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Fiscal Challenges Facing the New Member States

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1. Introduction

After May 1, 2004 the new member states (NMS) will be the subject of the same fiscal rules determined by the Treaty on the European Union and Stability and Growth Pact (SGP) as the old member states (OMS). This will be a quite new situation for NMS because at the accession stage their fiscal situation was not the subject of a regular and binding surveillance apart from preparing and presenting Pre-accession Economic Programs¹. The latter, however, had a character of a rather loose projection without any legal consequences of breaching the declared fiscal targets and did not influence seriously the actual outcomes of fiscal policy in individual countries.

Apart from being subject of the standard EU fiscal surveillance rules most of NMS expresses its interest to enter the Economic and Monetary Union (EMU) and meeting the fiscal convergence criteria seems to be the most serious obstacle on this road at least for some candidates.

The individual fiscal situation of NMS at the day of EU accession differed, with Baltic countries and Slovenia representing a healthier fiscal stance and 'Visegrad group' countries, Cyprus and Malta suffering serious fiscal problems. In addition, NMS have to deal in short to medium run with negative fiscal consequences of the EU accession (contribution to the EU budget, co-financing and pre-financing EU transfers, and costs of adopting *acquis*).

Although in early years of their membership NMS may still demonstrate certain specific characteristics of their fiscal situation and policies, in a medium to long-term perspective the nature of their fiscal problems will not differ from what can be observed and expected in OMS. This relates, for example, to the high level of fiscal redistribution caused by the excessive level of social-related expenditures, further challenged by the expected consequences of population aging. Thus, most of OMS and NMS will continue to face serious fiscal strains in the next decades. On a microeconomic level, both the incumbent and new members have to increase competitiveness of their economies and excessive fiscal burden is one of the serious obstacles staying on this road. Thus, we believe there are no convincing arguments to treat NMS in a different way than OMS and any modification of the fiscal surveillance rules (if justified) must relate to the entire EU-25 (or EU-27 few years down the road).

Our paper will concentrate on the detail analysis of fiscal challenges faced by the NMS with special attention given to eight transition economies of Central Europe and Baltic region (NMS-8). We will also try to answer to what extent the existing EU fiscal surveillance rules provide the sufficient guarantees of a long-term fiscal sustainability of both OMS and NMS and will they need in modification?

The paper is organized in the following way. The next section will analyze fiscal situation of NMS at the day of entry to the EU and differences between them. Section 3 will extend this analysis with an attempt to estimate fiscal costs of EU accession for NMS. In

¹ At the early stage of transition some of the current NMS had the IMF-sponsored adjustment programs, which required fulfilling the agreed fiscal and other macroeconomic targets (performance criteria). However, recently they have not borrowed from the IMF. This means that they have been subject of annual Article IV consultations only, which involve a soft surveillance mechanism (not including any kind of sanctions). A similar kind of 'soft' surveillance mechanism is provided by the OECD in relation to countries belonging to this organization (the Czech Republic, Hungary, Poland and Slovakia among NMS).

Section 4 we will try to discuss the prospects and conditions of meeting by NMS fiscal convergence criteria as defined by the Treaty of the European Union and SGP. Section 5 will remind long term fiscal challenges coming mostly from the unfavorable demographic trends, which face both OMS and NMS in a not so distant future. Section 6 will address the hot issue do the EU fiscal surveillance rules need in modification? Finally, Section 7 will shortly summarize the main findings and offer conclusions.

Significant part of this paper draws from an earlier research works of the authors and the entire CASE macroeconomic research team. This relates particularly to the recent CASE research project on prospects of the EMU enlargement². However, authors take the sole responsibility for the content of this paper, its quality and presented conclusions. The views and opinions presented here are those of the authors and not necessarily of the institutions, which they work for or which granted a support for this research work.

2. Fiscal legacy of transition

Six out of ten NMS (the Czech Republic, Cyprus, Hungary, Malta, Poland and Slovakia) entered the EU with serious fiscal imbalances, breaching the fiscal deficit criteria determined by the Treaty on the European Union and SGP. In addition, as shown in **Table 1**, fiscal situation of most of the NMS got worse from the beginning of 2000s. For the whole NMS group general government deficits (in ESA 95 terms) deteriorated from 3.8% of GDP in 2001 to 4.7% of GDP in 2002, mainly due to the sharp increase in the Hungarian deficit. In 2003 there was a further deterioration in the average fiscal position of NMS up to 5.0% of GDP. The reason for that was the sharp and unexpected deficit increase in the Czech Republic³. According to official European Commission sources⁴ the overall deficits are expected to fall to 3.9% of GDP in 2004. However, as we will show in Section 3 of this paper the NMS fiscal deficit can increase (at least in short term) as a consequence of membership-related expenditures after the accession.

The situation is even worse if we take into consideration the relatively high GDP growth rates in most of the NMS. As Coricelli and Ercolani (2002) point out correctly, most of the NMS budget deficits are both structural and cyclical in their character and their fiscal positions are more vulnerable to changes in real GDP growth than in the case of OMS. It means that if a current growth rate slows down for any reason in future the current fiscal problems will become even more acute.

The observed fiscal imbalances of NMS cannot be very surprising as at least Visegrad-4 (V-4) countries experienced chronic imbalances a long time ago, at the earlier stages of its post-communist transition (see EPI, 1997, Dabrowski & Rostowski, 2001).

Saying the above, one cannot forget, however, about differences between the individual NMS demonstrated by **Table 1**. While the deficits for Estonia, Lithuania, Latvia, and Slovenia are reported to be lower than 2% of GDP in 2003, the Czech, Hungarian,

² A comparative research project on "Strategies for Joining the EMU" coordinated by Marek Dabrowski and Jacek Rostowski and financed by Poland's Scientific Research Committee (grant No. H02C 029 23; December 2002 – November 2004)

³ In April 2003, Czech Republic submitted to the Commission the fiscal notifications with the deficit level of 5.8% of GDP. However, according to the Eurostat, the actual fiscal deficit for the Czech Republic amounted to 12.9% of GDP in 2003.

⁴ Data presented in this section are provided by EC (2003a, 2003c).

Maltese and Cyprus deficits reached more than 5% of GDP in 2003. In dynamic terms, four countries (the Czech Republic, Cyprus, Malta and Poland) recorded deterioration of their fiscal positions comparing to 2002 while other either improved or stabilized their previous balances (in relation to GDP). However, taking account on GDP growth rates only Estonia seems to represent a really healthy medium to long term fiscal outlook closed to the one recommended by SGP..

Table 1: General government balance (percent of GDP)

Country	1999	2000	2001	2002	2003	2004 f	2005 f
Cyprus	-4.5	-2.4	-2.4	-4.6	-6.3	-4.6	-2.2
Czech Republic	-3.4	-4.5	-6.4	-6.4	-12.9	-5.9	-5.1
Estonia	-3.7	-0.3	0.3	1.8	2.6	0.7	0.0
Hungary	-5.6	-3.0	-4.4	-9.3	-5.9	-4.9	-4.3
Latvia	-4.9	-2.7	-1.6	-2.7	-1.8	-2.2	-2.0
Lithuania	-5.6	-2.6	-2.1	-1.6	-1.7	-2.8	-2.6
Malta	-7.6	-6.5	-6.4	-5.7	-9.7	-5.9	-4.5
Poland	-1.4	-1.8	-3.5	-3.6	-4.1	-6.0	-4.5
Slovakia	-6.4	-12.3	-6.0	-5.7	-3.6	-4.1	-3.9
Slovenia	-2.1	-3.0	-2.7	-1.9	-1.8	-1.7	-1.7
NMS *	-3.2	-3.0	-3.8	-4.7	-5.0	-	-

Note: The general government sector (sector S.13 in ESA 1995, 2.68) comprises central government, state government, local government, and social security funds. Data for the general government sector are consolidated between sub-sectors at the national level. The series are measured in Euro and as % of GDP.

* - aggregate across countries weighted using GDP converted at market exchange rates

Source: Eurostat (based on fiscal notifications), for 2004-2005 EC (2004)

Table 2: Public debt (percent of GDP)

Country	1999	2000	2001	2002	2003
Cyprus	62.0	61.7	64.4	67.1	72.2
Czech Republic	13.4	18.2	25.2	28.9	37.6
Estonia	6.5	5.0	4.7	5.7	5.8
Hungary	61.2	55.4	53.5	57.1	59.0
Latvia	13.7	13.9	16.2	15.5	15.6
Lithuania	23.0	24.3	23.4	22.8	21.9
Malta	56.8	57.1	61.8	61.7	72.0
Poland	40.3	36.6	36.7	41.2	45.4
Slovakia	24.9	26.7	26.9	27.8	27.1
Slovenia	43.8	49.9	48.7	43.3	42.8
EU-25	66.7	62.9	62.1	61.5	63.2
OMS (EU-15)	67.9	64.0	63.2	62.6	64.2
Eurozone-12	72.8	70.4	69.4	69.2	70.6

Note: Debt is valued at nominal (face) value, and foreign currency debt is converted into national currency using end-year market exchange rates. The national data for the general government sector are consolidated between the sub-sectors. Basic data are expressed in national currency, converted into Euro using end-year exchange rates for Euro provided by ECB. Data are compiled on an accrual basis.

Source: Eurostat

Looking ahead, the official forecasts foresee deficits of at least 3% of GDP in 6 countries in 2004 (EC, 2003c). Except for Estonia and Lithuania, the forecasts point to a trend towards somewhat lower deficits over the forecast horizon, with particularly remarkable improvements in Hungary and the Slovakia. However, one must remember that many NMS

systematically underestimate their deficits at the projection stage, i.e. in the fiscal notifications submitted to the European Commission in the subsequent years (EC, 2004). For example, in fiscal notification of April 2003 the average general government deficit for NMS-10 was estimated at the level of 4.2% of GDP (EC, 2003c) while the actual deficit reported by the Eurostat amounted to 5% of GDP in 2003.

Analyzing the second fiscal criterion defined by the Treaty, i.e. a public debt to GDP ratio all the NMS but Cyprus, Malta and Hungary seem to be well below a 60% threshold representing, on average, a better performance than OMS (see **Table 2**). However, the mentioned three countries plus Czech Republic and Poland have recorded a rapid increase of its debt to GDP ratio recently. Again, Estonia represents the best performance among the whole NMS group.

Table 3: General government expenditure in NMS-8, 2002-2005, % of GDP

Country	Year	Collective consumption	Social benefits in kind	Social transfers other than in kind	Interests payments	Subsidies	Other current expenditure	Total current expenditure	Gross fixed capital formation	Other capital expenditure	Total expenditure	Change in total expenditure 2002-2005
CZ	2002	10.9	11.4	12.5	1.3	2.8	5.2	44.1	4.4	5.4	52.3	-3.1
	2003	10	10.5	12.6	1.3	2.9	13.4	50.7	4.2	4.5	57.9	
	2004	9.8	10.3	12.6	1.3	3	14.4	51.4	4.2	-3.3	50.9	
	2005	9.6	10.1	12.5	1.3	3.1	13.5	50.1	4.2	-3.9	49.2	
EE	2002	8.6	9.5	13	0.3	1.1	0.5	33	4.9	1.4	37.9	4.3
	2003	9	9.5	13.8	0.3	1.2	0.6	34.4	4.7	1.5	38.6	
	2004	9.5	9.6	14.6	0.3	1.4	1.8	37.2	4.5	1.6	42.8	
	2005	8.5	9.3	14.4	0.3	1.4	2.6	36.5	4.3	1.6	42.2	
HU	2002	10.8	12.6	13.7	4.2	1.8	1.9	45	4.9	4.4	52.6	-3.2
	2003	11.3	13.3	12.4	4.1	2	1.9	45	3.1	2.1	50.2	
	2004	11.6	13.1	13.4	4	1.5	1.9	45.5	4.5	2	52	
	2005	11.3	12.7	13.3	3.9	1.5	1.8	44.5	4.6	2	51.1	
PL	2002	9.4	8.6	17.7	3.7	0.5	0.9	40.8	3.5	0	44.9	0.8
	2003	9.2	8.3	17.4	3.1	0.5	3.1	41.6	3.5	0	45.1	
	2004	9	8.2	17.3	3.2	0.1	4.7	42.5	3.5	0.9	46.8	
	2005	8.8	7.9	17.5	3.3	0.2	3.5	41.2	3.7	0.8	45.7	
LT	2002	7.9	11.8	9.5	1.6	0.8	0.1	31.7	2.9	0.5	35	2.3
	2003	8.1	11.1	9.4	1.3	0.8	0.3	31	2.9	0.7	34.6	
	2004	7.7	12.6	10.1	1.4	2.1	1.6	35.5	3.2	0.4	37.4	
	2005	7.8	12.6	9.9	1.3	2.2	1.6	35.4	3.2	0.3	37.3	
LV	2002	9.6	9.7	12.1	1	0.7	3.6	36.7	3.3	2.8	44.9	-4.5
	2003	9.2	9.4	11.8	0.9	0.8	6.4	38.5	2.4	2.7	43.3	
	2004	9.1	9.2	11	0.8	0.8	7.9	38.8	2.3	2.6	41.8	
	2005	9	9.1	10.4	0.8	0.7	9.1	39.1	2.1	2.5	40.4	
SK	2002	11.3	8.8	11.8	3.6	1.6	10.6	47.7	3.3	2.2	50.9	-3.9
	2003	11.2	8.8	11.4	2.4	1.5	9.5	44.8	3	4.7	52.7	
	2004	10.9	8.6	11.1	2.7	1.4	4.3	39	2.7	4.4	46.1	
	2005	10.7	8.4	10.8	2.9	1.4	6.1	40.3	2.5	4.2	47	

Note: Table is based on ESA 95 definitions which do not necessarily correspond with the NMS Former definitions.
Source: EE (2004)

Fiscal troubles of the NMS have their roots in the high budget expenditures, particularly those related to various social commitments (see **Table 3**). In few cases like Hungary and Poland interest payments, i.e. costs of servicing the already accumulated public debt have also led to narrowing a room of fiscal maneuver.

In their Pre-Accession Economic Programs (PEPs) most NMS were putting forward medium-term fiscal strategies aiming to improve the budget balances and to bring down public expenditure by an average of 2% of GDP over the period 2002-2006 (see **Tables 4**). The planned expenditure cuts varied from country to country, ranging from about 1% of GDP in Slovenia, 4.3% in Slovakia, and 6.7% in Hungary which foresees the most dramatic reduction of its general government deficit. The overall fiscal deficit reductions were planned at the average level of 1.8% of GDP in 2002-2006 (see Funk, 2003).

Table 4: General Government statistics at the Pre-Accession Fiscal Programs of the NMS, 2000-2004

Country	Revenue			Expenditure			Balance		
	2002	2006	Change	2002	2006	Change	2002	2006	Change
Czech Republic	42.2	42.7	0.5	49.1	46.8	-2.3	-6.9	-4.1	2.8
Estonia	39.7	40.7	1.0	38.4	40.7	2.3	1.3	0.0	-1.3
Hungary	44.5	43.6	-0.9	53.7	46.1	-7.6	-9.2	-2.5	6.7
Latvia	41.9	42.2	0.3	44.9	44.2	-0.7	-3.0	-2.0	1.0
Lithuania	33.8	35.5	1.7	35.6	37.4	1.8	-1.8	-1.9	-0.1
Poland	42.1	42.1	0.0	45.9	45.5	-0.4	-3.8	-3.4	0.4
Slovakia	41.8	38.3	-3.5	49	41.2	-7.8	-7.2	-2.9	4.3
Slovenia	41.5	41.7	0.2	43.9	43	-0.9	-2.4	-1.3	1.1
Average	40.9	40.9	-0.1	45.1	43.1	-2.0	-4.1	-2.3	1.9

Source: The most recent CEECs Pre-Accession Economic Programs.

However, according to the recent “Public Finance in EMU - 2004” report (EE, 2004) general spending levels in NMS have not changed much in the recent years and only some countries – the Czech Republic, Hungary, Latvia and Slovakia – are going to carry out expenditure adjustment until 2005⁵ (see **Table 3**). On the other hand, the projected expenditure cuts in these countries would be almost offset by expenditure expansion in other countries (like Estonia and Lithuania), where the expenditure levels were planned to increase in relation to GDP in 2002-2005 (Public Finance Report) and in 2002-2006 (PEPs).

The objectives of expenditure consolidation stated in the PEPs and in the most recent report on “Public Finance in EMU – 2004” (EE, 2004) could be only achieved through deep cuts in the existing expenditure programs. However, according to projections published in the same document it is hardly to expect any significant changes in the structure of general government expenditure in the period of 2002-2005. This may suggest that there is not enough political determination and support to carry out the required fiscal adjustment in the analyzed countries. As result, the ambitious targets of curbing deficits can be missed.

3. Fiscal costs of EU accession.

The EU membership brings an additional fiscal pressure (other things being equal) on the NMS. It comes from a necessity to contribute to the EU budget, co-finance projects

⁵ Slovenia, Cyprus and Malta were not considered in this analysis.

financed by the EU structural funds, pre-finance some of the EU transfers during first period of membership, and continue implementation of *acquis* in some costly areas such as environmental protection, infrastructure, border control and public administration.

Fiscal problems caused by the EU accession are sometimes a source of surprise and confusion because they contradict a popular view in both OMS and NMS that the EU Enlargement will involve the substantial net positive transfers from OMS to NMS. We are not going to question the latter. However, one must distinguish between accession impact on the net country financial position (balance of payments consequences) and net fiscal position. While the former will be probably positive in most of NMS, the latter will be negative for all of them.

Table 5: Fiscal costs of EU accession and sources of financing: National Programs for Adopting the *Acquis*, national estimates (annual average, % of GDP), 2000-2003

Country	Total	General government	State budgets *	Local governments	EU financing**	Other financing
Czech Republic	3.1	2.3	1.1	1.2	0.3	0.5
Hungary	2.1	1.2	1.2	0	0.5	0.4
Latvia	3.3	1.6	1.4	0.2	1.1	0.6
Lithuania	1.6	1	0.6	0.4	0.4	0.2
Poland	1	0.4	0.2	0.2	0.6	0
Slovakia	3.6	1.3	1.3	0	0.9	1.4
Slovenia	2.6	2.2	2.2	0	0.4	0
Average	2.5	1.4	1.1	0.3	0.6	0.4

Notes: * - pre-accession period considered, it does not include membership contribution to the EU budget, which is to be paid from the state budget. The contribution was set later, during the negotiations in Copenhagen at the level of 1.27% of GDP.

** - estimated pre-accession assistance, no EU transfers considered, before Copenhagen Summit in December 2002.

Data for Estonia was not available. The 2000 GDP was used to calculate financial needs for EU accession in terms of GDP.

Source: NPAA, 2002.

Already the National Programs for the Adoption of the *Acquis* (NPAA) which were published well before Enlargement has actually happened⁶ estimated that accession may entail additional general government expenditures averaging to 1.4% of GDP (**Table 5**) out of which 50-70% would be funded from domestic, mainly public sources. The biggest share to finance from the domestic public sources was estimated by the Czech Republic and Slovenia (2.3% and 2.2% of GDP, respectively). Poland represented the lowest estimate in this respect (0.4% of GDP).

There is very little quantitative estimation of the fiscal effects of accession available and most studies have been limited to a general observation that EU accession will imply further budgetary challenges in addition to those already arising from economic transition (see e.g. EE, 2002).

One exception is Kopits and Szekely (2004) study, which assess that “*unless ACs undertake major fiscal reforms, the direct budgetary effects of EU accession, on average, could widen the deficit by as much as 3 to 4.75 percent of GDP annually in the medium term*”. On the basis of the similar methodology, Backe (2002) concludes that “*in the short run,*

⁶ The NPAA sets out in detail how the candidate country intends to fulfill the priorities of the Accession Partnership and prepare for its integration into the EU. It estimates the timing and cost of the steps needed to prepare the country for membership and implications for staff and financial resources.

membership in the EU will add to the fiscal strains on accession countries. In the medium run, overall effects can be expected to be broadly neutral or slightly positive”.

Our own effort to estimate the net fiscal impact of accession takes into consideration the net EU transfers to the government sector and accession-related budget expenditures, which are connected with adoption of the *acquis communautaire*.

3.1. Impact of net EU transfer flows on the public finances

There are two main groups of factors determining direct fiscal consequences of the EU membership: (i) the size of EU transfers directly channeled to the government sector and (ii) countries contribution to the EU budget.

Membership contribution to the EU budget is one of the most important but predictable fiscal costs of accession. NMS-8⁷ must pay a contribution being an equivalent to 1.27% of annual GDP in 2005 and 2006. Postponing the accession date from January 1 to May 1, 2004 reduced by one third the annual contributions in 2004 to the level of 0.85% of GDP in NMS-8. For the purpose of this analysis, the annual average contribution was calculated as average of 1.1% of GDP for 2004-2006.

The full contribution to the EU budget comes from the national state budgets. The most important component of the membership contribution fee are GNP resources (67% of the contribution will be taken from own resources of state budgets). 10% of applicants' budgetary contributions will come from customs duties and agricultural levies (this component is also called as 'traditional own allocations'). Another 12% will be taken from countries' VAT resources. As a part of the budgetary contribution, NMS will also have to pay the UK rebate⁸.

In addition, the short-term deterioration in NMS fiscal position could have resulted from the fact that they have to pay immediately full contributions to the EU budget (in monthly installments), while the level of payments for different appropriations will lag the corresponding level of commitments. This can be translated into a kind of one-off fiscal effect in first years of EU membership.

There are two sources of uncertainty, which make estimation of the fiscal impact of EU accession difficult. First, it is uneasy to figure out the share of total transfers, which will go to a general government sector (i.e. state budget, regions, municipalities and extra-budgetary funds) on the one hand, and which will be directed to other recipients (mostly private sector) on the other. Second, it is not yet known how big part of the potential transfers can be absorbed in practice. A modest absorption of EU financial sources threatens not only the national budget, but also the net financial position of the whole country. Moreover, it is very important to distinguish between planned and actual transfers. Commitment appropriations and payment appropriations are both planning categories.

⁷ Malta and Cyprus are obliged to pay a higher membership contribution (1.5% of GDP), while structure of received transfers differs from that of NMS-8.

⁸ This is part of sharing the burden generated by a 75% reduction granted to Germany, the Netherlands, Austria and Sweden from their normal financing share. The total agreed part of the UK rebate to be paid by acceding countries amounted to € 1.5 billion. The rest of the rebate will be financed by Germany, Austria, the Netherlands and Sweden. In 2001, the whole British rebate amounted to £2.8 billion, in 2002, £2 billion, and in 2003 £3 billion.

Furthermore, it must be remembered that not every transfer from the EU budget to a Member State is recorded in general government accounts since some funding goes directly to private beneficiaries (farmers, enterprises, schools, NGO organizations, and others) where the government functions only as a 'postman' (Hallet, 2004).

What kind of transfers go most probably to general government accounts? These are:

- Cohesion Fund transfers – they are normally used to finance environmental projects and transport infrastructure. They are subject to a local matching requirement of 15% of the costs of the project. The fiscal importance of these transfers is very small, however. Assuming a 100% percent of an absorptive capacity the yearly inflows could amount up to 0.5% of GDP.
- Special cash flow facility fund and temporary budgetary compensation – a so-called budget compensations negotiated in Copenhagen - special lump sum payments resolving the problem of cash shortfalls in some NMS. They will be transferred in monthly instalments what could partially offset the short-term liquidity problems resulting from the membership contribution, which is supposed to be paid up front,
- Additional expenditure and internal actions transfers – these transfers are to be used for administration, nuclear safety, institution building and Schengen facility fund (control of the new EU external borders) which are fixed.
- Structural Funds – are directed to local governments and/or private beneficiaries for financing of concrete projects.
- The CAP transfers have certainly important positive fiscal impact in terms of rural development programs, especially in the case of Baltic countries (see **Table 6**)

Table 6: Net fiscal effects of EU transfers in 2004-2006 (% of GDP), annual average

Item	CZ	EE	HU	PL	SL	LT	LV	SK
Net fiscal effects of EU transfer flows	-0.13	1.02	-0.06	0.45	-0.04	1.58	1.75	0.33
Membership contribution	-1.12	-1.05	-1.06	-1.12	-1.04	-1.06	-1.04	-1.14
Budgetary compensations	0.33	0.1	0.1	0.25	0.31	0.1	0.1	0.1
Structural Funds transfers	0.33	0.79	0.44	0.67	0.16	0.87	1.06	0.65
Cohesion Fund transfers	0.08	0.28	0.10	0.15	0.05	0.26	0.41	0.14
Internal actions and additional expenditures	0.11	0.47	0.18	0.2	0.24	0.78	0.48	0.27
Rural development under the CAP	0.15	0.42	0.17	0.3	0.23	0.63	0.74	0.3

Source: EC (2002), AMECO database, own calculations

According to our estimation five NMS will record the positive net fiscal effect of EU transfers in 2004-2006. These are: Latvia (1.75% of GDP), Lithuania (1.58%), Estonia (1.02%), Poland (0.45%) and Slovakia (0.33%). Three countries will record a negative fiscal effect: Slovenia (0.04% of GDP), Hungary (0.06%) and the Czech Republic (0.12%), due to relatively low level of SF and CF transfers what can be considered as indirect consequence of their higher GDP per capita level (comparing to other NMS). The relatively high budgetary compensations in the Czech Republic and Slovenia will not be able to change this picture.

At this point, it is important to mention about the fiscal aspect of other than above mentioned transfers. Some part of SF and Common Agriculture Policy (CAP) transfers will

go, in fact, around the public finance systems, while are to be channeled directly to eligible producers in the private sector with no positive direct impact on general government. SF and CAP allocations are targeted to regions/beneficiaries within member countries that meet specific criteria of need. In case of SF transfers under the principle of additionality, the EU financial sources cannot be used to finance projects that, in the absence of the transfer, would have been financed from government expenditure. It creates a significant cost for the budgets, which is included in the estimated costs of infrastructure investments (see **Table 7**). Moreover, the SF transfers are project-related and conditional on the member state government financial matching typically of 50% (25% in case of very poor regions) of the total cost of the project. The estimated costs of project co-financing and pre-financing are included in the infrastructure expenditure as the accession-related expenditures (**Table 7**). The transfers related to CAP direct payments are supposed to be made one year after they will be effectively paid to farmers. So reimbursement from the EU budget will come later than the money paid out of the national budget. Thus, assuming transfers of up to the limit, the SF and CAP allocations would possibly result in an increase in public expenditure of at least 1.5% of GDP (Kopits and Szekely, 2004).

Table 7. Accession related expenditures and total net fiscal effects of accession in NMS-8 2004-2006 (% of GDP), annual average

Item	CZ	EE	HU	PL	SL	LT	LV	SK
Accession related expenditure	-2.5	-2.0	-1.5	-1.3	-1.3	-2.0	-2.0	-2.3
Infrastructure expenditures	-1.5	-1.5	-1.5	-1.5	-1.0	-1.5	-1.5	-1.5
Reform of public administration	-1.5	-1.5	-1.0	-1.5	-1.0	-1.5	-1.5	-1.5
Phase-out of production subsidies	1.0	0.3	1.5	2.0	1.0	0.3	0.3	1.0
Realignment of custom duties	-0.5	0.3	-0.5	-0.5	-0.5	0.3	0.3	-0.3
Tax harmonization	0.0	0.5	0.0	0.3	0.3	0.5	0.5	0.0
Total net fiscal effects of accession (net transfers flows + other accession related expenditure)	-2.6	-1.0	-1.6	-0.8	-1.3	-0.4	-0.3	-2.0

Source: EC (2002), AMECO database, Kopits and Szekely (2004), own calculations

The pre-accession assistance transfers are excluded from the analysis, because they were negotiated earlier and were to be directed to private sector recipients with no significant influence on public finances.

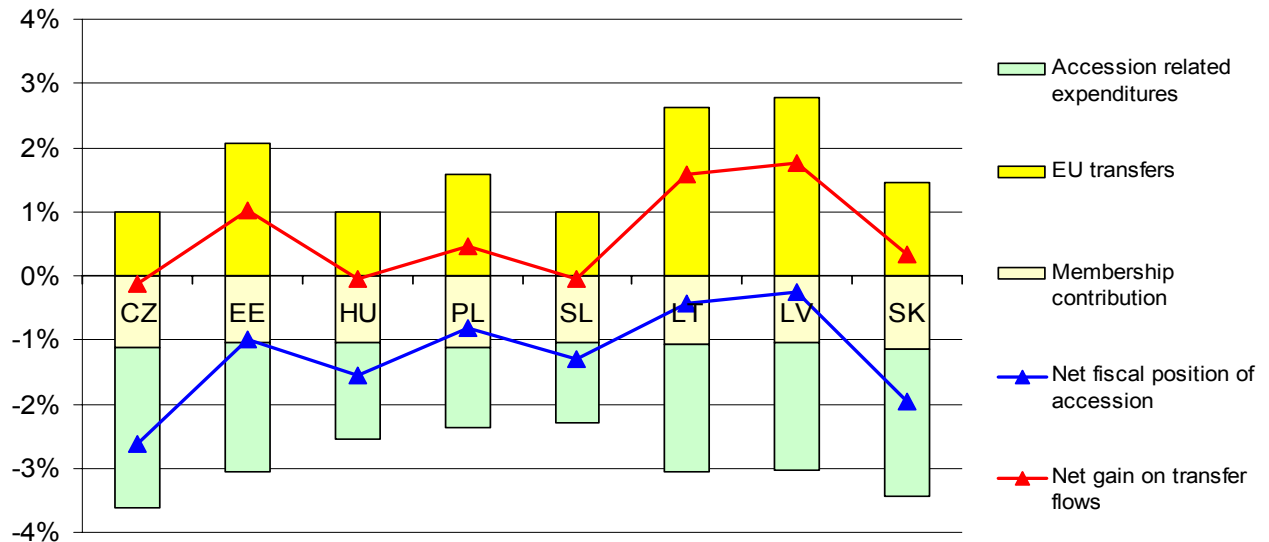
3.2. Accession-related expenditures

The costs of EU accession are connected with the adoption of some specific *acquis communautaire*, particularly in so fiscally sensitive areas as environmental protection, infrastructure, transportation, public administration, social policy, external border control, etc. Adoption of EU standards and regulations - contained in 31 negotiation chapters imposes a substantial adjustment burden on both the public and private sectors of NMS. The accession-related expenditures, which have never been financed from the budget before, can be covered by the EU transfers to a very limited extent only what is presented in **Figure 1**. They consist of the following components:

- infrastructure expenditures,
- public administration reform,
- phase-out of production subsidies,

- realignment of custom duties, and
- tax harmonization.

Figure 1: Net fiscal effects of NMS-8 accession, annual average in 2004-2006, % of GDP



Source: Tables 6 and 7

The fiscal cost of compliance with the *acquis* is particularly heavy in the areas of environmental protection (air and water quality, waste management) and transportation infrastructure (road construction and upgrading of railroads). The total amount of SF and CF annual inflows estimated at the level ranging from 0.2% of GDP in Slovenia to 1.5% of GDP in Latvia is obviously not sufficient to cope with this challenge. Under condition of high absorption of SF which fuel the local governments, the additional infrastructure expenditures may require up to 1.5% of GDP annually (above SF transfers) in additional budgetary outlays⁹, which is even more than the membership contribution to the EU budget. As indicated above, expenditures may be partially offset by CF transfers that go directly to the state budget but their size is very limited (less than 0.5% of GDP). In any event, the additional infrastructure expenditures are subject to a considerable margin of uncertainty as they depend on the timeframe of implementation of investment projects agreed upon with the European Commission.

A second important accession-related cost is related to public administration reform, which can be partially offset by transfers from the additional expenditure category. In order to develop the appropriate capacity of the institutions responsible for managing the EU funds, NMS will have to spend approximately an additional 1% of GDP from public sources.

On the other hand, requirement of indirect-tax harmonization may bring the additional revenues to national budgets. NMS have been obliged to harmonize the statutory base of VAT and excises and observe minimum statutory rates. The EU average standard VAT rate is 19.7%, while in NMS-8 it is 20.8%¹⁰. While VAT rates in most NMS are significantly above the minimum rates (15% standard rate, 5% reduced rate), their excises on energy and fuel tend

⁹ On the basis of estimates of the World Bank from 1997 and 1999 for Estonia, Hungary and Poland.

¹⁰ On the basis of Dobrinsky (2002) and own calculations

to be below the minimum rates. VAT rates in none of NMS are below the described minimum. However, some of NMS provided significant exemptions from VAT and they were expected to be abolished. Consequently, after accession, NMS should recoup, on average, revenues of around 0.5% of GDP mainly from a broadening of their VAT base, higher excise duties and eco-taxes.

As result of launching the EU agriculture support it will be possible to reduce or eliminate some national budget expenditures targeted to this sector. While most CAP transfers are channeled directly to eligible producers in the private sector, they would act to some extent as a substitute for some previous farm subsidies. Obviously, the magnitude of fiscal effects will be primarily determined by the overall size of the agricultural sector in each country (very high in Poland and low in Estonia). The phase-out of farm subsidies, along with non-farm subsidies as result of adopting *acquis* in the area of state aid and competition could lead to significant budgetary savings of around 1% of GDP or more in some NMS¹¹. However, there is a lot of uncertainty about timing and scope of reducing the earlier forms of subsidies in individual NMS.

Accession also brought removal of customs duties on imports from EU members and adoption of a common external tariff (at 5.5% rate) on non-EU imports. However, in low tariff countries (such as, for example Estonia, with a near zero rate before accession), this would result in a small gain. Depending on the country tariff rates, realignment of customs duties will result from -0.5% of GDP in Hungary, Poland, the Czech Republic and Slovenia to +0.5% of GDP in Estonia.

The net fiscal effect of the accession-related expenditures is stronger than the net fiscal effect of EU transfers presented earlier (see **Table 6**) and negative for all NMS. It ranges from -1.3% GDP in Poland and Slovenia to -2% of GDP in Baltic countries and -2.5% of GDP in the Czech Republic.

3.3. Overall assessment

On balance, our estimation shows that accession appears to have an unfavorable net effect on general government balance in all NMS of up to -2.6% of GDP in the Czech Republic (see **Table 7** and **Figure 1**). The concrete effect depends on EU transfer flows and estimated costs of required reforms and public investment programs in individual countries what in turn depends on development level. Baltic countries and Poland seem to face the smallest negative fiscal consequences of EU accession (in relative terms). In addition, the fiscal balance of Baltic countries at the day of accession was the best among the NMS (see **Section 2**) what makes the additional accession-related fiscal burden easier to accommodate. Poland is in a much worse situation in this respect and even moderate net fiscal consequences of accession (0.8% of GDP) can deteriorate dramatically country's fiscal position.

Our estimation of net fiscal effect of accession is based on the following three important assumptions:

1. NMS will use the full amounts of project-related EU transfers channeled to the government sector.
2. The EU transfers will substitute one for one for other government expenditures.

¹¹ According to the Kopits and Szekely (2004) estimate, the phase-out of production subsidies in Poland will bring 2% of GDP saving on subsidies, mainly currently directed to farmers.

3. All of the transfers and payments are presented in general government accounts¹².

In the case of lower absorption or lower rate of substitution, negative net fiscal effects of accession will be even stronger.

The increased deficits of NMS are likely to be partly compensated over time by favorable indirect fiscal effects. Long term gains can originate from the new wave of foreign direct investment, decreasing transaction costs of trade, transport, industrial cooperation and simplifying of international cooperation procedures, and the opportunities offered by the free access to the Single European Market, not to mention the political and security benefits and modernization of the institutional and legal system following adoption of the *acquis communautaire*, leading to higher GDP growth rates and higher fiscal revenues.

4. NMS on the road to EMU.

All the NMS are obliged and expected to join the EMU in the coming couple of years. In order to be eligible to do it they must meet the nominal convergence criteria defined by the Treaty. Even a very superficial analysis shows that two fiscal criteria (fiscal deficit not exceeding 3% of GDP and public debt not exceeding 60% of GDP) can be the most difficult to be fulfilled by at least some of the EMU candidates. This has been confirmed by the Convergence Report 2004 prepared in accordance with Article 122(2) of the Treaty, the first one, which covers NMS (CR, 2004). According to this document only four out of ten NMS, i.e. Baltic countries and Slovenia do fulfill the fiscal criteria. An additional accession-related net fiscal burden analyzed in the previous section can make this task even more difficult in the near future.

Failure to meet the fiscal criteria as established by Treaty has and will have a number of negative consequences both for NMS and the entire EU. First, the fiscal health itself is an important precondition of an overall macroeconomic stability and sustainable economic growth, particularly in less developed economies. Second, leaving NMS out of the Eurozone for a long time (particularly for reasons of fiscal laxity) will involve a risk of serious macroeconomic destabilization inside the Union. Third, NMS will not be able to enjoy economic benefits of the Eurozone membership such as price stability, interest rate convergence, elimination of exchange rate risk and danger of currency crisis, decreasing transaction costs in intra-Union trade, etc.¹³ Fourth, it can also have negative political consequences for the entire EU as it will mean the existence of two-class membership (a kind of core and periphery) in an important sphere of economic integration for long period of time.

Furthermore, postponing by NMS their EMU entry for reason of their fiscal non-compliance will make meeting the convergence criteria at the later date even more difficult. There are basically two reasons of such an adverse effect: (i) accumulation of additional public debt (or delay in its reduction); (ii) higher interest rates during the 'waiting' period. Both lead to higher interest payments and, eventually, to a necessity of deeper cuts in non-interest expenditures or higher tax increase.

¹² According to Antczak and Markiewicz (2003), there are uncertainties about transfer classification as either the above- or under-the-line items in particular national budgets. If some of the payments are classified as under-the-line items in the budget they will not be reflected in the current budget balance.

¹³ The detail analysis of costs and benefits of the EMU membership is out of the agenda of this paper. However, authors believe that the benefits outweigh the costs. For more arguments on net benefits coming from an early EMU membership see Rostowski (2002).

In order to demonstrate the negative fiscal effects of delaying nominal convergence and EMU entry date we have conducted a very simplified simulation for NMS-8 (for details see Gorzelak, 2004).

4.1. Simulation model

In our simplified projection model the current level of debt depends on the debt from previous period plus the current fiscal balance. The interest rate has impact on interest payments, and change of domestic interest rate to foreign interest rate ratio alters the exchange rate. Exchange rate changes determine the domestic currency value of the debt denominated in foreign currency. We also assume that the terms ‘domestic debt’ and ‘debt denominated in domestic currency’ are the same, and ‘foreign debt’ is equal to ‘foreign currency denominated debt’. Finally, fiscal deficit increases a domestic debt while fiscal surplus reduces the foreign part of a public debt. The debt and deficit values are shown in relative terms, as a proportion of GDP – so growth in the latter reduces the debt ratio:

$$D_d = D_{d, t-1} / (1+g) * (1+r) - B \quad (1)$$

where D_d – domestic debt (as % of GDP); g – real GDP growth rate; r - interest rate; and B - primary fiscal balance (deficit has minus sign; as % of GDP).

Similarly, the equation for foreign debt goes as follow:

$$D_f = D_{f, t-1} / (1+g) * (1+r) * (1+\Delta E) \quad (2)$$

where: D_f - foreign debt, E - exchange rate; and $(1+\Delta E)$ is exchange rate depreciation¹⁴ (E/E_{t-1}) and equals to $(1+r)/(1+r_w)$ where r_w is the international interest rate. The projection uses this formal, exact formula, instead of the simplified uncovered interest parity equation, according to which $r = r_w + \Delta E$ (where the exchange rate gains on interest payments are ignored).

4.2. Detailed assumptions on input data

The projection compares two EMU accession scenarios. They differ by the EMU accession date, which is 2007 in the fast scenario (so the Maastrich convergence criteria must be met as early as in 2005), or 2012 (2010, respectively). In case of countries that are not endangered by breaking any of the criteria, the public debt to GDP ratio is assumed not to be in a worse position than at it was prior to starting date of the projection.

We choose two alternative exogenous paths of the average real GDP growth in NMS, 5% and 2% annually, through the whole projection period. Therefore, simulations for each country is performed twice, under the fast and slow growth assumptions (see below)¹⁵.

For each country, the path of the primary fiscal deficit values makes an input data. The series are modeled separately, and are altered in order to achieve the targeted deficit/debt values at the appropriate year, 2005 or 2010. It is assumed, that the fastest possible path of (primary) deficit reduction can be by 1% of GDP annually. The heavily indebted countries will have to run overall budget surpluses (including the interest payments). However, we

¹⁴ Appreciation, if the domestic interest rate is lower than international interest rate.

¹⁵ We are aware that these are the most disputable assumptions in our projection. However, ‘endogenization’ of real GDP growth path, especially taking into consideration various possible dates of EMU accession would require a much more complex and sophisticated forecasting model and would go evidently beyond agenda of this paper.

assume that their maximum level can reach 2% of GDP. Also, the overall fiscal balance cannot be in a surplus (i.e. primary surplus must not be greater than interest payments) after the assessment year (2005 vs. 2010), or after the debt to GDP ratio reaches its target value, which may occur in some scenarios. If such case would occur, the debt reduction policy is to be terminated. This last assumption allows for comparison of fiscal results of different accession scenarios. Generally, the assumptions limiting speed of fiscal adjustments and maximum level of a fiscal surplus seem to reflect both political realities in NMS and their additional accession-related fiscal needs (see Section 3)

The interest rate of a public debt assumed in the projection is the same for both domestic and foreign debt. It changes according to the linear function, that allows to reach the target value one year before the accession date – this means that convergence ends when it is obvious that joining the EMU will take place, and the expected interest rate will equal to the international rate. The international interest rate stays on the constant level during the whole projection period, and equals to 4% p.a. This is also the target value of an interest rate for the domestic public debt. The proportion of the foreign and domestic interest rates determines the change of the exchange rate.

We used two IMF databases: the Government Finance Statistics (GFS) for the fiscal deficit, domestic and foreign debt, and interest payments, and the International Financial Statistics (IFS) for GDP and interest rates¹⁶. The debt and deficit ratios are calculated using the year's nominal values, while the GDP growth is in real terms. The primary fiscal deficit, used in the projection, was obtained by adding the interest payments to the overall fiscal balance, both as shown in GFS.

The interest rate used to estimate both the interest payments, and exchange rate path, is defined as an average of lending and deposit interest rates, as published by the IMF. Such a choice has been determined by the lack of appropriate statistical data that could be used for projection purposes (and comparable for all the countries in question). There are two main advantages of this simplified method (i) it bases on available data, and (ii) it produces results close to the actual interest payments, as it can be checked for the years prior to the projection period.

4.3. Simulation results: the fast growth assumption

We have started our simulation exercise with the scenario assuming fast pace of growth (5% p.a.) and the later accession date (2012). The target debt to GDP ratio is to be achieved two years earlier. Primary deficit, the real GDP growth rate and the interest rates are the input data; domestic and foreign parts of the public debt are the model outcome. The deficit is added to the domestic debt, and the foreign part is enlarged due to the exchange losses. Both parts of the debt are increased by interest payments. The goal is to have the debt to GDP ratio at the 'assessment' year (2010 in this scenario) not greater, than prior to the projection period¹⁷.

In the case of Poland, the goal of debt reduction to the pre-projection level (44.8% of GDP) may be reached in 2010, however a quite fast primary deficit reduction path (0.8% of GDP p.a.) must be adopted (see **Table 8**). The total fiscal balance reaches the maximum allowed level, +2% of the GDP, in 2010. The debt ratio rises up to 2006 due to primary

¹⁶ The GFS debt figures may differ from IFS numbers. In case of discrepancies, the GFS values were used.

¹⁷ In most cases, 2002 – the date depends on data availability.

budget deficits, interest payments and the exchange losses on the foreign part of the debt. Substantial surpluses that are achieved later, together with a decrease in the interest rate level allow for accelerating the debt reduction in the following years. Primary surplus growth is terminated in year 2010, when the target debt to GDP ratio is reached. Last two years bring further surplus reduction, as the overall surplus does not occur, and the primary surplus reflects only the interest payments - so the nominal value of the debt stays unchanged.

Table 8. Fast growth (5%), late accession (2012) scenario.

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Czech Republic									
Deficit (-) or surplus	-0.7%	-0.5%	-0.2%	0.0%	0.2%	0.4%	0.7%	0.7%	0.6%
Total Debt	19.0%	19.3%	19.4%	19.2%	18.8%	18.2%	17.3%	16.5%	15.7%
Interest Rate	4.2%	4.1%	4.1%	4.1%	4.1%	4.0%	4.0%	4.0%	4.0%
Hungary									
Deficit (-) or surplus	1.3%	1.4%	1.4%	1.5%	1.6%	1.7%	1.7%	1.8%	1.9%
Total Debt	58.0%	58.3%	58.2%	57.6%	56.5%	55.0%	53.1%	50.8%	48.4%
Interest Rate	7.7%	7.2%	6.7%	6.1%	5.6%	5.1%	4.5%	4.0%	4.0%
Latvia									
Deficit (-) or surplus	-0.3%	-0.1%	0.0%	0.2%	0.3%	0.4%	0.6%	0.6%	0.5%
Total Debt	16.1%	16.4%	16.4%	16.3%	16.0%	15.5%	14.8%	14.1%	13.4%
Interest Rate	5.2%	5.1%	4.9%	4.7%	4.5%	4.4%	4.2%	4.0%	4.0%
Poland									
Deficit (-) or surplus	-0.7%	0.1%	0.9%	1.7%	2.5%	3.3%	4.2%	1.7%	1.6%
Total Debt	52.1%	53.9%	54.6%	54.0%	52.2%	49.1%	44.8%	42.7%	40.7%
Interest Rate	8.0%	7.4%	6.9%	6.3%	5.7%	5.1%	4.6%	4.0%	4.0%
Slovakia									
Deficit (-) or surplus	0.1%	0.4%	0.6%	0.9%	1.1%	1.4%	1.7%	1.4%	1.3%
Total Debt	39.8%	40.5%	40.7%	40.4%	39.6%	38.3%	36.5%	34.8%	33.1%
Interest Rate	7.5%	7.0%	6.5%	6.0%	5.5%	5.0%	4.5%	4.0%	4.0%
Slovenia									
Deficit (-) or surplus	0.7%	0.8%	1.0%	1.2%	1.4%	1.6%	1.7%	1.0%	1.0%
Total Debt	31.0%	31.3%	31.2%	30.6%	29.6%	28.2%	26.4%	25.2%	24.0%
Interest Rate	7.8%	7.3%	6.7%	6.2%	5.6%	5.1%	4.5%	4.0%	4.0%

Source: own calculations based on IMF data.

For much less indebted Czech Republic, the target of not exceeding 2002 level of debt to GDP ratio at 2010 is much easier to achieve: the deficit reduction must follow the modest path of 0.23% percentage point p.a. The country takes the advantage of moderate level of debt at the start of the projection, and – mostly – very low interest rate, not much higher than an international rate at the beginning of the period in question.

Just a bit faster debt reduction path (GDP 0.26% p.a.) would be necessary in Slovakia because it starts with debt twice as high as in the Czech Republic, and suffers from higher initial interest rates. As for preceding countries, during the final years covered by the simulation the assumed rate of GDP growth is higher than the interest rate, so the domestic debt to GDP ratio would fall (in real terms) even if the interest payments would not be covered by the primary surplus. The total fiscal balance never reaches surplus during the projection period. The only reason of so small difference in the annual deficit reduction values between the Czech Republic and Slovakia is that the latter starts with primary surplus.

The debt to GDP ratio of Hungary at the beginning of the projection period is similar to that of Poland. However, Hungary's budget records primary surpluses at the starting point, which substantially accelerates the debt reduction, and allows for keeping the 2010' debt at the original level at a very low 'cost' of primary surplus increase by 0.08 percent of GDP p.a. Termination of this increase after 2010 would not allow for balancing the overall budget, so the trend continues to the end of the simulation. Primary surplus reaches the level of the interest payments in the final year.

Similarly to Hungary, Slovenia enjoys m a primary budget surplus at the beginning of projection. This allows for only a moderate increase of primary fiscal balance by 0.18% of GDP p.a. The budget reaches a small total surplus prior to the assessment year, so the deficit reduction trend may be reversed in 2011.

The situation of Baltic countries is quite similar, as all three of them started their independence with a zero debt. They also enjoy low interest rates. The figures for Latvia are presented in **Table 8**, the results for Lithuania and Estonia will be discussed later.

Latvia has no reasons to worry. According to the projection, cutting the primary deficit by small 0.14% of GDP p.a. allows for returning to the starting debt/GDP ratio level at 2010. It is possible due to a moderate debt level, small primary deficit and low interest rates at the beginning of the projection. The overall budget deficit disappears at 2010, so there is no later need for any primary deficit reduction.

Table 9. Fast growth (5%), early accession (2007) scenario.

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Czech Republic									
Deficit (-) or surplus	0.0%	0.9%	0.7%	0.6%	0.6%	0.6%	0.5%	0.5%	0.5%
Total Debt	18.3%	17.3%	16.4%	15.6%	14.9%	14.2%	13.5%	12.9%	12.3%
Interest Rate	4.1%	4.1%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Hungary									
Deficit (-) or surplus	1.5%	1.8%	2.1%	2.0%	1.9%	1.8%	1.7%	1.7%	1.6%
Total Debt	57.1%	55.7%	53.1%	50.6%	48.2%	45.9%	43.7%	41.6%	39.6%
Interest Rate	6.8%	5.4%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Latvia									
Deficit (-) or surplus	0.2%	0.8%	0.6%	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%
Total Debt	15.6%	14.8%	14.1%	13.4%	12.8%	12.2%	11.6%	11.0%	10.5%
Interest Rate	4.9%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Poland									
Deficit (-) or surplus	-0.5%	0.5%	1.5%	2.5%	1.1%	1.7%	1.6%	1.6%	1.5%
Total Debt	51.3%	51.4%	49.3%	46.4%	44.8%	42.7%	40.7%	38.7%	36.9%
Interest Rate	7.1%	5.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Slovakia									
Deficit (-) or surplus	0.4%	1.0%	1.5%	1.4%	1.3%	1.3%	1.2%	1.1%	1.1%
Total Debt	39.1%	38.4%	36.5%	34.8%	33.1%	31.5%	30.0%	28.6%	27.2%
Interest Rate	6.7%	5.3%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Slovenia									
Deficit (-) or surplus	1.1%	1.6%	2.2%	1.0%	1.0%	0.9%	0.9%	0.8%	0.8%
Total Debt	30.2%	28.9%	26.4%	25.1%	23.9%	22.8%	21.7%	20.7%	19.7%
Interest Rate	6.9%	5.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%

Source: own calculations based on IMF data.

The second scenario assumes the fast GDP growths (5% annually) and early EMU accession (in 2007), so the debt target must be fulfilled as soon as in 2005. The interest rate decrease (in order to reach its target level) is much faster, and must occur in years 2004-2005. This substantially reduces both interest payments and exchange losses (on foreign debt) during the whole projection period; the latter do vanish, in fact, from 2005 onwards. As in the previous scenario, the deficit reduction policy ends after the moment of assessment (2005 in this part of the projection), if possible. In case of the debt to GDP ratio higher than the target value, and/or the total budget deficit in 2005, the primary deficit reduction (or surplus increase) is to be continued until both of the conditions are fulfilled. Beyond this moment the overall fiscal surplus is assumed to be zero (primary surplus equals to the interest payments, so the nominal value of the debt stays the same).

In the case of Poland the projection goal cannot be achieved even after adopting the fastest possible deficit reduction path of 1% of GDP p.a. (see **Table 9**). In the assessment year (2005) debt to GDP ratio exceeds that of 2002. The target value is achieved as late as in 2008, when the primary surplus increase may be stopped (and the trend may be even reversed for this year). This date is however acceptable, since Poland did not come even close to the maximum allowed level (60%) of debt to GDP ratio, during none of the years covered by the simulation. Small primary surplus decrease may occur from 2010.

The Czech Republic must cut its deficit in 2004-2005 by a substantial 0.9% of GDP p.a., if the goal of having the assumed debt/GDP ratio is to be obtained in 2005. Then the primary surplus may be reduced. The foreign part of the debt is finally repaid in 2006.

Trying to catch up with the original debt to GDP ratio (36.5%), Slovakia would have to adopt the fastest path of the deficit reduction (or surplus increase) of 1 percentage point p.a. However, even such effort would not allow for obtaining the targeted result, and the debt in 2005 would still exceed the desired level. Moving the target date to 2006 allows for fulfilling the debt/GDP ratio requirements at lower cost of annual increase in primary surplus of 0.56% of GDP – and this path has been used in the projection, in order to avoid rapid changes in budget balance near the assessment date. Since the total debt is far from any alarming limits, there is nothing wrong in achieving its target level one year later than assumed. From 2007 the primary surplus path allowing for (and only for) interest payments contains slightly decreasing values.

Hungary would miss some 0.6 percentage point in order to achieve the target debt to GDP ratio in 2005, despite the assumption of the fastest primary surplus growth. The good thing is that adopting the moderate path of 0.3% of GDP p.a. allows for reaching the desired debt level just one year later, as it was in case of Slovakia. Faster (than in the previous scenario) reduction of the interest rates does allow for accelerated fall of the debt ratio in the following years, even without any repayments.

The situation of Slovenia is similar to the one of Hungary and Slovakia – reaching the targeted debt to GDP ratio at the end of 2005 is not possible, but achieving this goal in 2006 does not require too excessive effort. The required step of the primary surplus increase is 0.6% of GDP p.a.

As in the first scenario, Latvia has no problems at all. The target debt/GDP value is reached at 2005 by increasing the 2004-2005 primary surpluses by 0.6% of GDP in the consequent years. Lack of total fiscal deficit allows for financing the interest payments from the primary surplus only in the rest of the projection period.

Table 10 compares simulation results of two scenarios, each assuming fast growth but differing in relation to EMU accession date. We use three synthetic indicators. Statistics called ‘surplus’ adds up the annual primary fiscal balances in the whole projection period (2004-2012), corrected by the real GDP growth path values, in order to present it as % of the 2004 GDP. ‘Debt’ means the 2012 value of the total debt burden, in relation to the 2004 GDP level (real numbers)¹⁸. ‘Payments’ describe the real interest payments in the period 2004-2012 as % of 2004 GDP. As with the surplus, it is the sum of annual interest payments, as a proportion to current GDP values, corrected by the real GDP growth numbers. All three synthetic measures although very simplified and static¹⁹ allow for comparison of scenarios results.

Table 10. Fast growth, different accession dates – comparison of simulation results (in % of 2004 GDP)

Country	2012 EMU accession			2007 EMU accession			Differences		
	Surplus	Debt	Payments	Surplus	Debt	Payments	Surplus	Debt	Payments
Czech R.	2.2%	23.2%	7.8%	6.0%	18.1%	6.5%	-3.8%	5.1%	1.3%
Hungary	17.7%	71.5%	32.6%	19.8%	58.5%	23.2%	-2.0%	12.9%	9.4%
Latvia	3.1%	19.8%	7.4%	5.4%	15.5%	5.8%	-2.3%	4.3%	1.6%
Poland	20.2%	60.1%	30.1%	14.7%	54.5%	21.4%	5.5%	5.6%	8.7%
Slovakia	11.5%	49.0%	22.1%	12.8%	40.2%	15.8%	-1.3%	8.7%	6.3%
Slovenia	12.9%	35.4%	17.3%	12.2%	29.1%	11.9%	0.7%	6.3%	5.4%

Source: own calculations. Real numbers.

The results differ between countries but all of them seem to benefit from the earlier EMU accession. Under the second scenario the Czech Republic must bear the additional social cost of improving the total primary fiscal balances during the projection period by 3.8% of 2004, as compared to the late accession variant. However, the fast accession would result in reduction of the 2004-2012 interest payments by value equal to 1.3% of 2004 GDP and the public debt at the end of the projection period would be lower by 5.1% of 2004 GDP.

For Poland, the faster EMU accession means not only the lower cumulative interest payments and final debt but also smaller average burden of fiscal adjustment. All three kinds of gains stem from the high initial interest rates. Their rapid reduction in 2004-2006 (in fast accession scenario) significantly reduces the interest payments, and the exchange rate losses on the foreign part of debt. This allows for financing the total interest payments from the primary surplus, which becomes possible from 2009. The trend continues in the next years, so the primary surplus may be further reduced. The increase of surplus in the late accession scenario is not much slower than in the early accession version (0.8% instead of 1% of GDP p.a.), but lasts three years longer, rising the primary surplus to the high level of 4.2% in 2010. It is necessary both to finance high interest payments, and break the initial trend of budget deficits in presence of high interest rates.

Hungary is in a better position, since it does not suffer from primary deficits at the projection start. Therefore, there is no painful ‘getting-out-of-deficit’ process in this country, which could cause further debt increase, and higher interest payments or exchange losses.

¹⁸ This technique of comparing the size of debt accumulation under two different scenarios gives the numeric results differing from those actually predicted in our simulation. For example, ‘71.5%’ value of the Hungarian ‘Debt’ measure in the first scenario may look strange at first glance, since it is the 2012 debt amount compared to the 2004 GDP (in the real terms). The actual 2012 debt to GDP ratio is less than 50% (see **Table 8**).

¹⁹ None of these measures were discounted by the interest rate values.

This is why Hungary does not follow the Polish way; since no substantial deficit reduction was required in the late accession scenario (but it had to occur in the second part of the simulation) the cumulative fiscal adjustment effort must be greater in the early accession variant (by 2.0% of 2004 GDP, totally). This is, however, highly rewarded by astonishing reduction of debt level (12.9% of 2004 GDP) and interest payments, totaling to 9.4% of 2004 GDP.

Due to initial primary fiscal surpluses and moderate interest rate level Slovenia gains in all three categories. The faster surplus increase realized at the beginning of the early accession scenario allows for reduction of surplus values in the following years, making the total surplus number lower than it would be in the late accession scenario. A similar conclusion may concern Slovakia: although not in as good position in terms of the ‘surplus’ statistics, it also benefits from good initial fiscal balance and faster surplus increase in the first years of the 2007 accession scenario. The results for Latvia may be described analogically to those of the Czech Republic, as those countries positions seem to be very similar in terms of choice of the accession date.

4.4. Simulation results: the slow growth assumption

Table 11 presents the results of simulation performed under the slow growth (2%) and late accession (2012) assumptions, while **Table 12** – under the slow growth (2%) and early accession (2007) scenario.

Table 11. Slow growth, late accession scenario.

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Czech Republic									
Deficit (-) or surplus	-0.5%	-0.2%	0.2%	0.6%	0.9%	1.3%	1.7%	0.7%	0.7%
Total Debt	19.4%	20.0%	20.2%	20.5%	19.5%	18.6%	17.3%	17.0%	16.6%
Interest Rate	4.2%	4.1%	4.1%	4.1%	4.1%	4.0%	4.0%	4.0%	4.0%
Hungary									
Deficit (-) or surplus	1.7%	2.3%	2.8%	3.3%	3.8%	4.4%	4.5%	2.1%	2.0%
Total Debt	59.2%	60.5%	60.9%	60.3%	58.7%	56.2%	53.1%	52.1%	51.1%
Interest Rate	7.7%	7.2%	6.7%	6.1%	5.6%	5.1%	4.5%	4.0%	4.0%
Latvia									
Deficit (-) or surplus	-0.1%	0.1%	0.4%	0.6%	0.9%	1.2%	1.4%	0.6%	0.6%
Total Debt	16.5%	17.0%	17.2%	17.0%	16.6%	15.8%	14.8%	14.5%	14.2%
Interest Rate	5.2%	5.1%	4.9%	4.7%	4.5%	4.4%	4.2%	4.0%	4.0%
Poland									
Deficit (-) or surplus	-0.5%	0.5%	1.5%	2.5%	3.5%	4.5%	4.5%	4.0%	3.9%
Total Debt	53.4%	56.5%	58.3%	58.8%	57.7%	55.2%	52.2%	49.2%	46.2%
Interest Rate	8.0%	7.4%	6.9%	6.3%	5.7%	5.1%	4.6%	4.0%	4.0%
Slovakia									
Deficit (-) or surplus	0.4%	1.0%	1.6%	2.1%	2.7%	3.2%	3.7%	1.4%	1.4%
Total Debt	40.7%	42.0%	42.6%	42.3%	41.2%	39.2%	36.5%	35.8%	35.1%
Interest Rate	7.5%	7.0%	6.5%	6.0%	5.5%	5.0%	4.5%	4.0%	4.0%
Slovenia									
Deficit (-) or surplus	0.9%	1.3%	1.7%	2.2%	2.6%	3.0%	3.3%	1.0%	1.0%
Total Debt	31.7%	32.5%	32.6%	32.1%	30.9%	29.0%	26.4%	25.9%	25.4%
Interest Rate	7.8%	7.3%	6.7%	6.2%	5.6%	5.1%	4.5%	4.0%	4.0%

Source: own calculations based on IMF data.

The consequences of slow growth assumption for the simulation results are quite predictable. Since slower GDP growth means slower reduction of the debt/GDP ratio, higher budget surpluses are required in order to control the relative debt level. Sometimes – as in case of Poland - even the fastest path allowed in the projection does not provide enough progress. In the late accession scenario for this country the targeted debt level will remain substantially exceeded at the assessment date (2010) and never reached during the years covered by the projection. Moreover, the debt to GDP ratio will come close to the 60% limit (over 58% in 2006-2007). Reduction of interest rates in the early accession scenario allows for obtaining the projection's goal, but in 2010 - five years after this scenarios' assessment date. The highest debt level is noted in 2005, and equals to 54.4% GDP.

Table 12. Slow growth, early accession scenario.

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Czech Republic									
Deficit (-) or surplus	0.1%	1.1%	1.1%	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%
Total Debt	18.7%	18.0%	17.3%	16.9%	16.6%	16.3%	16.0%	15.7%	15.3%
Interest Rate	4.1%	4.1%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Hungary									
Deficit (-) or surplus	2.2%	3.2%	4.2%	2.0%	2.1%	2.0%	2.0%	2.0%	1.9%
Total Debt	58.1%	57.1%	54.0%	53.1%	52.0%	51.0%	50.0%	49.0%	48.1%
Interest Rate	6.8%	5.4%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Latvia									
Deficit (-) or surplus	0.5%	1.4%	0.6%	0.6%	0.6%	0.5%	0.5%	0.5%	0.5%
Total Debt	15.8%	14.8%	14.5%	14.2%	14.0%	13.7%	13.4%	13.1%	12.9%
Interest Rate	4.9%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Poland									
Deficit (-) or surplus	-0.5%	0.5%	1.5%	2.5%	3.5%	4.0%	3.1%	1.8%	1.7%
Total Debt	52.8%	54.4%	53.9%	52.5%	50.0%	47.0%	44.8%	43.9%	43.0%
Interest Rate	7.1%	5.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Slovakia									
Deficit (-) or surplus	0.9%	1.9%	2.9%	1.6%	1.4%	1.4%	1.4%	1.3%	1.3%
Total Debt	39.8%	39.4%	37.3%	36.5%	35.8%	35.1%	34.4%	33.7%	33.0%
Interest Rate	6.7%	5.3%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Slovenia									
Deficit (-) or surplus	1.5%	2.5%	3.5%	0.7%	1.0%	1.0%	1.0%	1.0%	1.0%
Total Debt	30.7%	29.4%	26.5%	26.4%	25.8%	25.3%	24.8%	24.4%	23.9%
Interest Rate	6.9%	5.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%

Source: own calculations based on IMF data.

The Czech Republic and Slovakia do manage to achieve the desired debt level on time in the late accession scenario. It requires primary surplus increase by 0.4% and 0.6% of GDP p.a, respectively. The early accession assumption calls for the fastest surplus increase, but there are still some delays in reaching the debt target: one year for the Czech Republic and two years in case of Slovakia. Hungary follows the same way, with the annual surplus increase of 0.5% of GDP in the late scenario, and two years delay in the early accession one. For Slovenia the numbers are: GDP 0.4% of annual surplus increase in late accession simulation (no delay) and 2 years of delay in case of 2007 EMU accession (maximum surplus increase path). Latvia is the only country, which manages to keep the debt to GDP ratio at the pre-projection level in the early accession scenario, by increasing the surplus by 0.9% of GDP in 2004-2005 (and by 0.3% in the late accession scenario).

Table 13 compares results of the late and early accession simulations, as it was performed in the previous subsection.

Table 13. Slow growth, different accession dates – comparison of simulation results (in % of 2004 GDP)

Country	2012 EMU accession			2007 EMU accession			Differences		
	Surplus	Debt	Payments	Surplus	Debt	Payments	Surplus	Debt	Payments
Poland	27.4%	54.3%	30.1%	20.0%	50.5%	21.4%	7.3%	3.8%	8.7%
Czech R.	6.0%	19.5%	7.4%	6.7%	18.0%	6.6%	-0.7%	1.5%	0.8%
Slovakia	19.2%	41.1%	21.1%	15.2%	38.7%	15.6%	4.1%	2.4%	5.5%
Hungary	29.2%	59.8%	31.1%	23.2%	56.3%	22.9%	6.0%	3.5%	8.3%
Slovenia	18.6%	29.7%	16.5%	14.0%	28.0%	11.7%	4.6%	1.8%	4.9%
Latvia	6.3%	16.6%	7.0%	6.2%	15.1%	5.7%	0.2%	1.5%	1.3%

Source: own calculations. Real numbers.

As it may be seen, the final results of the comparison between the late and early accession scenarios are very similar to those in **Table 10**. It could mean that the pace of economic growth is not so important for the benefits offered by an early EMU accession. Of course, its higher level substantially helps to reduce the real debt to GDP ratio (by definition), and leaves the countries in better situation at the end of simulation period, as compared to the slower growth projection results. However, it does not fundamentally affect the gains coming from faster accession. Slow growth does require bigger effort in terms of fiscal adjustment but very similar benefits may still be achieved from not delaying the EMU accession date. The faster decrease of the interest rates in the 2007 EMU entry variant appears to be the main reason of this scenario advantages.

4.5. The case of Estonia and Lithuania

Lithuania and Estonia, which have not been covered by the above simulation, enjoy a relatively comfortable macroeconomic situation. Estonia's interest rates are already very close to the projection target value (4.7 in 2002 vs. 4.0 in the projection) and its public debt is virtually non-existing (~3% of GDP). Lithuania does have moderate (~20% of the GDP) level of public debt, but other indicators produce an excellent picture. Interest rate equals to 4.2% (almost as low as the 4.0% target assumed in our simulation) and the budget records primary surpluses. Since for both countries the high growth assumption would be a realistic one, the GDP growth rate would exceed the interest rate in every year covered by the projection. So, as far as this analysis is concerned, the debt to GDP ratio would fall even if the interest payments were not paid (and were increasing the debt nominal value).

This means that current macroeconomic indicators are so good that even serious delay in the EMU accession could not produce any substantial costs. Therefore, the results for Lithuania and Estonia have not been presented above as the projections do not give any differentials between their two accession scenarios. The reason is very simple – in fact both Estonia and Lithuania are already in the Euro zone, having the Euro-denominated currency boards.

4.6. Projection's conclusion

For all the countries analyzed in our projection, choosing the faster EMU accession scenario would bring substantial benefits. These effects are the bigger, the worse country's initial macroeconomic conditions are, that is: the higher the interest rate, the greater the debt

ratio, and the larger the primary deficit. The pace of GDP growth does not matter for gains offered by the faster accession. On the other hand, a country does not have to be in a bad situation in order to benefit from faster EMU accession scenario: even the Czech Republic and Latvia (both with moderate debt, low level of interest rates and small deficits) do benefit from not delaying the EMU accession date.

5. The long-term fiscal challenges in the EU-25/27.

In a longer run both OMS and NMS can face the same unpleasant fiscal arithmetic coming from slow rates of growth and unfavorable demographic trends.

A slow pace of economic growth makes even small deficit dangerous from the point of view of a long-term fiscal sustainability (public debt to GDP dynamics) what has been demonstrated in our fiscal projection discussed in Section 4. We will come back to this issue in the next section when discussing consistency of the fiscal surveillance rules. Here we will limit ourselves to expressing two general remarks. First, the perspective of slow growth does not threaten all the EU member, especially NMS, many of them recording a quite impressive GDP dynamics. Second, this kind of risk can be potentially addressed through microeconomic reforms aiming to increase competitiveness of the European economy (what is the subject of the Lisbon agenda) and individual member states.

What concerns population aging, this perspective has been already predetermined by the declining fertility rates in the recent decades and increasing expected life horizon of the currently working generation. It will lead unavoidably to worsening a dependency ratio (**Table 14**), and increasing pension and health spending, other things being equal (see Gros et al., 2004)²⁰. Unless adequately addressed on time it may cause serious fiscal crisis in the next twenty or thirty years. According to Gros (2004) aging will lead (*ceteris paribus*) to additional expenditures of 3-5 % of GDP, on average for Eurozone member countries. In the case of NMS they will account, perhaps, even to 4-6 % of GDP (see below).

A set of potential remedies may include increasing contribution (payroll taxes) to the public pension and health insurance schemes, more open and active immigration policies, increasing formal and effective retirement age, decreasing the replacement rate (i.e. relation of an average public pension benefit to average wage), elimination of pension privileges for some sectors and professional groups (mostly in public sector). None of these measures are politically easy to implement and without some negative side-effects. For example, increasing payroll taxes will lead to decreasing competitiveness, more labor market rigidities, tax avoidance and unregistered employment. So, in addition to measures trying to cure directly and indirectly growing imbalances in the public pension schemes (and public health insurance systems) it will be probably necessary to cut non-pension and non-health public expenditures to create additional fiscal room to accommodate an unavoidable expansion of the aging-related spending.

The unfavorable demographic trends constitute a common challenge to the entire EU-25/27 and a number of other nations in Europe (like Russia, Ukraine, Belarus, Moldova or Serbia). As mentioned before, in NMS these trends are even more adverse than in OMS (see Gros, 2004). Moreover, if we take into consideration the numerous past inefficiencies and

²⁰ Analysis of many other microeconomic and social consequences of population aging would go beyond agenda of this paper, so we limit our discussion to those having a direct fiscal impact in medium to long term.

loopholes of the public pension systems in NMS it is not surprising that they have already generated huge implicit pension debt (unfunded pension liabilities), which well exceed 200% of GDP in some countries (Gomulka, 2001).

Table 14: The dynamics of old age dependency ratios in EU-27

Country	2030/2000	2050/2000	Level in 2050
EU-15	1.64	2.00	53.4
Czech Republic	1.92	3.05	60.5
Hungary	1.58	2.41	51.4
Poland	1.94	2.93	52.2
Bulgaria	1.59	2.56	62.7
Romania	1.50	2.72	52.9

Source: Gros (2004)

6. Do EU fiscal surveillance rules need in modification?

The EU fiscal surveillance rules have become a subject of a hot economic and political debate during last couple of years. It seems that main cause of this controversy comes from the very fact that increasing number of member countries has already failed or is about to fail to meet the numeric fiscal criteria as defined by the Treaty and the SGP. It relates to both OMS and NMS.

There have been many arguments raised against the current EU fiscal discipline rules. The most important and frequent of them refer to:

1/ The upper limit of fiscal deficit of 3% of GDP does not leave room for an active countercyclical fiscal policy in the period of recession or growth slowdown or (the weaker version of this argument) does not allow the automatic fiscal stabilizers to work.

The main weakness of this argument is that it disregards the SGP provision obliging the member states to achieve medium-term budgetary positions close to balance or surplus. So if they run a fiscal surplus in 'good' times they will easily accommodate automatic fiscal deterioration connected with an economic downturn without breaching the 3% deficit limit. Possibly they will have even some room for a discretionary fiscal expansion if they find such a policy helpful for stimulating their economies.

The current problems of some EU members to meet the deficit criterion originates from their fiscal laxity in the years of higher economic growth (1999-2001 in the case of Eurozone; see Rostowski, 2004; Gros et al., 2004).

The additional counterargument relates to controversy around short-term effects of a fiscal policy. There is a growing empirical evidence that in many cases fiscal policy has a non-Keynesian effect, i.e. fiscal expansion may lead to economic slowdown or even recession while fiscal consolidation may stimulate economic growth. A non-Keynesian effect can be especially expected in countries recording high deficit and public debt because any further fiscal expansion undermines confidence of economic agents regarding future macroeconomic stability and low taxes. On the contrary, fiscal adjustment improve expectations of economic agents and country investment reputation (see Siwinska and Bujak, 2003).

2/ The 3% deficit limit neglects the public investment needs, which may justify, on many occasions, the deficits higher than 3% of GDP. Higher investments (and higher deficits) today can contribute to higher rate of economic growth in future, which will make repaying debt and lowering deficit to GDP ratio much easier. This argument is frequently addressed to the situation of NMS, which are expected to have bigger needs in the area of infrastructure investments.

The advocates of this approach often refer to the so-called golden rule established by the UK Treasury (H.M.Treasury, 1998), under which net spending on public investment (i.e. spending minus depreciation of the existing public assets) is not included in the calculation of the excessive deficit (see also Rostowski, 2004).

The main problem with this kind of argument is that it assumes a substantial positive influence of additional public investment on economic growth and budget revenues, allowing to pay off the additionally accumulated debt and costs of its servicing from future additional revenues. This does not need to be true in each case and serious uncertainty connected with any kind of future fiscal projection makes such an exercise very risky. Growth may not accelerate and interest rates may increase in a meantime as result of higher public sector borrowing requirements what will lead to debt dynamics going out of control. The economic history provides a lot of examples of mistargeted public investment programs of low effectiveness.

In addition, governments can have little incentives to take a real care on future solvency of their successors. On the contrary, their current political needs (for example, forthcoming elections) may push them to investment over-expansion, i.e. to the same kind of fiscal irresponsibility as in the case of any other public expenditures.

What concerns NMS, Gros (2004) argues that their level of public investments is already adequate to their level of per capita income and they do not need the additional deficit for these purposes.

3/ Inconsistency between deficit and debt criterion and bigger importance of the latter²¹. The practice of EU fiscal surveillance concentrates excessively on deficit at the cost of debt criterion. On the other hand, the debt-to-GDP level and its dynamics are more important from the point of view of a long term fiscal sustainability than current deficit.

The deficit below 3% of GDP does not necessarily guarantee the stable or declining debt-to-GDP ratio while in some cases deficits higher than 3% of GDP may not deteriorate the debt-to-GDP ratio. It depends on country's average growth rate, inflation and interest rate (see debt equation in Section 4).

Table 15 shows that deficit of 3% of GDP is consistent with public debt of 60% of GDP under assumptions of average real growth rate of 3% and 2% inflation. Slower average real growth (what is the case of some EU members) requires targeting a cyclically adjusted fiscal deficit well below 3% of GDP (2% in the case of Germany) in order to keep debt to GDP ratio below 60% of GDP. NMS representing higher real growth rates (and slightly higher inflation) can run higher deficits (in the range of 4% of GDP) and still keep public debt below 60% of GDP.

²¹ See Gros et al. (2004), Rostowski (2004), Pisani-Ferry (2002), Buiters and Grafe (2002) on interrelations between deficit and debt criterion.

Table 15: Steady state debt levels (as % of GDP)

Trend growth of real GDP in % p.a.	Cyclically adjusted deficit in % of GDP			
	2%	3%	4%	5%
Germany: 1.5%	57	86	114	143
OMS (?): 2%	50	75	100	125
Maastricht: 3%	40	60	80	100
NMS (?): 4%	33	50	67	83
NMS with Ballassa-Samuelson effect	29	43	57	71

Note: The calculations assume an inflation rate of 2% so that nominal GDP growth is 2 percentage points higher than the real rates indicated in the first column, the only exception is the last row where it is assumed that the new members have a trend inflation rate that is one percent higher than that of the rest of the Eurozone.

Source: Gros (2004)

While we are sympathetic to giving the debt criterion (and particularly the changes in debt-to-GDP ratio) a bigger importance in the process of monitoring fiscal positions of the member states we are against abandoning the deficit criterion or its relaxation. On the contrary, the SGP provision of a medium term balanced or surplus budget should be given priority and in the case of countries, which represent a low average growth rate the maximum allowed deficit should be lower than 3% of GDP. On the other hand, having in mind the dramatic fiscal challenges connected with population aging (see Section 5) faced by the entire EU, faster growing countries should not be allowed to run higher fiscal deficits even if it does not involve an immediate treat of deterioration of their debt-to-GDP ratios.

What needs a serious discussion and possible corrections is the enforcement mechanism of the SGP and Treaty fiscal criteria. Although backed by the financial sanctions the latter are not automatic. Any step in the excessive deficit procedure requires the Council of Ministers majority voting. In the situation when an increasing number of countries face problems with meeting the fiscal criteria forming a ‘solidarity’ coalition blocking the excessive deficit procedure may become a frequent phenomenon.

On technical level the fiscal surveillance mechanism is additionally complicated by the practice to project *ex ante* country’s structural (i.e. cyclically adjusted) deficit what in turn requires to forecast *ex ante* the potential output and other macroeconomic parameters. The already accumulated experience points out to repeated mistakes in forecasting future growth rates and fiscal positions of individual countries. Furthermore, we do not believe that it is possible to find any formula²², which would guarantee the unquestionable (and free of political bargaining) prediction of future structural deficits. In addition, in the case of NMS going through a series of deep structural changes during last 15 years identification of their business cycle and estimation of their potential outputs seems to be a particularly complicated task.

What should be done to improve the enforcement mechanism in order to avoid the worse case scenario, i.e. massive breaching of fiscal discipline by member states, threatening the EMU credibility?

Rostowski (2004) suggests tightening fiscal discipline rules on a national level, preferably in national constitutions (following the example of Poland). Another possibility is to introduce automatic sanctions on the EU level when country breaches one of fiscal criteria.

²² One of such proposals is suggested by Coricelli and Ercolani (2002).

They could involve, for example, suspending country's voting rights in the ECB Governing Council or in the ECFIN Council of Ministers.

Generally we believe that: (i) EU fiscal surveillance rules cannot be relaxed; (ii) their effective implementation requires in a much better enforcement mechanism based on automatic sanctions; (iii) NMS do not need in different fiscal treatment.

7. Summary and conclusions

The NMS entered the EU, running structural fiscal deficits. More than half of them (including the biggest ones) breaches the Treaty actual deficit limits. High rate of economic growth makes fiscal situation of most NMS pretty manageable in a short to medium term perspective but the long term fiscal outlook, mostly connected with the consequences of population aging, seem to be very dramatic. Thus, NMS should prepare themselves already today to be able to meet this challenge in the next decades (the same concerns OMS). In addition, the perspective of EMU entry should provide NMS a strong incentive to reduce deficit already now because waiting (and postponing both fiscal adjustment and Euro adoption) will only result in higher cumulative fiscal costs. The additional financial burden connected with the EU accession cannot serve as excuse of delaying fiscal consolidation.

In fact, the EMU accession can serve as an important positive incentive for governments and societies to start put a fiscal order already now. This 'carrot' will work if the opportunity of a fast EMU accession track is offered for these countries, which are able to meet the Maastricht convergence criteria soon. Admission to the ERM-II of three countries representing the best fiscal and macroeconomic performance, i.e. Estonia, Lithuania and Slovenia in June 2004 creates a positive demonstration effect for other NMS and should be followed by further admissions as the next candidates improve their fiscal situation.

In spite of the growing debate on relevance of the EU fiscal surveillance rules and not excluding possibility of their limited modification, they should not become relaxed. Frequent breaching of these rules cannot serve as the argument that they are irrelevant from the point of view of safeguarding fiscal prudence and avoiding fiscal 'free riding' under an umbrella of monetary union. Growth problems in some OMS and, again, forthcoming population aging in all the Europe may call for even tighter fiscal rules than those determined by the Maastricht Treaty and SGP.

Any version of fiscal surveillance rules (either current or modified) must be solidly anchored in the effective enforcement mechanism (including automatic sanctions) on the Union and national levels.

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