and institutional reforms in most NEW-8. This, together with the requirements of EU membership and upcoming euro adoption, may produce a considerable fiscal challenge for many of the NEW-8. Therefore, it appears to be imperative for them to conduct a straightforward, credible course of fiscal consolidation. This requires restructuring their budgets (as well as their social security and pension systems) and increasing the efficiency of public spending and tax collection.

However, this needs to be done in a way that avoids worsening their position in the (globalization-based) locational competition process for mobile production factors. In particular, when trying to get public support for necessary reform measures, governments may be tempted to compensate losers from reforms through the budget, financed through tax increases (or through subsidies or transfer payments).[68] This, however, could have adverse effects on attracting capital necessary to finance infrastructure investment. In this situation, combining various necessary reforms may be helpful as it may create important synergies and reduce short-term costs,[69] which makes the reforms more acceptable politically.

[67] In the short to medium term, i.e. in the run-up to euro adoption, there is also a risk of financial crises through the early capital market opening in the NEW-8.

[68] Problems in obtaining broad political support for fiscal reforms usually arise from the uneven distribution of benefits and costs of reforms across the economy and over time. Industrial countries' experiences over the past decades show that opposition to reforms is more likely to be overcome when the budgetary situation allows losers from reforms to be compensated through the budget (IMF, 2004a).

[69] Especially reforms on the labor and product markets could make wages and prices more flexible, thus increasing their ability to absorb shocks and shorten recessions induced by fiscal consolidation (IMF, 2004a; see also footnote 45 above).

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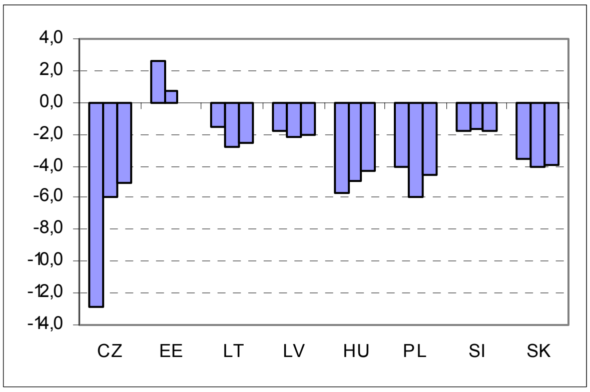
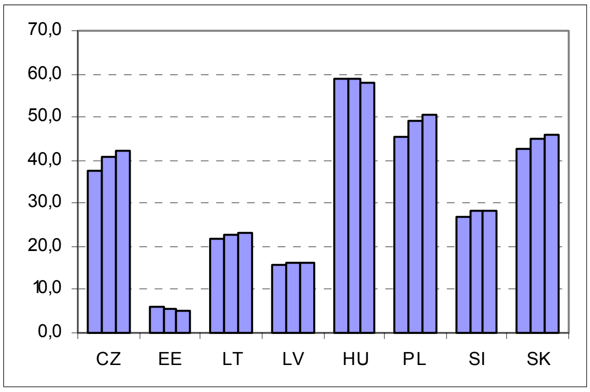
Figure 1. Public Deficits and Public Debt in the NEW-8 (percent of GDP), 2003-2005

a) Public Deficits, 2003-2005

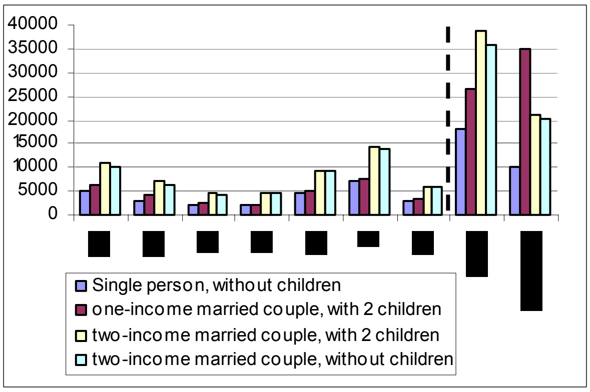


b) Public Debts, 2003-2005



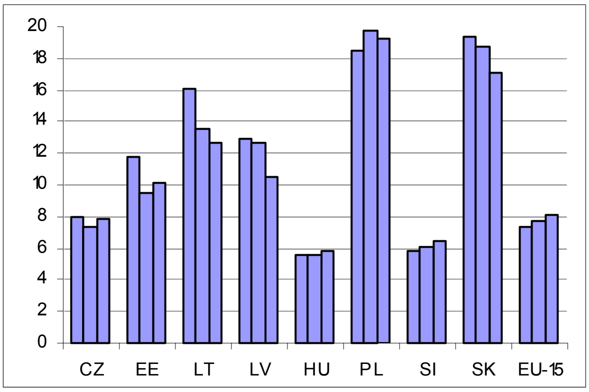
Source: Eurostat.

Figure 2. Net Earnings of Employees in Manufacturing (EUR), 2002



EU-South here refers to Greece, Portugal and Spain.
Source: Eurostat, 2004a.

Figure 3. Unemployment Rates[1)] in the NEW-8, 2001-2003



[1)] Annual harmonized unemployment rate as percentage of civilian labor force.
Source: Eurostat, 2004b.

Figure 4.a. Regional Employment per Sector in the Czech Republic, 2002

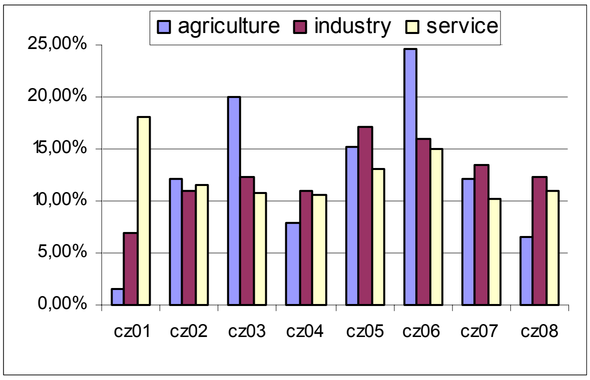


Figure 5.a. Regional Shares of R&D Expenditures in the Czech Republic, 2000-2001

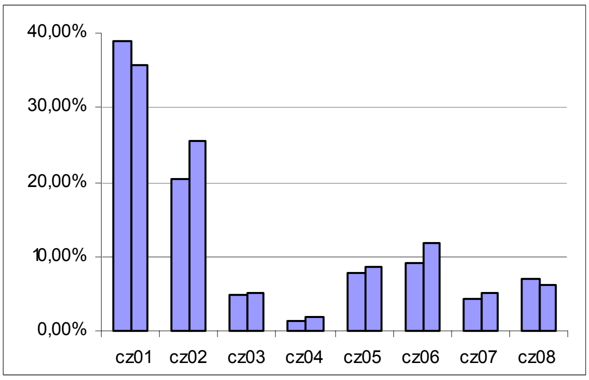


Figure 4.b. Regional Employment per Sector in Hungary, 2002

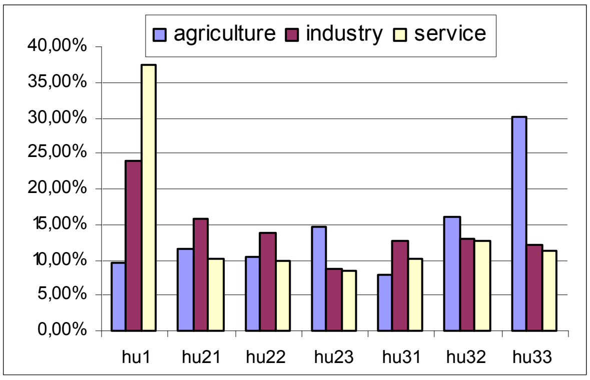


Figure 5.b. Regional Shares of R&D Expenditures in Hungary, 2000-2001

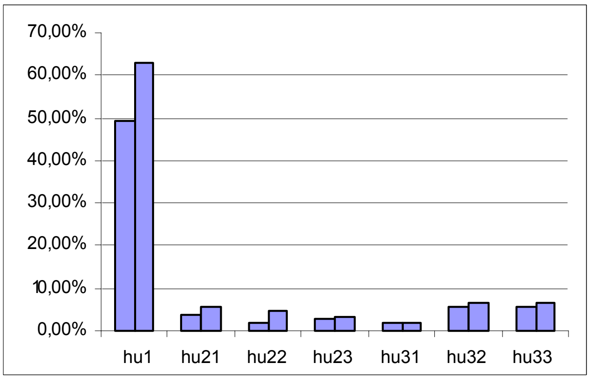


Figure 4.c. Regional Employment per Sector in Poland, 2002

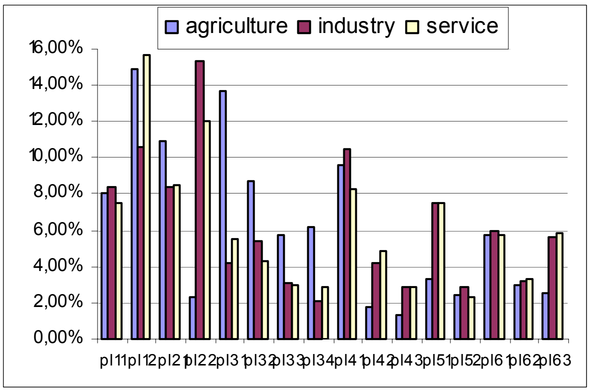


Figure 5.c. Regional Shares of R&D Expenditures in Poland, 2000-2001

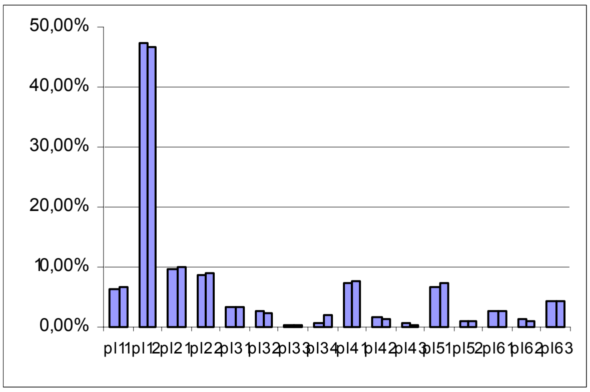


Figure 4.d. Regional Employment per Sector in the Slovak Republic, 2002

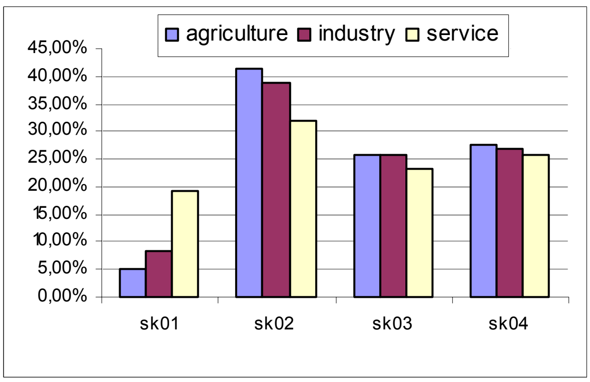
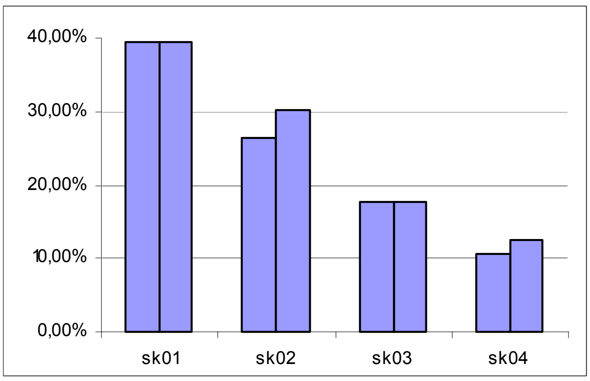


Figure 5.d. Regional Shares of R&D Expenditures in the Slovak Republic, 2000-2001



Abbreviations:

Czech Republic	Hungary	Poland	Slovak Republic
cz01 Praha	hu1 Közép-Magyarország	pl11 Lódzkie	sk01 Bratislavský
cz02 Strední Cechy	hu21 Közép-Dunántúl	pl12 Mazowieckie	sk02 Západné Slovensko
cz03 Jihozápad	hu22 Nyugat-Dunántúl	pl21 Malopolskie	sk03 Stredné Slovensko
cz04 Severozápad	hu23 Dél-Dunántúl	pl22 Slaskie	sk04 Východné Slovensko
cz05 Severovýchod	hu31 Észak-Magyarország	pl31 Lubelskie	
cz06 Jihovýchod	hu32 Észak-Alföld	pl32 Podkarpackie	--------------------------------
cz07 Strední Morava	hu33 Dél-Alföld	pl33 Swietokrzyskie	pl51 Dolnoslaskie
cz08 Moravskoslezko		pl34 Podlaskie	pl52 Opolskie
		pl41 Wielkopolskie	pl61 Kujawsko-Pomorskie
		pl42 Zachodniopomorskie	pl62 Warminsko-Mazurskie
		pl43 Lubuskie	pl63 Pomorskie

Classification of sectors:
<u>Agriculture</u>: a_b agriculture, forestry and fishery
<u>Industry</u>: c_e, f mining, mineral extraction, industry, electricity, construction
<u>Service</u>: g_h_i, j_k, l_to_p trade, maintenance and repair of motor vehicles and commodities, hotel and restaurant industry, communications and information transmission, credit and insurance industry, real estate and housing, leasing of chattels, provision of services mainly for business companies, civil service, defence, social security, education and tuition, health care, veterinary and welfare, provision of other public and private services, private households
Source: Eurostat.

Figure 6. Net FDI Inflows (percent of GDP), 1995-2002

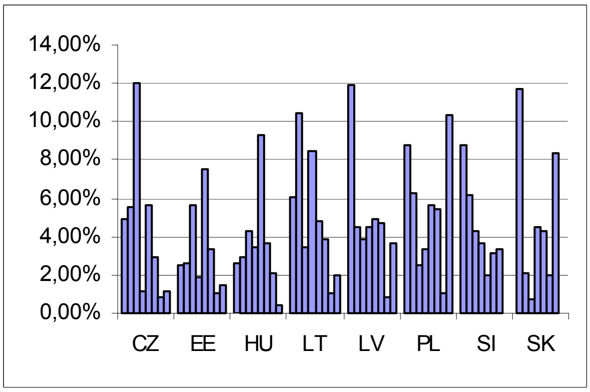
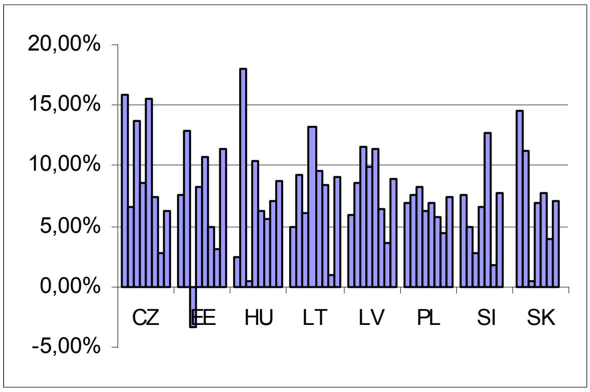
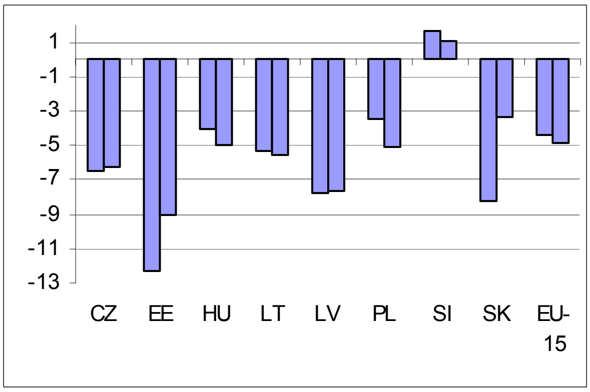


Figure 7. Net Capital Inflows (percent of GDP), 1995-2002



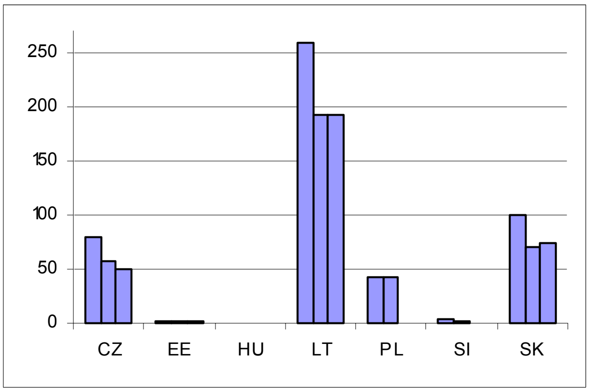
Source: IMF, 2004a.

Figure 8. Current Account Balance (percent of GDP), 2002 and 2006



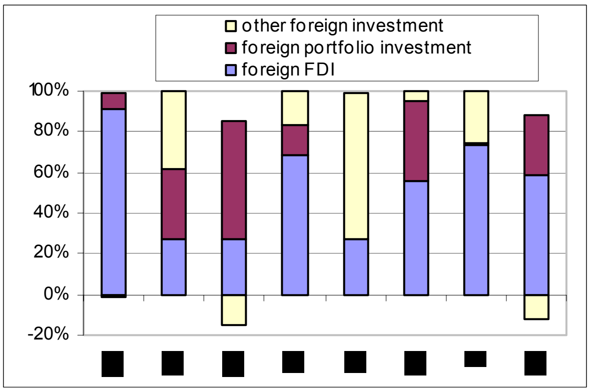
Source: EC, 2004a.

Figure 9. Total Short-term External Debt to Official Reserves (percentage), 2001-2003



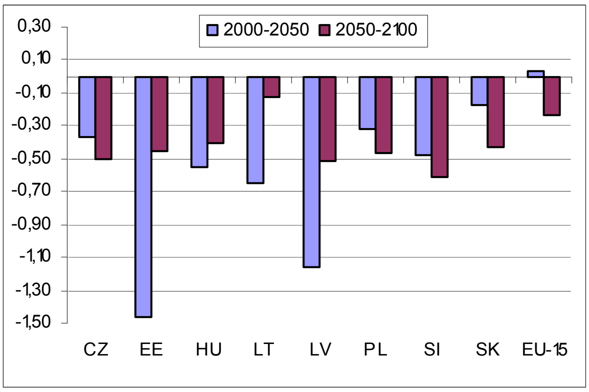
Data for EE from 2003 and for PL and SK from 2002 on are projections.
Data for Hungary: 0.9% in 2001 and 0.7% in 2002.
Data for Latvia not available.
Source: IMF, 2004b.

Figure 10. Structures of Foreign Capital Stocks, 2002



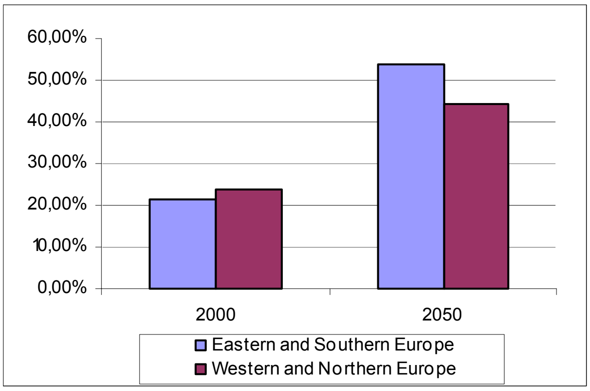
Source: IMF, 2004a.

Figure 11. Average Annual Rate of Population Change, Medium Scenario (percentage)



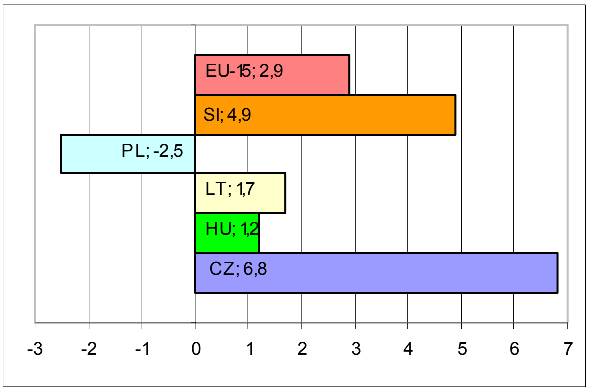
Source: UN, 2004 (own calculations).

Figure 12. Old Age Dependency Ratio (percentage)



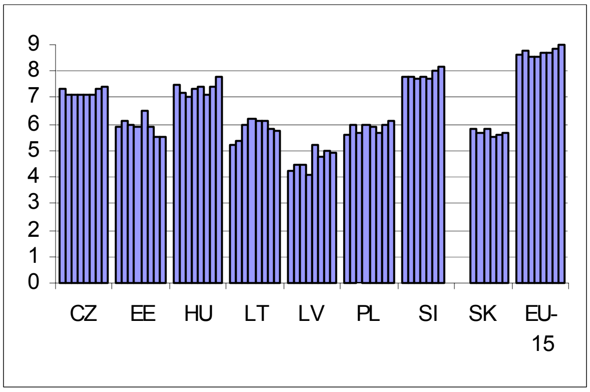
Source: UN, 2004 (own calculations).

Figure 13. Changes in Public Pension Expenditures (percent of GDP), 2000-2050



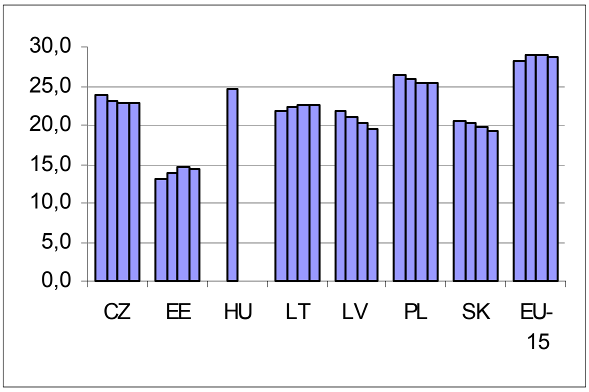
Source: data for the CZ, HU, PL: OECD, 2004
data for the remaining countries:
Lambrecht et al., 2003.

Figure 14. Total Health Expenditure (percent of GDP), 1995-2002



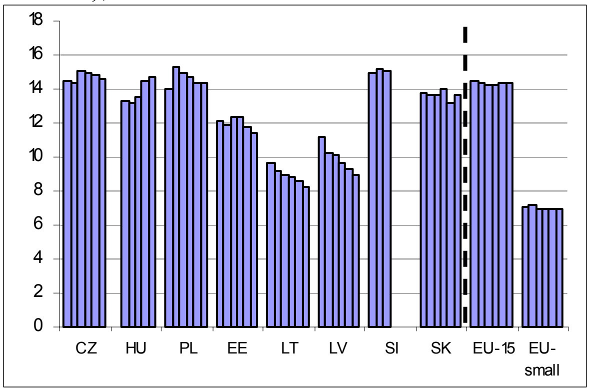
Source: WHO.

Figure 15. Social Transfers (percent of total expenditures), 2002-2005



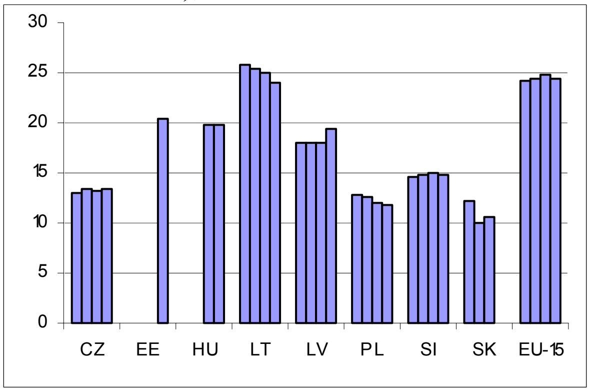
Source: EC, 2004a.

Figure 16. Total Social Contribution (percent of GDP), 2000-2005



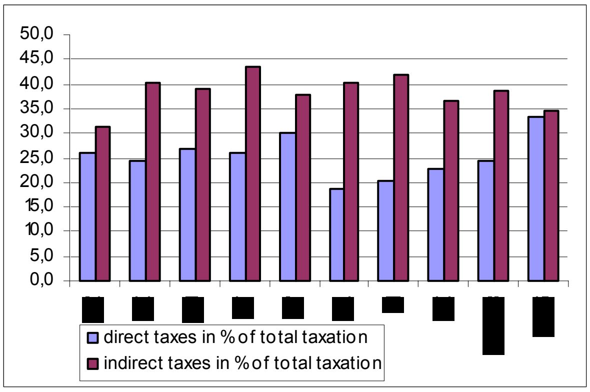
EU-small here refers to Denmark, Finland and Ireland
Source: EC, 2004a.

Figure 17. Personal Income Taxes (percent of Total Taxation), 1999-2002



Source: EC, 2004b.

Figure 18. Direct and Indirect Taxes (percent of Total Taxation), 2002



Source: EC, 2004b.

Table 1. Selected New Member Countries: Summary of Fiscal Effects of EU Membership[1)]
(percent of GDP)

	CZ	EE	HU	PL	SI
Direct effects					
Contribution to the EU budget	-1.25	-1.25	-1.25	-1.25	-1.25
Structural Funds transfers[2)]	-1.5	-1.5	-1.5	-1.5	-1.0
Cohesion Funds transfers	0.5	0.5	0.5	0.5	0.5
Reform of public administration[3)]	-1.5	-1.5	-1.0	-1.5	-1.0
Phase-out of production subsidies	1.0	0.25	1.5	2.0	1.0
Realignment of custom duties[4)]	-0.5	0.25	-0.5	-0.5	-0.5
Tax harmonization	0.0	0.5	0.0	0.25	0.25
Infrastructure expenditures	-1.5	-1.5	-1.5	-1.5	-1.0
Net direct effect	-4.75	-4.25	-3.75	-3.5	-3.0
Indirect effects					
Structural reforms	(+)	(+)	(+)	(+)	(+)
Tax competition	(–)	(0)	(–)	(–)	(–)
Tax revenue windfall	(+)	(+)	(+)	(+)	(+)
Decline in interest rates	(+)	(0)	(+)	(+)	(+)

1) Annual effect on the fiscal balance over the medium term, following accession.
2) National contribution.
3) Including legal approximation.
4) Including liberalization commitment under WTO.

Source: Kopits and Istvan P. Székely, 2004, p. 291.

Table 2. Direct Fiscal Effects of EU Membership in the NEW-8 (percent of projected GDP), 2004-2006

		CZ	EE	HU	LT	LV	PL	SI	SK
Contributions to the EU budget	2004	0.66	0.70	0.73	0.73	0.72	0.74	0.76	0.75
	2005	0.99	1.06	1.10	1.10	1.09	1.11	1.14	1.13
	2006	0.99	1.06	1.10	1.10	1.09	1.11	1.14	1.13
Payments from the EU budget	2004	1.12	1.95	1.16	2.37	2.56	1.72	1.13	1.35
	2005	1.74	3.03	1.86	3.97	4.16	2.97	1.61	2.23
	2006	1.82	3.35	2.04	4.31	4.82	3.25	1.69	2.53
Net payments	2004	0.46	1.25	0.43	1.64	1.84	0.98	0.37	0.60
	2005	0.75	1.97	0.76	2.87	3.07	1.86	0.47	1.10
	2006	0.82	2.29	0.93	3.21	3.73	2.14	0.55	1.40
Co-financing of EU programmes	2004	0.22	0.37	0.23	0.46	0.59	0.40	0.14	0.34
	2005	0.33	0.61	0.35	0.75	0.99	0.61	0.23	0.55
	2006	0.37	0.70	0.39	0.86	1.16	0.69	0.28	0.62
Payments from Structural Funds (excl. Cohesion Fund)	2004	0.22	0.51	0.29	0.58	0.75	0.51	0.11	0.40
	2005	0.38	0.84	0.49	0.96	1.25	0.86	0.20	0.68
	2006	0.39	0.83	0.49	0.96	1.26	0.87	0.21	0.70

Source: Hallet, 2004.

Table 3. Transfers from the EU to the New Member States, 2004-2006

Maximum enlargement-related appropriations for commitments 2004-2006 for 10 new Member States (million Euros, 1999 prices)				
	2004	2005	2006	2004-2006
Agriculture	1,897	3,747	4,147	9,791
Structural Action	6,070	6,907	8,770	21,747
Internal Policies	1,457	1,428	1,372	4,257
Administration	0,503	0,558	0,612	1,673
Budgetary Compensations				3,385
Total	9,927	12,640	14,901	40,853
Source: EC, 2004c, and Federal Ministry of Finance of the Federal Republic of Germany, 2004.				

Table 4. Degree of Openness

	Population (millions)	(Ex+Im)[1)]/GDP
	2003	2002
EE	1.36	1.77
SI	2.00	1.22
LV	2.33	1.43
LT	3.46	0.94
SK	5.38	1.57
HU	10.14	1.42
CZ	10.20	1.39
PL	38.22	0.68
Unweighted average (exc. PL)	4.98	1.22
[1)] Data for 2003 not yet available.		
Source: Eurostat, own calculations.		

Table 5. Standard and Poor's Credit Ratings, 2004

	CZ	EE	HU	LT	LV	PL	SI	SK
Local Currency	A stable	A- positive	A stable	A- stable	…	A- stable	AA stable	A- stable
Foreign Currency	A- stable	A- positive	A- stable	A- stable	…	BBB+ stable	AA- stable	BBB+ positive
Source: Standard and Poor's, 2004.								

Explanation: The table above displays values of the long-term issuer credit ratings following the methodology of Standard and Poor's. "AAA" denotes the highest, "BBB-" the lowest possible score within the investment grade. The terms "positive" and "stable" indicate the tendency for short-term ratings.

Table 6. Financial Market and Infrastructure Reform Indicators, 2004

	CZ	EE	HU	LT	LV	PL	SI	SK
Banking reform and interest rate liberalisation	4-	4↑	4	3	4-	3+	3+	4-↑
Securities markets and non-bank financial institutions	3+↑	3+	4-	3	3	4-	3-	3-
Source: EBRD, 2004, p. 6.								

Explanation: The table above displays values of various transition indicators following the methodology of the European Bank for Reconstruction and Development (EBRD). "4+" denotes the highest score which means "standards and performance typical of advanced industrial economies".

Table 7. Infrastructure Transition Indicators, 2004

	CZ	EE	HU	LT	LV	PL	SI	SK
Telecommunications	4	4	4	3+	3	4	3	3+
Electric power	3+	3	4	3+↑	3+↑	3+↑	3	4
Railways	3	4+	3+	2+	3+	4	3	3-
Roads	2+	2+	3+	2+	2+	3	3	2+
Water and waste water	4	4	4	3+	3+	3+	4	2+
Overall Infrastructure	3+	3+	4-	3-	3	3+	3	3-
Source: EBRD, 2004, p. 10.								

Explanation: The table above displays values of various transition indicators following the methodology of the European Bank for Reconstruction and Development (EBRD). "4+" denotes the highest score which means "standards and performance typical of advanced industrial economies".

Table 8. VAT and CIT Rates in the NEW-8, 1 May 2004

	VAT Rate	Reduced VAT Rate(s)	Statutory CIT Rate (2004)	Statutory CIT Rate (planned)
CZ	19%	5%	28%	24%
EE	18%	5%	26%	20%
HU	25%	5% and 15%	16%	12%
LT	18%	5% and 9%	15%	15%
LV	18%	5%	15%	15%
PL	22%	3% and 7%	19%	19%
SI	20%	8.5%	25%	25%
SK	19%	-	19%	19%
EU-15	19.7%	-	31.1%	-
Source: Ernst & Young, 2004, and Economiesuisse, 2004, p. 68.				