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ICEG European Center

Conference proceedings

MGYOSZ – ICEG EC Conference: "Growth and Jobs: Challenges for EU8+2"

Foreword

MGYOSZ (the Federation of Hungarian Employers and Industrialists) and ICEG European Center had their first joint conference in November 2005 in Brussels. It focused on the renewed Lisbon programme and especially its relevance to the new member states of the EU.

Since the initiative proved to be a success, in June 2007, MGYOSZ and ICEG European Center organised their second common conference in Brussels. This time the conference was more specific about the Lisbon goals: presentations concentrated on growth developments and the creation of new jobs in the new member states and on the possible macroeconomic effects of the EU Structural and Cohesion funds.

Following the introductory words of Pál Gáspár, the director of ICEG European Center, the first session of the conference went on to explore issues concerning growth performance and competitiveness. The three presenters in succession were: Frigyes-Ferdinand Heinz from the European Central Bank, Marc Stocker from BusinessEurope and Szabolcs Erdős from ICEG European Center. The issues for discussion in this panel were:

- What are the medium-term driving factors of catching-up in the EU8+2?
- Is growth driven by increasing productivity or factor inputs contribute more to growth than they did earlier?
- What are the major challenges to achieve sustained convergence and increasing competitiveness?

The second panel concentrated on employment and labour market challenges. The three speakers were: Béla Galgóczi from the European Trade Union Institute, Leszek Kasek from the World Bank and Gábor Pellényi from ICEG European Center. The issues for discussion of this session were:

- Is the catching-up of the EU8+2 still characterised by “jobless growth”?
- What are the reasons behind differences in employment rates and what can policies do to increase labour market flexibility in the EU8+2?
- What are the experiences of policy makers with labour market reforms in the EU8+2?

The third session was devoted to issues concerning the use of EU Structural and Cohesion Funds. Christoph Rosenberg from the Warsaw regional office of IMF, John Walsh from the Directorate General Regional Policy of the European Commission and András Oszlay from ICEG European Center presented their views and findings in this session. Discussion was mostly focusing on:

- What are the lessons concerning the allocation of Structural Funds learnt by other net recipients?
- What have been the experiences of the EU8 in 2004-2006?
- How should the EU8+2 allocate the use of funds to promote long-term growth and employment objectives?
- Do National Development Plans reflect the needed efficient allocation of resources?

Of the nine presentations, five was elaborated on by their respective authors in this „Conference Proceedings”. The first article is that of Christoph Rosenberg (co-authored by Robert Sierhej), which gives an overview of the effects of the EU Structural and Cohesion Funds ont he macroeconomic variables in Central and Eastern Europe. The second article is from András Oszlay, who surveyed the quantitative analyses concerning the use of these funds and the resulting effects on the most important macroeconomic indicators. The third article is written by Szabolcs Erdős, who assessed the growth performance of the new member states in light of the Lisbon targets. In the fourth article Béla Galgóczi gives his contribution to the understanding of why

labour had such minor contribution to growth in the new member states in the past decade. Finally, Gábor Pellényi's article goes on to briefly examine the factors that influenced activity and employment rates in the new member states.

For further information on past and future MGYOSZ – ICEG EC joint conferences you are advised to visit the website of ICEG European Center at http://www.icegec.hu.

The conference venue was „Room Europe"
in the headquarters of BusinessEurope

Interpreting EU funds data for macroeconomic analysis in the new member states[1]

- Christoph B. Rosenberg and Robert Sierhej (International Monetary Fund) -

I. INTRODUCTION

Transfers from the EU are increasingly impacting the economies of the EU's new member states in Central and Eastern Europe (NMS).[2] Widely perceived in the region as "manna from heaven", much attention is currently focused on how to absorb these funds as quickly as possible, so as not to lose them under EU rules. At the same time, injecting up to 4 percent of GDP into economies that are already in a rapid catch-up process will have significant macroeconomic ramifications. Little analysis of these effects in the specific context of the NMS has been carried so far, because of uncertainties about the flows involved, the limited empirical evidence to date and the sometimes complex rules regarding the usage of EU funds. Data available from national and EU sources are, prima facie, not useful for macroeconomic analysis because of differences in accounting conventions and categorization.

This paper is intended as a primer on the macroeconomic implications of EU funds in the NMS. It focuses on EU-related financial flows from and to the NMS, during the first 2 ½ years of membership as well as under the EU's new financial perspective (NFP) for 2007-13. This information is not readily available and depends crucially on each country's projected absorption path. The paper seeks to create a correspondence between the forms in which EU funds data are conventionally presented and the categories necessary to assess their impact on fiscal and external accounts and aggregate demand. It also provides some preliminary back-of-the-envelope estimates of the expected magnitudes. The paper is not intended to offer a full macroeconomic analysis, in particular the implications for growth, employment and the real exchange rate. This more ambitious task, which would require a model-based approach, is left to another paper.

The paper is structured as follows. Section II gives an overview of the size and structure of EU funds available to the NMS. Section III focuses on structural funds, which are the bulk of funds under the NFP. Section IV looks at the fiscal implications. Section V provides estimates of projected actual – as opposed to committed – flows, which are necessary to assess the first-round impact of EU funds on aggregate demand and the balance of payment. Section VI concludes.

II. EU FUNDS AVAILABLE TO THE NMS: AN OVERVIEW

EU funds to the NMS serve three broad purposes: income convergence, agricultural support and development of internal market institutions. This is achieved by a myriad of individual programs, each with their own set of rules and target institutions. Moreover, the classification of these funds has changed under the NFP, making it sometimes difficult to compare commitments

[1] This article was kindly provided for re-publication in this Conference Proceedings by Christoph B. Rosenberg, one of the authors. Its only deviation from the original publication (IMF Working Paper 07/77) is that Appendix 2 is removed.

[2] The NMS covered in this paper include Estonia, the Czech Republic, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia (EU8), plus Bulgaria and Romania. The latter two are only included with respect to the new financial perspective 2007-13 as data on pre-accession aid in 2004-06 were not available.

before and after 2007. Box 1 provides a mapping of the EU's budget headings from old to new financial perspective. An explanation of the various programs is contained in Appendix I.

Box 1. Classification of EU funds available to NMS 1/

New Budget headings 2007-13	Old Budget headings 2004-06
Preservation and management of natural resources	Agriculture
Market measures	Market measures
Direct payments	Direct payments
Rural development	Rural development
	EAGGF--EU Agricultural Guarantee and
EAFRD--EU Agricultural Rural Development Fund	Guidance Fund (guararantee section)
FIFG--EU Financial Instrument for Fisheries	
Sustainable growth	Structural actions
Competitiveness for growth and employment	
Nuclear safety	
Community initiatives	Community initiatives
Cohesion for growth and employment	
Structural funds	Structural funds
ESF--EU Social Fund	ESF--EU Social Fund
ERDF--EU Fund for Regional Development	ERDF--EU Fund for Regional Development
	EAGGF--EU Agricultural Guarantee and
	Guidance Fund (guidance section)
	FIFG--EU Financial Instrument for Fisheries
Cohesion Funds	Cohesion Funds
Citizenship, freedom, security and justice	Internal Policies
Existing policies	Existing policies
Schengen	Nuclear safety
	Institutional building
	Schengen
EU as a global player	Pre-accession
	Pre-accession
Compensations	Compensations
Budget compensation	Budget compensation

1/ Headings which do not affect transfers to NMS (e.g., administration) are omitted.

Overall funds committed to the NMS are set to increase under the EU's new financial perspective (Figure 1a). In nominal terms, all NMS are promised substantially greater allocations under the NFP than what they were granted for 2004-06 (the so-called Copenhagen agreement) and before membership (pre-accession aid). Poland, for example, will replace Spain as the largest recipient of EU structural funds. In GDP terms, increases are not quite so impressive (Figure 1b), reflecting high projected nominal GDP growth in the NMS[3]. Indeed, EU funds are likely to decline as a percentage of GDP in fast-growing countries like Latvia. At the other end of the spectrum, Hungary and Czech Republic are set to enjoy a steep increase in EU funds relative to GDP, in part due lower medium-term growth assumptions. Differences in country-specific allocations primarily reflect the degree of real income convergence (Figure 2)

[3] GDP projections used in this paper draw on real growth and US Dollar deflators from the latest IMF country reports. The US Dollar/Euro exchange rate is assumed to remain at its present level.

Fig 1a. NMS: Average annual commitments (in euro bn, 2004 prices)

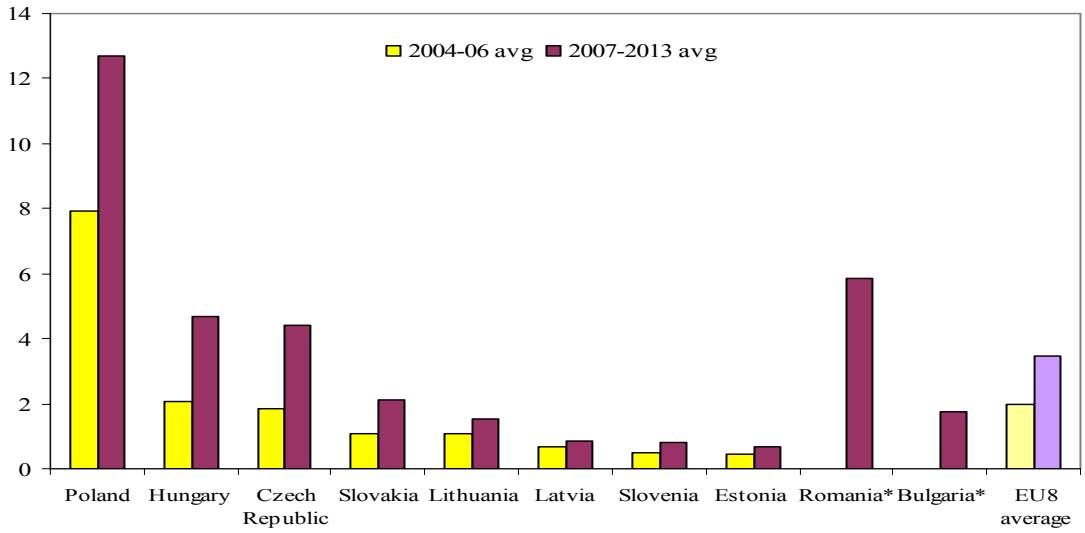
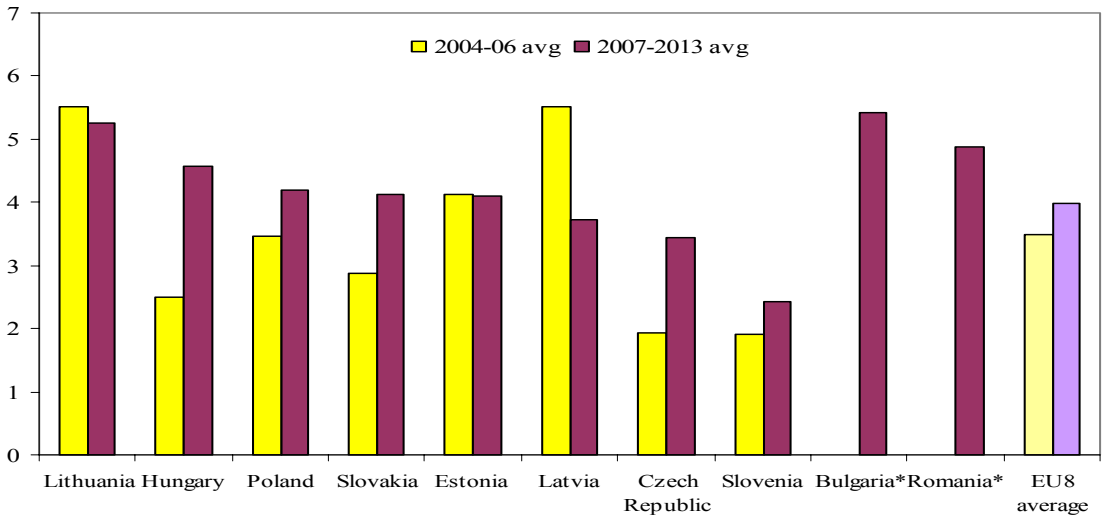
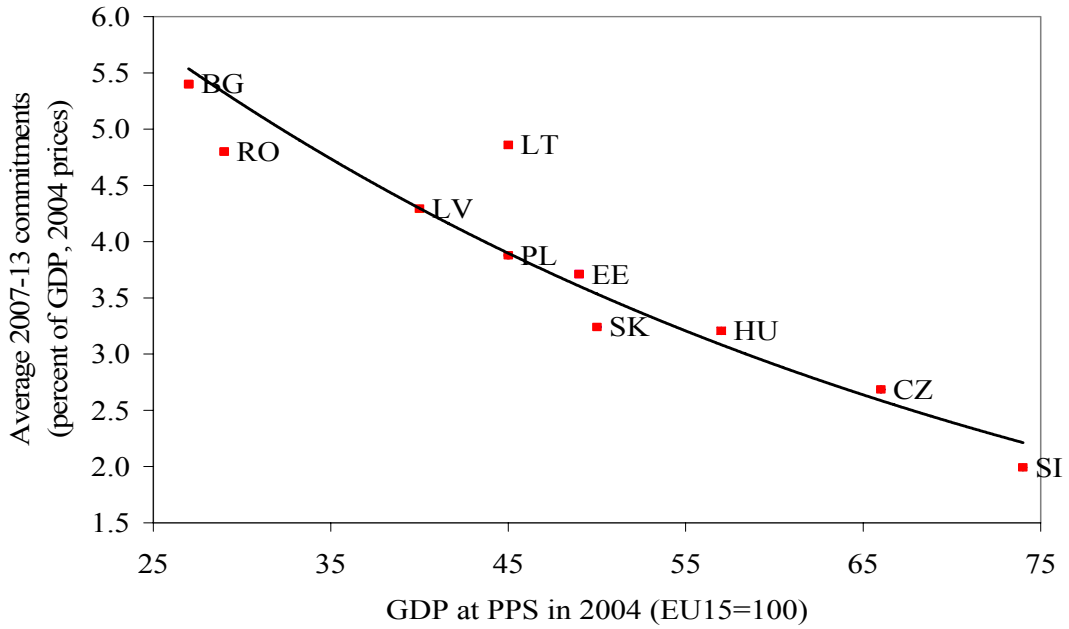


Fig 1b. NMS: Average annual commitments (in percent of GDP, current prices)



Source: National authorities, European Commission, IMF staff estimates.
* Data on pre-accession aid are not available.

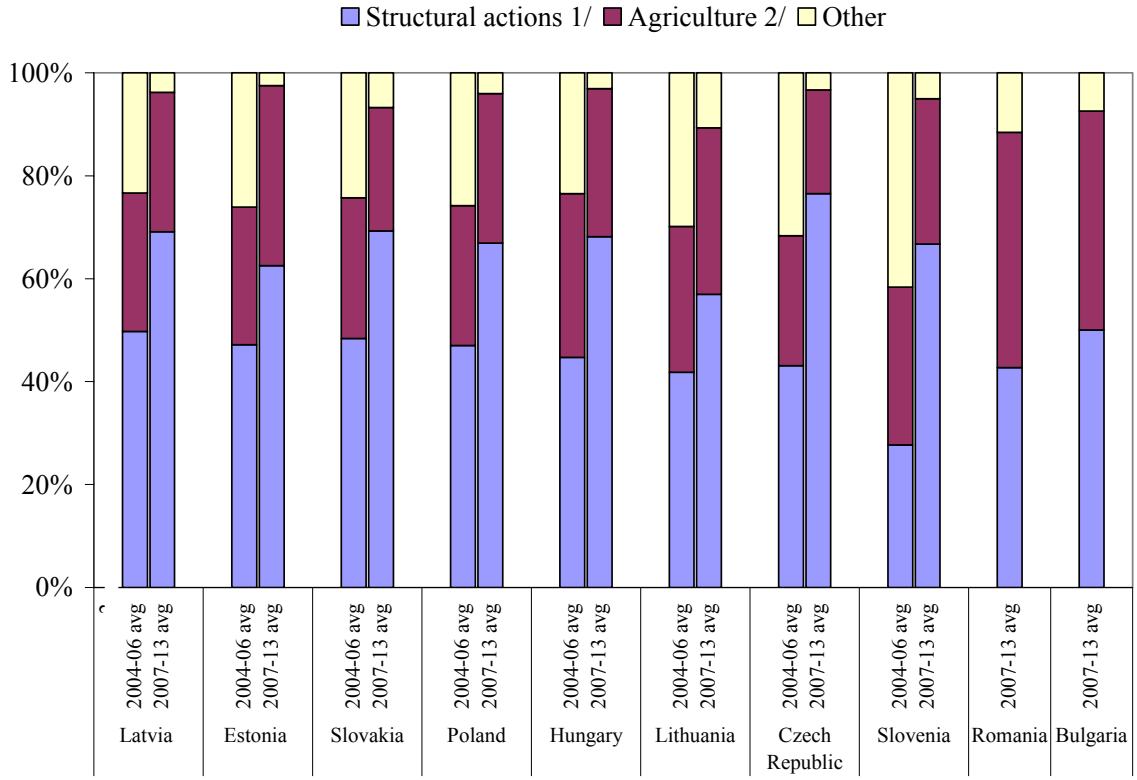
Fig 2. NMS: Commitments and real convergence



Source: National authorities, European Commission, Eurostat, IMF staff estimates.

Funding is increasingly focused on speeding up income convergence (Figure 3). Structural and cohesion funds are intended to foster real convergence and therefore account for a large share of payments in the less wealthy NMS. They are set to increase substantially under the NFP, mainly at the expense of unconditional lump sum budget payments granted in the first years of membership primarily to richer countries such as Slovenia (at the time intended to prevent them from becoming net payers to the EU). The NMS will also experience a gradual increase in direct payments to farmers under the common agricultural policy: starting from 40 percent of the level in old members states in 2007, payments to farmers will be increased by 10 percentage points a year to reach parity with the old members by 2013.

Fig 3. NMS: Structure of commitments



Source: National authorities, EC.
1/ Include structural funds (ERDF, ESF, community initiatives) and cohesion funds
2/ Includes direct payments, market measures, and rural development (FIFG/EFF and EAGGF (guidance & guarantee)/EAFRD)

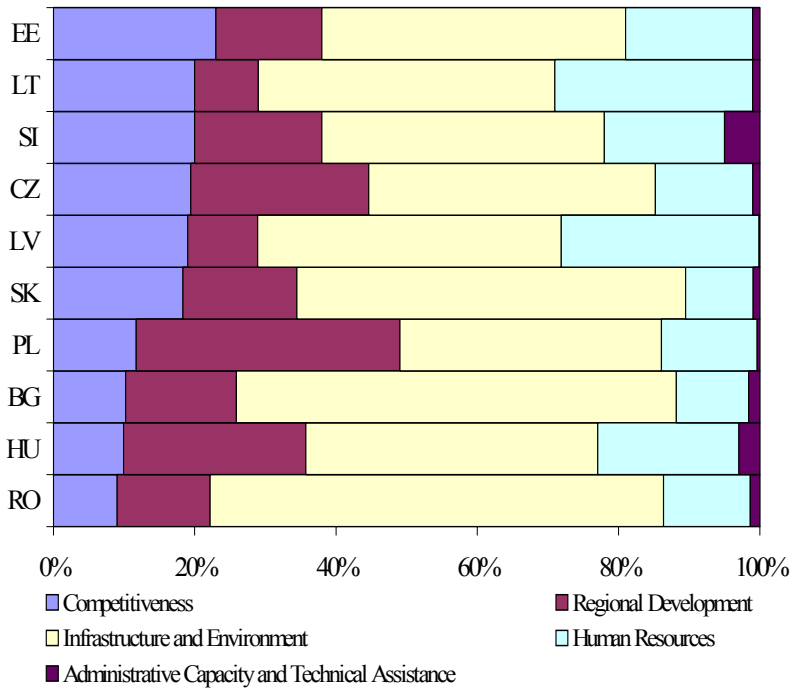
As EU members, the NMS also contribute about one percent of GDP to the EU budget. These contributions (called own resources) include gross national product based resources, value added tax based resources, the British rebate[4], and the EU's traditional revenue sources collected on its behalf by national governments (sugar levies and 75 percent of tariffs on non-EU imports) and are presently capped at 1.24 percent of gross national income. In fact, the NMS' annual payments have been around one percent of GDP in 2005 and 2006 (the first full years of membership) and are expected to remain at that level, also in the recent accession countries Bulgaria and Romania.

[4] The rebate is calculated as 66 percent of its theoretical negative balance towards the EU budget (around Euro 5.3 billion in 2007). It is financed by all other EU members according to their GNI shares (those for Austria, Germany, Netherlands and Sweden are reduced by three quarters).

STRUCTURAL FUNDS

Structural and cohesion funds, the EU's main instrument to increase country's growth potential, are attracting great attention in the NMS. These funds finance investment in physical infrastructure and human resource development (rather than income support) and are therefore designed to permanently increase countries' productive potential and speed up real convergence. The committed amounts are large—ranging from an annual average of 1 ½ percent of GDP in Slovenia to over 3 percent of GDP in Hungary—and expectations regarding their positive effects are correspondingly high. Discussions with the European Commission have so far focused on National Strategic Reference Frameworks which define NMS' priorities regarding the use of these funds. These differ substantially (Figure 4), with larger countries like Poland allocating a big portion to regional programs while others (especially the Baltics) dedicating larger share to human resource development. These plans are expected to be finalized in 2007.

Fig 4. NMS: Allocations of EU structural funds 2007-2013



Source: National Strategic Reference Frameworks.

Absorption of structural funds picked up only slowly in some countries, pointing to teething problems. There is a concern in some NMS that funds could be de-committed if they are not drawn within the timeframe set by the EU. Data now available for the first 2 ½ years of membership allow some analysis of the pace and problems of absorption. Demand is high and ***contracting*** of funds committed under the 2004-06 financial perspective is proceeding swiftly. In most countries, it is likely to be completed by the end of 2006. Slovenia is contracting above EU commitments to ensure utilization of all funds in the event that implementation of some projects slips (Figure 5a). The bottleneck, however, is the ***absorption*** of EU funds: the administrative capacity to control projects, ensure efficient implementation, provide co-financing, and receive EU refunds after submission of proper documentation. Figure 5b shows that actual absorption, as measured by the submission of requests for interim payments, differs greatly between countries. The Czech Republic and Poland and the Czech Republic initially did very poorly – possibly because a large portion of funds is distributed to regional programs (Figure 4) - but have recently caught up with the other EU8. Slovenia, Estonia and Hungary, are doing particularly well.

Fig 5a. EU8: Contracting of structural funds (end of December 2006, percent of 2004-06 commitments)

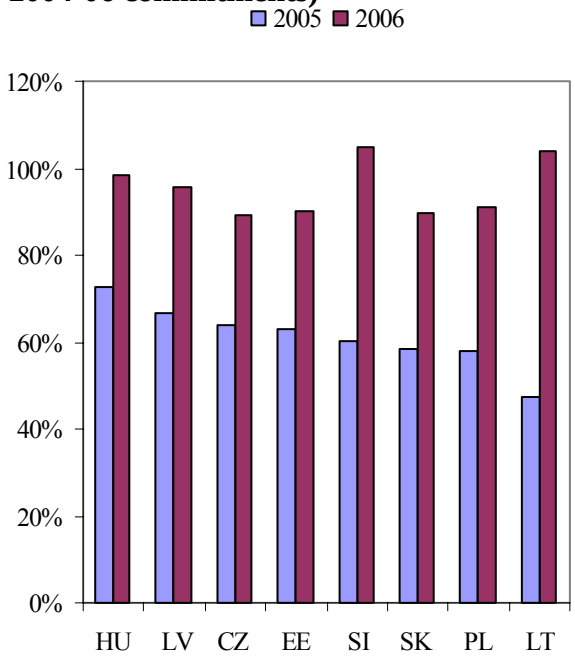
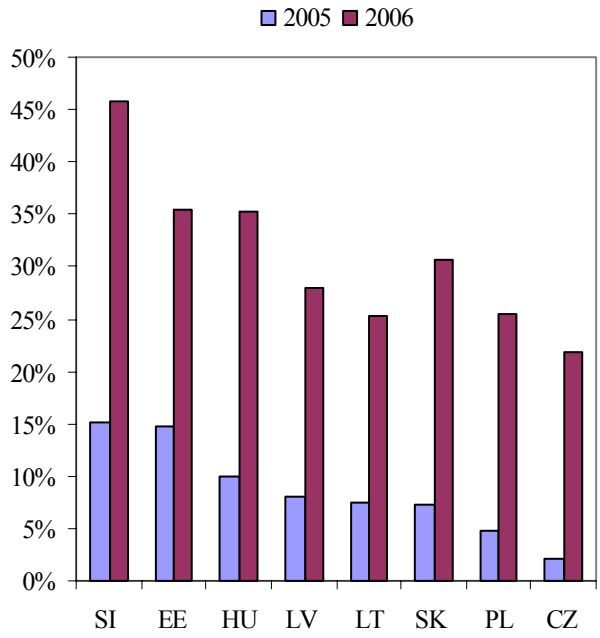
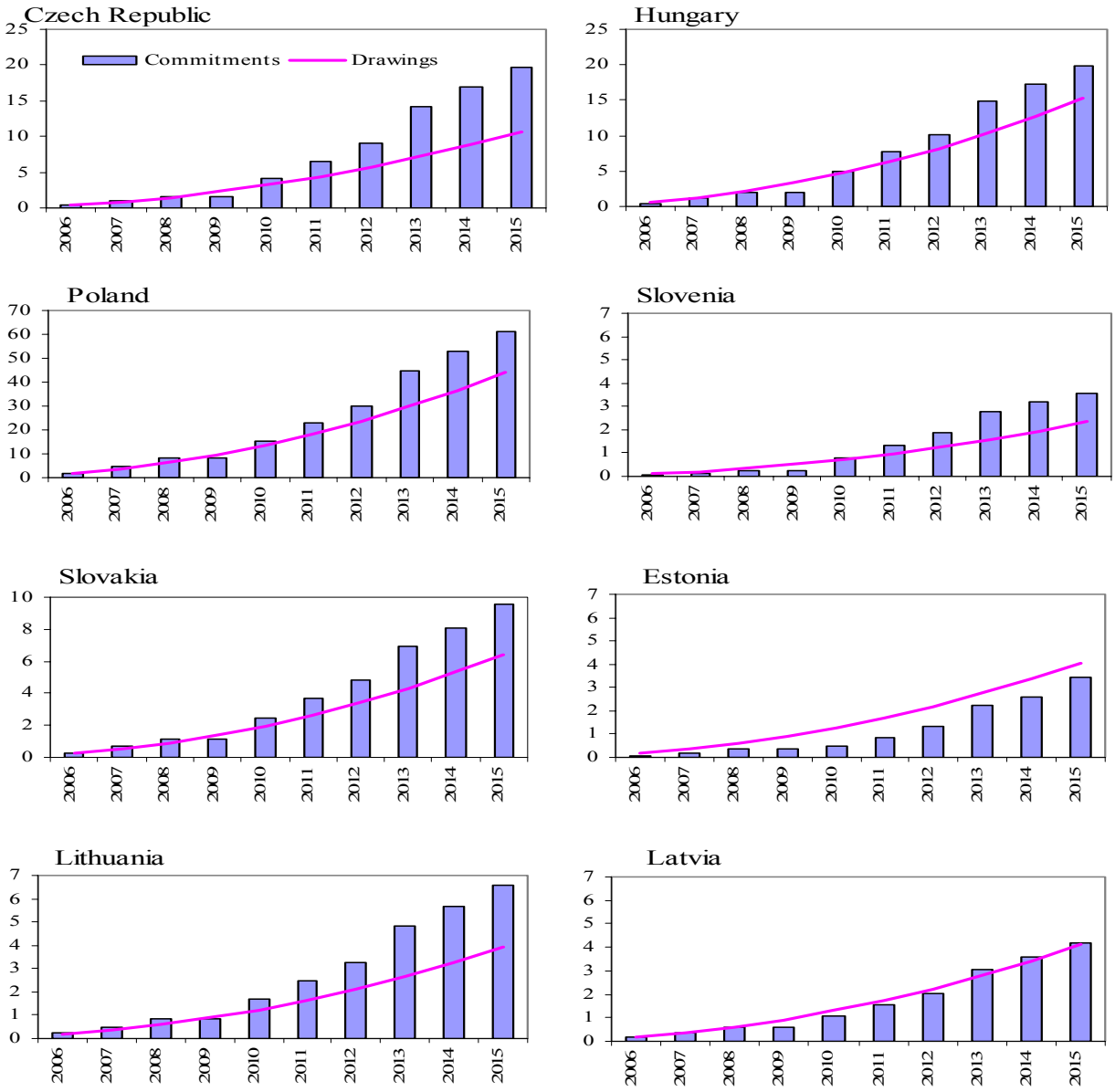


Fig 5b. EU8: Requests for interim payments (end of December 2006,percent of 2004-06 commitments)



Absorbing all structural funds presents an increasingly tall order. Under the so-called n+2 rule, countries need to submit all claims for refunds by end-2008, necessitating an acceleration of past absorption rates if funds are not to be de-committed. The challenge is compounded by the increased allocation under the NFP. An extension of the time permitted between contracting and reimbursement from 2 to 3 years will help, at least until 2011 when the n+3 rule reverts to the present n+2 rule. Figure 6 illustrates this absorption challenge by plotting a trend line of absorption to date (based on 2004-06 actuals) against the cumulative amounts that need to be absorbed so as not to lose funds under the n+2/n+3 rule. Estonia is well on track to meeting this challenge while other countries, especially the Czech Republic, Lithuania, Slovakia and Poland need to sharply accelerate their absorption over the next two years if they are not to lose funds.

Fig 6. EU8: Structural funds--EU commitments and country-specific absorption 1/ (cumulative in Euro billion)



Source: European Commission, national authorities, IMF staff calculation.
1/ Trend extrapolation based on drawings in 2004-06.

Institutional frameworks for managing EU funds can affect the absorption capacity. General requirements are defined by EU regulations, but countries are free to find their own solutions within this framework. To date, one can identify two distinct models among the NMS:

- The ***Baltic countries*** centered the management around the Finance Ministry which acts both as paying and managing authority.

- Frameworks in the ***Central European countries*** are less centralized, with managing and paying authorities assigned to separate institutions (paying authority is always in the Ministry of Finance).

Performance so far provides no conclusive answer on which framework is more efficient. After all, the initial leaders in absorption, Slovenia and Estonia, represent both models. However, there appear to be two general lessons from the NMS' experience: First, initial frameworks were over-regulated, often to prevent misuse of EU funds. Secondly, absorption is helped by a strong central managing authority. Countries have already reacted to this initial experience. For example, Poland in late 2005 created a new ministry of regional development to consolidate the oversight over funds which had previously been located in various ministries and this has greatly speeded up absorption. The Czech Republic, meanwhile, is retaining its disaggregated approach to managing EU funds.

III. FISCAL IMPLICATIONS

EU-related transfers directly impact countries' fiscal balance. This matters, for two reasons: First, many NMS are struggling to exit from the excessive deficit procedure and aim to meet the Maastricht fiscal criteria for Euro adoption. It is therefore important to identify additional budgetary pressures arising from EU funds[5]. Secondly, EU funds obscure the size and direction of the fiscal stimulus. With data for at least two budget years available, it is now possible to undertake a first ex-post assessment.

Measuring the impact of EU funds on the fiscal accounts is fraught with a number of methodological difficulties. Several problems arise:

***Accounting method*:** The treatment of EU funds differs greatly between countries, mainly because they do not use the accrual-based ESA95 standard in their national budgets but rather stick to cash-based accounting (Box 2). But it is of course the deficit calculated according to ESA95 rules that ultimately matters for determining a country's compliance with the EU's deficit limits.

***Ultimate user of funds*:** Under ESA95 rules, only funds that end up with "government units as final beneficiaries" are recorded as an expenditure and offsetting revenue item in the fiscal accounts (Box 2). In practice, funds for agricultural support virtually all go to the private sector, while those for internal policies and cohesion go to the public sector. The status of the ultimate user is the most uncertain for structural funds, even on an ex post basis (these data are generally not easily available): information obtained from some countries suggest that 45 percent of regional development funds (ERDF), 70 percent of social funds (ESF) and 100 percent of community initiative funds end up in the public sector.

***Co-financing*:** Under EU rules, countries need to co-finance every project from national resources, at rates ranging from 15 percent for cohesion funds to 25-50 percent for structural funds[6]. For structural funds committed under the NFP, this ratio has been reduced to 15 percent. In practice, the co-financing amount may be larger, depending on national policy preferences. Co-financing can also in principle come from the private sector (such as commercial loans) but for the time being, it overwhelmingly relies on budgetary resources.

***Substituted spending*:** Member countries are allowed to use EU-funds to substitute national spending for some purposes (e.g., agriculture), but not for others (e.g., structural)—the so-called

[5] Prior to EU accession there was a lively debate about whether EU funds increase the make fiscal adjustment more difficult. See Hallet and Keerman (2005) and Sommer (2003).

[6] For structural funds, the co-financing requirement is 25 percent for Objective 1 projects (20 percent if the region in a country eligible for cohesion funds) and 50 percent for Objective 2 and 3 projects. Objectives 1-3 are defined in Appendix I.

additionality rules[7]. In practice it is virtually impossible to establish how much a government would have spent on a certain expenditure item if it had not had access to EU funds. Estimates of the fiscal impact of EU funds however, crucially hinge on getting the amount of additionality right. A simplified assumption, used in the paper, is that countries substitute domestic spending to the maximum extent possible under EU rules.

Box 2. Accrual (ESA95) and cash-based fiscal reporting for EU funds

	ESA95	Cash-statistics
Coverage	Only transfers to *government* beneficiaries are included in general government accounts. If transfers to *non-government* beneficiaries are intermediated by government agencies, they are reported below-the-line.	Most NMS include all EU transfers above-the-line regardless of the ownership of the final beneficiaries. Poland and Czech Republic, included only transfers to *government* beneficiaries initially, but changed this to include also transfers to *non-government* beneficiaries in the government accounts.
EU-financed part of projects	Expenditures and revenues are booked simultaneously, even if spending is financed by government borrowing and refunded by the EU with a delay. Thus, EU transfers for project financing are deficit neutral as expenditures have an automatic revenue counterpart.	Expenditures and revenues are booked when they are incurred. This is not deficit neutral in the short-run due to time lags between expenditures and corresponding refunds. In the longer-run, the fiscal impact should be neutral to the extent that expenditures are fully refunded by the EU.
National co-financing of EU supported projects	Co-financing, required for most EU projects, is booked as expenditure. Other things equal (e.g., no decline in other expenses), this deteriorates fiscal balance.	The same treatment as in ESA95; the usual cash/accrual discrepancies related to different timing of commitments and cash spending may apply.
Budget compensation received from the EU	This form of transfer from the EU is booked as budget revenue when it is received. Ceteris paribus, it improves fiscal balance.	The same treatment as in ESA95.
Contributions to the EU budget	Payments to the EU are recorded at the time of their transfer, implying a negative impact on the fiscal balance. Traditional Own Resources (TOR), custom duties on non-EU imports and sugar levies, are not counted as a contribution because they are treated as the EU's budget direct revenue rather than a transfer from member states.	Booked as expenditure when transferred to the EU and thus deteriorates fiscal balance. Except for Hungary, NMS include TOR in their contributions to the EU.
Advances for EU funds	Advances are a part of structural commitments that is paid upfront to provide liquidity for starting EU-supported projects (advances are not related to project implementation). They are an off-budget item and have no fiscal impact.	Baltic states NMS book advances as revenues which temporarily improves the fiscal balance. CEE countries book advances off-budget.

An example for Lithuania illustrates the issues discussed above. It assumes that there is no expenditure substitution, agricultural funds are fully transferred to non-government beneficiaries, and other transfers end up with non-government entities.

Source: Data from the authorities and staff estimates.

[7] The EU determines additionality by comparing spending in a certain category (including co-financing) with average spending in this category in the preceding two years.

Lithuania: Cash and accrual fiscal accounting for EU funds (percent of GDP)

	Cash-based			Accrual (ESA95)		
	2004	2005	2006p	2004	2005	2006p
EU related revenues	**2.2**	**2.8**	**3.2**	**0.9**	**1.0**	**1.4**
Budget compensation	0.2	0.0	0.0	0.2	0.0	0.0
Agriculture	0.3	1.3	1.6	…	…	…
EU refundable transfers	1.7	1.5	1.5	0.7	0.9	1.4
o/w advances	0.5	0.3	…	…	…	…
EU related spending	**1.7**	**3.6**	**4.3**	**1.3**	**2.0**	**2.4**
Contributions to EU	0.7	1.0	1.0	0.7	1.0	1.0
Agriculture	0.1	1.4	1.5	…	…	…
EU refundable transfers	1.0	1.2	1.8	0.7	0.9	1.4
Domestic co-financing	**0.3**	**0.5**	**0.6**	**0.3**	**0.5**	**0.6**
Net fiscal impact	**0.2**	**-1.3**	**-1.8**	**-0.7**	**-1.5**	**-1.6**

The net impact of EU-related transfer on the fiscal balance is negative in all countries. Using ESA95 accounting, the effect can be estimated by adding unconditional budget transfers received from the EU and substituted spending, and subtracting contributions to the EU and budgetary co-financing of projects[8]; EU funds that are passed on to government beneficiaries cancel each other out on the revenue and spending side (Text Table 1). As shown in Figure 7, EU-related transfers are—all other things being equal—increasingly creating a drag on fiscal deficits. The exact size depends mainly on the assumed amount of substituted spending, but could be in the range of ½ and 1 ½ percent of GDP.

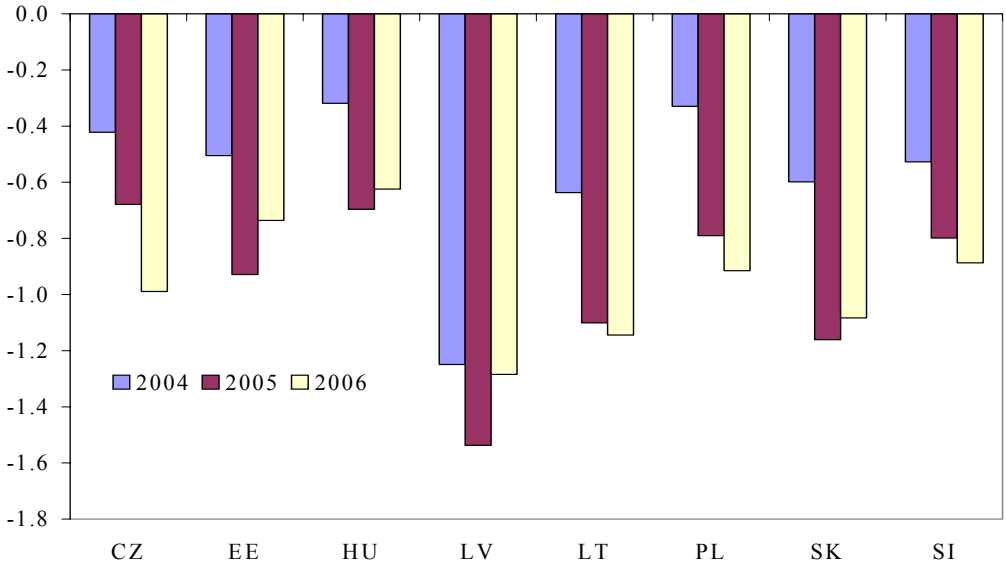
Text Table 1. Framework for evaluating direct fiscal impact of EU transfers.

(1) EU related receipts
budget compensation
refunds on EU projects/policies 1/
(2) EU related expenditures
contribution to EU
spending on EU projects/policies 1/
national co-financing
(3) Substituted spending 2/
Net fiscal impact (1)-(2)+(3)

1/ These lines are equal in ESA95.
2/ Including the substitution component of cofinancing.

[8] There is a question if a part of co-financing should be treated as substituted spending on the assumption that this spending would have occurred if no EU funds had been available.

Fig 7. EU8: Net impact of EU-related funds on the fiscal deficit*
(ESA95, percent of GDP)



Source: National authorities, Eurostat, IMF staff estimates.
* Substitution as reported by the authorities for HU and SI; maximum possible substitution according to EU rules for other countries.

EU funds also obscure the size and direction of the fiscal stimulus. With both budgetary revenues and expenditures containing substantial transactions with a non-domestic entity (the European Commission), the change in the headline fiscal deficit from one year to the other is no longer a good approximation of the demand impact of fiscal policy. As shown in Text Table 2, payments to and from the EU need to be excluded from both expenditures and revenues. Since net transfers from the EU are increasing in all countries, this generally leads to larger estimates of the fiscal stimulus (or less withdrawal of stimulus) than suggested by the headline balances.

Text Table 2. Fiscal Stimulus due to EU-related transfers in the NMS

	Czech Republic				Estonia 2/			
	2005	2006	2007	2008	2005	2006	2007	2008
Revenue	41.6	41.1	40.2	39.8	35.5	38.3	37.8	36.9
o/w EU funds	0.5	0.5	0.6	1.1	0.9	1.6	1.5	1.7
Expenditure	44.7	45.9	44	43.1	33.2	35.6	36.5	35.5
o/w contribution 1/	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Balance	-3.1	-4.8	-3.8	-3.3	2.3	2.7	1.3	1.4
Adjusted revenue	41.1	40.6	39.6	38.7	34.6	36.7	36.3	35.2
Adjusted expenditure	43.7	44.9	43.0	42.1	32.2	34.6	35.5	34.5
Adjusted balance	-2.5	-4.3	-3.4	-3.4	2.3	2.1	0.8	0.7
Fiscal stimulus:								
headline		1.7	-1.0	-0.5		-0.4	1.4	-0.1
adjusted for EU funds		1.8	-1.0	0.0		0.3	1.2	0.1
	Lithuania 2/				**Poland 2/**			
	2005	2006	2007	2008	2005	2006	2007	2008
Revenue	33	33.3	33.9	34.5	40.9	41.8	42.4	41.6
o/w EU funds	1.4	1.3	1.9	2.5	0.6	0.7	1.1	1.7
Expenditure	33.6	34.5	34.8	35	43.3	43.7	43.8	42.6
o/w contribution 1/	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Balance	-0.6	-1.2	-0.9	-0.5	-2.4	-1.9	-1.4	-1
Adjusted revenue	31.6	32.0	32.0	32.0	40.3	41.1	41.3	39.9
Adjusted expenditure	32.6	33.5	33.8	34.0	42.3	42.7	42.8	41.6
Adjusted balance	-1.0	-1.5	-1.8	-2.0	-2.1	-1.6	-1.5	-1.7
Fiscal stimulus:								
headline		0.6	-0.3	-0.4		-0.5	-0.5	-0.4
adjusted for EU funds		0.5	0.3	0.2		-0.4	-0.2	0.2
	Hungary				**Latvia 2/**			
	2005	2006	2007	2008	2005	2006	2007	2008
Revenue	42.2	41.9	43.1	43	35.3	36.1	37.4	37.4
o/w EU funds	0.5	0.6	0.8	1.4	1.3	2.0	1.8	1.8
Expenditure	50	52	49.9	47.2	36.8	37.5	38.8	38.7
o/w contribution 1/	0.8 1/	1.0	1.0	1.0	0.8	1.0	1.0	1.0
Balance	-7.8	-10.1	-6.8	-4.2	-1.5	-1.4	-1.4	-1.3
Adjusted revenue	41.7	41.3	42.3	41.6	34.0	34.1	35.6	35.6
Adjusted expenditure	49.2	51.0	48.9	46.2	36.0	36.5	37.8	37.7
Adjusted balance	-7.4	-9.7	-6.6	-4.6	-2.0	-2.4	-2.2	-2.1
Fiscal stimulus:								
headline		2.3	-3.3	-2.6		-0.1	0	-0.1
adjusted for EU funds		2.3	-3.2	-1.9		0.4	-0.1	-0.1
	Slovakia 2/				**Slovenia**			
	2005	2006	2007	2008	2005	2006	2007	2008
Revenue	36	34.2	33.4	32.7	45.8	45.1	43.6	42.7
o/w EU funds	0.6	0.8	1.0	1.7	0.8	0.8	0.6	0.8
Expenditure	39.2	37.9	36.3	35.2	47.2	46.6	45.1	44.4
o/w contribution 1/	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Balance	-3.2	-3.7	-2.9	-2.5	-1.4	-1.5	-1.5	-1.7
Adjusted revenue	35.4	33.4	32.4	31.0	45.0	44.3	43.0	41.9
Adjusted expenditure	38.2	36.9	35.3	34.2	46.2	45.6	44.1	43.4
Adjusted balance	-2.8	-3.5	-2.9	-3.2	-1.1	-1.3	-1.1	-1.5
Fiscal stimulus:								
headline		0.5	-0.8	-0.4		0.1	0.0	0.2
adjusted for EU funds		0.7	-0.5	0.3		0.2	-0.2	0.4

"+" = additional stimulus

"-"= withdrawal of stimulus

Source: National authorities, Convergence programs, IMF staff estimates.

1/ Excluding TOR.

2/Estimated distribution between government and non-government institutions may not exactly correspond to ESA actuals.

The challenge is to make best use of EU funds without complicating fiscal policy. EU funds provide a unique opportunity to increase investment spending and thus to accelerate growth. But, as shown above, they will *ceteris paribus* contribute to larger deficits—a challenge especially for countries trying to meet the Maastricht fiscal criteria. Even in countries with low deficits or a surplus, EU funds may lead to an unwarranted fiscal stimulus. This is an issue primarily in the Baltics, where economies are already showing signs of overheating.

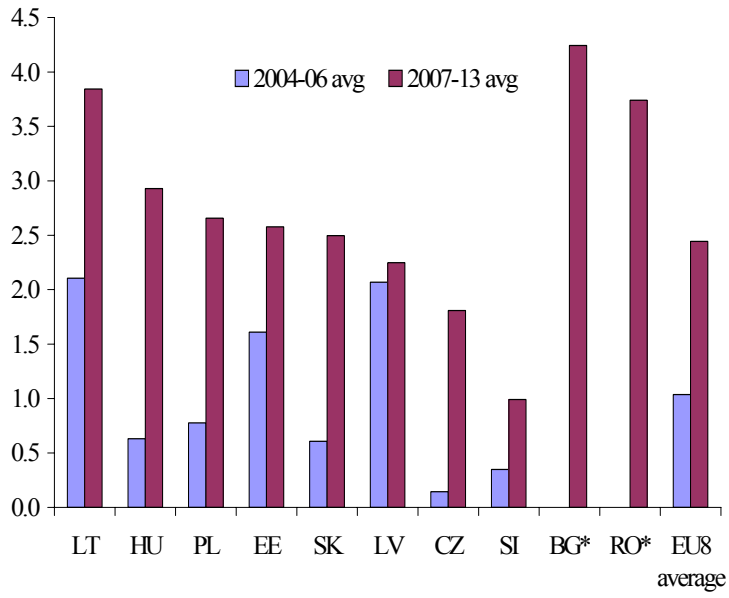
What can be done to contain the fiscal drag? If countries do not want to permit fiscal loosening, they can use EU-funds to substitute domestic spending to the extent possible under EU rules. Co-financing would need to be accommodated by reducing spending elsewhere, preferably in current expenditures which are still high in the NMS compared to other emerging market countries. This boils down to a relative increase of capital spending in the budget—after all, the purpose of

structural funds. Data for 2003-05 provide little evidence that countries have indeed reduced the share of current spending in order to make room for EU structural funds[9].

IV. Broader Macroeconomic Implications

The broader macroeconomic implications of EU-related transfers depend on actual flows to the economy as a whole. The analysis needs to consider all funds involved (not only those passing through the budget discussed above) as well as countries' contributions to the EU. As discussed in the section III, actual flows will depend on countries' absorption rates and, to a lesser extent, market variables that influence certain receipts from the EU (e.g., agricultural support) and contributions to the EU (e.g., VAT share). Data for the first two years of EU membership suggest that all NMS were, as expected, net beneficiaries of EU funds, all be it to very different degrees (Figure 8). The Baltic countries received much larger amounts as percent of GDP than their Central European neighbours (between 1 and 2 percent, as opposed to about ½ percent) reflecting relatively large allocations received in the Copenhagen agreement and, at least in Estonia, early progress in establishing effective institutions to manage absorption. Net transfers from the EU are projected to increase to above 2 percent of GDP per year under the NFP for all NMS except Slovenia. At about 3 ½ percent of GDP, average annual inflows in Romania and Bulgaria are projected to be particularly high, reflecting generous allocations under the NFP and only slightly lower expected absorption rates than in the other NMS[10].

Fig 8. NMS Net inflows of EU funds (percent of GDP, current prices)



Source: National authorities, European Commission, Eurostat, IMF staff estimates.
*Data on preaccession aid are not available.

Aggregate Demand

A number of conceptual issues arise when estimating the overall demand impact. Since net drawings from the EU were positive, it is natural to expect that they had a positive demand impact, even if limited in some countries. Measuring this impact is, however, not a straightforward task. Issues that need to be taken into account include:

[9] National top-ups of EU agricultural transfers may be contributing to the persistently high share of current spending.

[10] Absorption in Bulgaria and Romania is optimistically projected at 95 percent of committed amounts, compared to around 98 percent in the other NMS (in line with the better performing old member states at this stage). Note that in Romania and Bulgaria a larger part of funds is available as direct budgetary support which can be absorbed very quickly.

- ***Advance payments*** bear no relation with economic activity and need to be excluded from any demand-side estimate. Given the infant stage of project preparation, these monies remained largely unspent in 2004 and rested on government accounts. Poland stands out as it initially used most of these advances to finance its state budget deficit. Only in 2005 were advances used at a larger scale to make payments to the beneficiaries of structural funds.

- There are other ***timing issues***: EU refunds are only received after documentation has been submitted to and approved by the European Commission (a process which may require up to six months), so they reflect economic activity from the past. It would therefore be more accurate to capture the demand impact at the time when beneficiaries sign contracts with suppliers or pay their bills rather than when EU refunds are received. But such data are difficult to obtain.

- As discussed above**,** it is unclear whether EU funds are ***crowding out or augmenting domestic spending.*** Structural funds have an explicit additionality rule, but it is not easy to verify in practice.

- Finally, there are ***second-round or Keynesian multiplier effects*** *as well as* ***general equilibrium implications*** that can only be captured in a broader model setting.

As a first cut, the demand effect of EU-related transfers can be estimated in a simplified framework. Such a back-of-the envelope approach entirely disregards the timing and second-round effects issues mentioned above. The demand impact can be defined as:

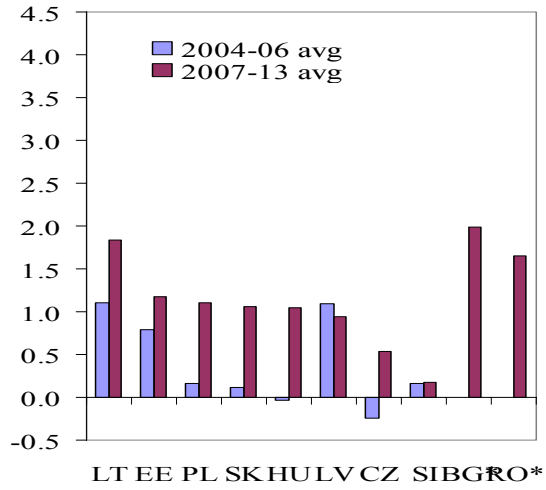
$$D = \alpha(T + NC) - C - A \text{ with } \alpha \in <0,1>$$

Where demand (D) depends on transfers from the EU (T), national co-financing (NC), contributions paid (C), and advances received (A). One of the greatest uncertainties is the degree in which EU funds substitute domestic spending that would have taken place anyway. We capture this by a crowding-out factor (α), a measure of substitution between EU transfers and domestic spending (α=1 if there is no substitution).

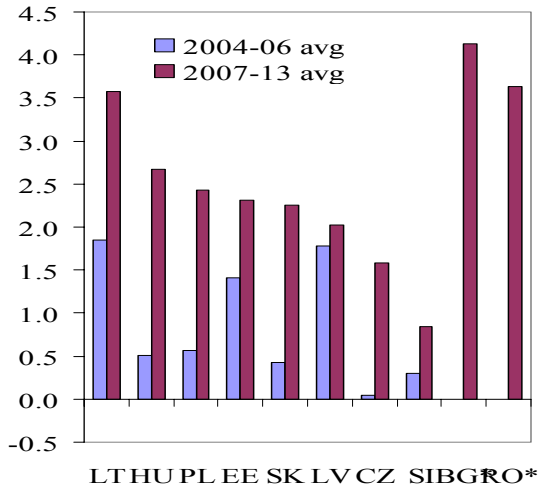
The demand effect of EU-related transfers is mostly positive, but the results depend crucially on how much domestic spending is substituted. Figure 9a shows the results of the above formula if one makes the (admittedly heroic) assumption that all NMS followed official additionally guidelines on EU transfers, i.e., expenditures financed with structural, pre-accession, and rural development funds do not replace domestic spending while other EU transfers (e.g., cohesion, common agriculture policy, Schengen) do. Reflecting the different types of EU funds received, the implied values for α range from 0.55 in Hungary to 0.65 in Estonia, Latvia and Slovakia. In the first 2 ½ years of EU membership, the demand impact is estimated to be rather modest (less than ½ percent GDP) in Central Europe, but higher (up to 1 percent of GDP) in the Baltics where EU commitments and (in Estonia) absorption have been high. In the time period covered by the NFP, the demand impact will be larger in most countries (especially in Hungary), as net EU-related inflows are projected to increase. The demand impact is estimated to be particularly large in Lithuania, Romania and Bulgaria. For illustration, Figure 9b shows the demand effect if all EU funds are assumed to be additional to domestically-funded spending ($\alpha=1$). The effects are now much larger, up to 4 percent of GDP under the NFP.

Fig 9. First-round demand effect of EU funds

9a. Official additionality (α =0.55-0.65)
(percent of GDP, current prices)



9b. Full additionality (α =1)
(percent of GDP, current prices)



Source: National authorities, European Commission, Eurostat, IMF staff estimates.
*Data on pre-accession funds are not available.

As the demand impact of EU funds grows, economic policy may need to adjust. In countries where growth is sluggish, EU funds may provide a welcome boost to economic activity. If, however, the economy is already suffering from signs of overheating, measures to offset the unwarranted demand stimulus generated by EU funds may be in place. In the Baltics, where there is little room for monetary or wage policy, a tightening of non-EU related fiscal spending may be one of the few instruments left.

Balance of Payments

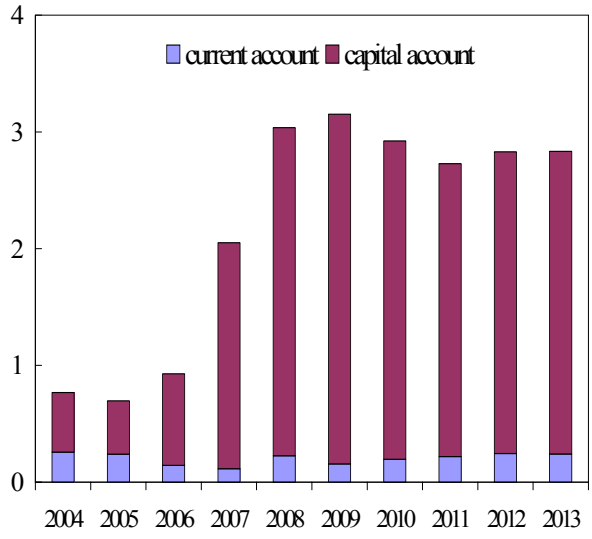
Transfers from and to the EU will have profound effects on the balance of payment in the NMS. In the first instance, these flows will need to be recorded either in the capital or the current account, depending on whether they are used for investment purposes or for current expenditures. The accounting is not always precise, as some funds could finance both kinds of spending. Text Table 3 shows a schematic classification of how various sorts of EU funds enter external sector statistics. The ultimate impact on the balance of payments will depend on important second-round effects (e.g., the import propensity of EU-funded projects and real appreciation pressures). Such an analysis is, however, beyond the scope of this paper.

Text Table 3: Classification of EU-related transfers in the Balance of Payments

	Current account	*Capital account*
Transfers from the EU:		
Budget compensation		
Agriculture		
Structural funds:		
ESF		
ERDF		
EAGGF (guidance)		
FIFG		
Cohesion funds, ISPA		
Community initiatives, internal policies		
Pre-accession instruments:		
SAPARD		
PHARE		
Contributions to the EU:		
Own resources and TOR		
Contributions to EU institutions		

Source: Statistical Office of The European Communities, *Current and capital transfers from the EU. A proposed treatment*, 1996.

Fig 10.
EU8: BoP impact of EU-related transfers (in percent of GDP)



Source: National authorities, Eurostat, IMF staff

EU-related transfers complicate the analysis of external sustainability. As shown in Figure 10, EU funds have in the first instance primarily led to an increase of inward capital transfers, a trend that is likely to intensify over the next years as the importance of structural and cohesion funds increases. The current account balance is affected to a much lesser extent (at least initially) because contributions to the EU partly offset agricultural and other current transfers from the EU. These non-debt-creating flows call for some caution in assessing the external position of the NMS by using traditional indicators, such as the overall current account deficit. Even if import-intensive projects lead to a deterioration of the current account in the short term, this may be largely funded by capital transfers from the EU, with a low risk of sudden stops. External sustainability will also be affected with the real appreciation associated with substantial foreign-exchange denominated inflows.

V. CONCLUSIONS

EU-related transfers are set to substantially impact the macroeconomic situation in the NMS. We have only focused on the magnitudes and institutional issues involved, disregarding funds intended positive effects on structural change and economic catch-up in the NMS. But even a rough analysis of accounting identities and the first-round impact shows how EU funds can complicate fiscal policy and demand management. For example, we find that EU-related transfers may have *ceteris paribus* led to a fiscal drag of ½ -1 percent of GDP and an additional aggregate demand stimulus of up to 1 percent of GDP. These effects are likely to grow substantially under the NFP for 2007-13, which allocates additional EU resources, especially structural funds, to the NMS. The paper highlights how much any such estimate depends on the extent to which EU funds replace existing spending plans by both the private and the public sector.

The use of EU funds involves policy tradeoffs. Policy makers need to square the circle of exploiting the enormous opportunities offered by the access to "free money" from Brussels while at the same time guarding against any destabilizing macroeconomic side-effects. One aspect highlighted in this paper is the need to restructure budgetary spending to make sure that the co-financing needs associated with EU funds do not lead to an unwarranted fiscal expansion. A fuller analysis of the macroeconomic policy implications of EU funds, including monetary policy, would require a model that adequately incorporates second-round effects on both the demand and supply side of the economy.

APPENDIX I. EU FUNDS AVAILABLE TO THE NEW MEMBER STATES (NMS)

Agriculture

There are several components of the EU Common Agricultural Policy (CAP) available to the new member states (NMS):

- *Market measures:* purchase of unprocessed food at intervention price and subsidies to non-EU exports;

- *Direct payments:* payments to farmers based on farm area and type of production; in the NMS these are lower than in the EU-15: direct payments were 25 percent of the EU-15 level in 2004 and have been increased by 5 percentage points a year reaching 40 percent in 2007; the increase will be 10 percentage points a year between 2008-13 to equalize payments with the EU-15 by 2013; NMS may top-up direct payments: such top-ups cannot exceed 30 percent of the EU-15 level, and the sum of EU payments and top-ups cannot be higher than payments received by farmers in EU-15;

- *Rural development (EAGGF guarantee section)*: so called CAP pillar II to provide support to farms in less favourable areas (LFA), forestation of land, structural pensions (paid to those who transfer farms to young farmers), food-processing, or training of farmers; EAGGF guarantee and guidance (see below) sections are merged under the 2007-13 financial perspective into the *European Agricultural Fund for Rural Development (EAFRD)*;

- *Fisheries (EFF):* fund created to support the fisheries sectors under the 2007-13 financial perspective; this task was financed with the structural fund FIFG (see below) in 2004-06.

Structural funds

Structural funds finance programs under the following objectives: Objective 1—economic catch-up in less developed regions (GDP per capita less than 75 percent of EU average), Objective 2—economic and social cohesion in areas facing structural difficulties (e.g., rural, fisheries); Objective 3—training and promotion of employment in regions not eligible under Objective 1 (for example, the Prague region in the Czech Republic). These objectives account for 94 percent of structural allocations for the NMS. There are four structural funds to finance the above objectives:

- *European Regional Development Fund (ERDF)*: financing Objectives 1 and 2
- *European Social Fund (ESF)*: financing Objectives 1, 2 and 3
- *European Agricultural Guidance and Guarantee Fund (EAGGF)—guidance section:* financing Objective 1 in agriculture; it is merged with the *guarantee section* under the 2007-13 financial perspective (see above);
- *Financial Instrument for Fisheries Guidance (FIFG):* financing Objective 1 in the fisheries sector. This fund is converted into the European Fund for Fisheries (EFF) and classified together with agricultural funds in the 2007-13 financial perspective.

Other structural funds, so called Community Initiatives, aimed at solving problems common to a number of member states and regions include: *Interreg III* (cross-border cooperation), *Urban II* (innovative strategies in urban areas), *Equal* (combating labor market discrimination), and *Leader +* (rural development initiatives). Community Initiatives accounted for some 5 percent of structural funds in 2004-06.

Cohesion Fund

Cohesion fund: this fund is available to countries with GDP per capita below 90 percent of the EU average. It does not finance programs, but is used to directly support large infrastructure projects in transportation and environment.

Internal policies

NMS receive funding within the existing EU policy priorities mainly for:

- *nuclear safety:* decommissioning of power plants*;*
- *Schengen:* to strengthen control of the EU border and to comply with the Schengen Treaty.

Pre-accession aid

This financial assistance is aimed at facilitating adjustment to full membership including to build absorption capacity for EU funds; as such it is not a part of the 2004-06 package. However, disbursements of remaining pre-accession resources continue also after accession. There were three pre-accession instruments:

- *Poland and Hungary: Assistance for Restructuring of the Economy (PHARE)*;
- *Instrument for Structural Policies for pre-Accession (ISPA)*; ISPA's role is close to cohesion funds and these two types of funding are usually merged in reporting;
- *Special Accession Program for Agriculture and Rural Development (SAPARD)*.

Budget compensation

Budget compensation: an unconditional payment from the EU budget agreed at the last stage of the accession negotiations. The main goals were to ensure that new members did not become net contributors, and to improve budget liquidity. In part it was financed directly from the EU budget and in part with resources shifted from structural funds allocated to NMS. This is not a regular EU fund, and the NMS which acceded in 2004 will not receive compensation after 2006; Romania and Bulgaria will receive budget compensation until 2009.

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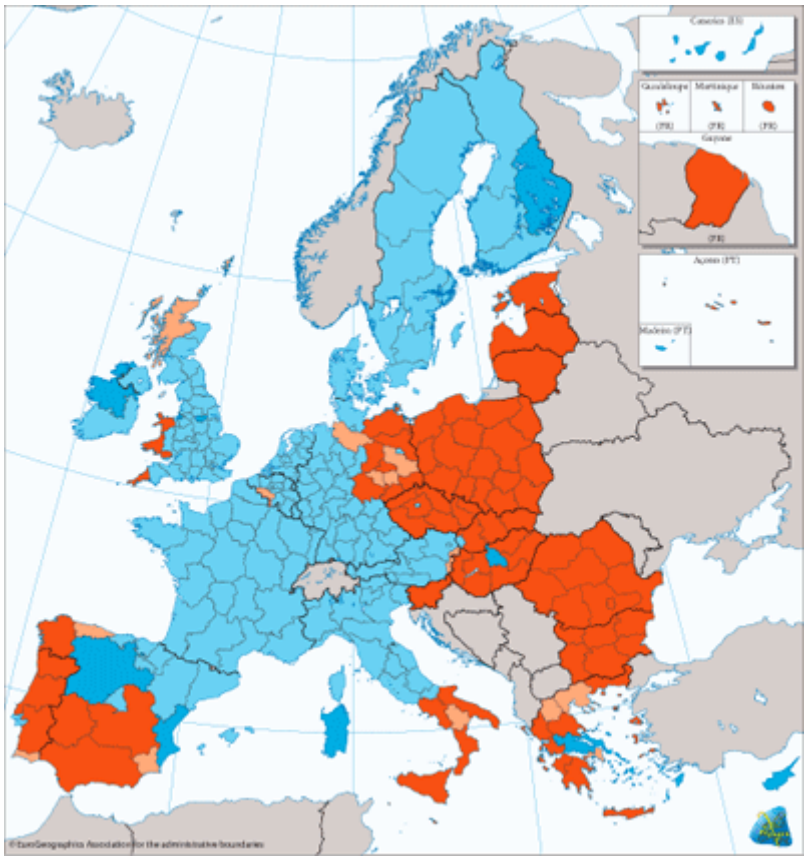
The macroeconomic effects of structural and cohesion funds

- András Oszlay (ICEG European Center) -

An increasing share of EU funds is devoted to put the member states' economies on a faster and more stable growth track, or at least to achieve lasting impacts that can contribute to the creation of new jobs (or the preserving of already existing jobs). For the new member states of the EU it is especially the Structural and Cohesion Funds that play a crucial role. It is rather self-explanatory, since of the 85 convergence regions within EU-27 59 is located in the new member states[11] (see Figure 1). Convergence regions are those, where per capita national incomes are below 75% of the EU-27's average.

Figure 1. Convergence regions in the EU (with orange shading)



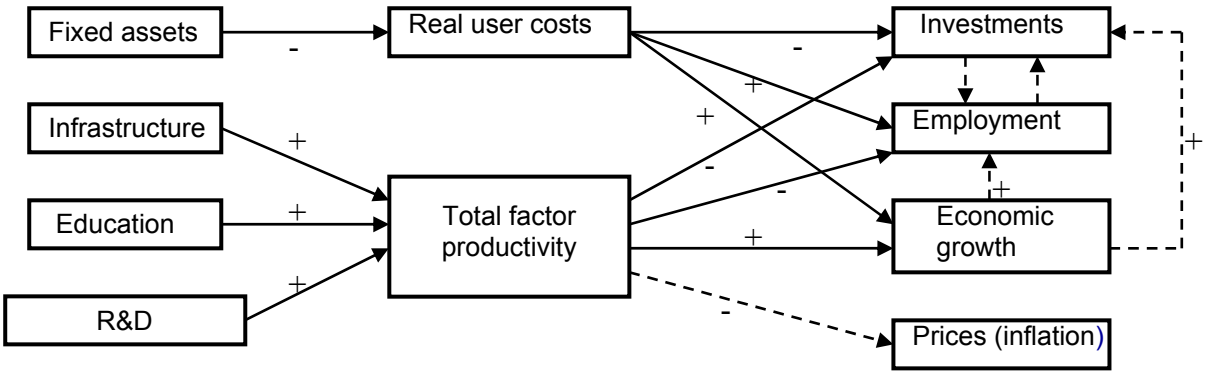
Source: European Commission – DG REGIO

From the inspection of the above figure it is clearly seen, that with the exception of two regions, all the regions in the new member states are convergence regions, and are thus the main targets of the Union's cohesion policy. Of the two remaining regions Central Hungary is a so called phasing-in region, and is thus still eligible for cohesion policy instruments, while Prague region in the Czech Republic (alone from the regions of the new member states) is already a competitiveness region.

[11] Throughout this text we use this term to cover eight countries that became members on May 1, 2004 (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia) and two countries that joined the EU on January 1, 2007 (Bulgaria and Romania).

The inflows from the Structural and Cohesion Funds (hereafter convergence funds) can principally affect the most important real macroeconomic variables through two main channels as explained in the figure below.

Figure 2. Simplified impact mechanism of convergence funds



Note: direct effects are represented by continuous lines, indirect links with dashed lines

Should the inflow of funds finance directly investment into fixed assets, this will lead to a fall in real user costs. This, in itself, results in increased gross fixed capital formation. Another source of growth of investment into fixed assets is that firms increasingly substitute labour with the relatively cheap capital, where this is technologically possible. Thus, the direct effects of such use of Structural and Cohesion Funds are positive in the case of gross fixed capital formation, but negative in the case of labour. Since, however, more investment into fixed assets will also lead to faster growth, it still has a positive indirect effect on job creation. Thus, whether this kind of use of the funds lead to employment growth, depends on the relative size of the direct and indirect effects. From a pure theoretical point of view, the latter can be more significant, but it also depends on how productive the underlying investments turn out to be.

In the cases, when convergence funds finance infrastructural developments, education (or training) and research and development activities, an improvement in total factor productivity is expected. Since the same output can be produced with less capital and less labour if productivity is higher, the direct effect on labour is negative again, but in this case it is also negative for gross fixed capital formation. In reality, it is more likely, that output will not remain at the same level, but expand in the case of a positive productivity shock, which indirectly again leads to employment growth and investment growth. What's more, improving productivity also leads to a downward pressure on the costs of production, which can spill over to the final sales prices, eventually also affecting inflation.

In sum, the inflow of convergence funds has a definite positive contribution to economic growth (at least in principle), but the effect on labour is not straightforward. Even in the case of growth, it needs deeper examination, whether the positive effects emerge only in the period of the extension of the funds, or a permanently higher growth rate can be achieved. Thorough quantitative analyses are needed to answer, which of these propositions hold true in reality.

Effects on economic growth: quantitative methods

The main subject of assessing the impact of convergence funds with more sophisticated quantitative methods is that of economic growth. This doesn't come as a surprise, since the main aim of these funds is to help real convergence[12], i.e. to support the least developed countries and regions of the EU to close the income gap with the developed ones. Whether the funds do have such an effect is assumed to be best captured in the development of GDP-figures.

There are two main approaches to analyse the impact of convergence funds in a systematic quantitative manner: simulation with general equilibrium models and econometric analysis. It is important to to declare in advance, that both approaches have severe weaknesses, and in no way can one of them judged to be superior. The reason why it has to be stressed right at the onset is that the two approaches lead to significantly different assessments of the impact of convergence funds on economic growth.

Model simulations

Model simulations are mostly based on computable general equilibrium models, the parameters of which are not the results of estimation from observations, rather, they are calibrated[13]. The inflow from convergence funds is treated as additional public investments that increase the stock of capital in various sectors of the economy. To evaluate the effect of the funds, a baseline version of the model, that excludes these additional public investments is also needed. Thus the impact of convergence funds is captured as a difference between the simulated model and the baseline model.

An important characteristic of these models is that they assume productive public investments that are performed in the most efficient manner. They usually also assume that a given economy can absorb all the funds, that were allocated to it in the financial programming period that spans out to seven years. Also an integral part of these models is that the principle of additionality is not violated, i.e. these funds are not substitutes for such state investments that should be executed anyway, but they generate excess investment. Consequently, what these type of models estimate is in fact can be regarded as the most favourable, potential effect of the convergence funds on economic growth.

The European Commission has two model families to examine the effect of convergence funds on economic growth. The first is called Hermin, which has a neo-keynesian approach. The production side of the economy of a given country is represented by two sectors: an industrial one and another that provides services. The output of the former is influenced by external (world) demand, world prices of goods and commodities and the relative costs of production. The services sector is less sensitive to world prices and relative costs, but is largely determined by developments in domestic demand. In the case of public investments (remember, convergence funds are treated as additional public investments) Hermin does not only assume a direct effect on growth through increased capital stock, but also an indirect effect through the accumulation of human capital and knowledge. Expectations in Hermin are mostly adaptive (i.e. backward looking).

[12] Convergence has two meanings in this context. *Absolute* convergence refers to the catching up of national incomes to the Union's average. However the return to a country's long-term income level – following the derailment caused by the years of central planning and the subsequent transition shock – is also considered convergence. This is referred to as *conditional* convergence.

[13] Calibration broadly means, that the model's parameters are chosen in such a way, that the initial state of the model is stable equilibrium, thus in response to a one-off shock the model returns to this equilibrium state.

The other model family of the Commission is the QUEST-II, which is more neoclassical in its approach. Another marked difference from Hermin is that this is a real multisector model with forward looking expectations. On the production side output is determined by sectoral production functions. On the demand side QUEST-II has intertemporally optimising households (i.e. private consumption is dependent on both current and discounted future income). Also a deviation in QUEST-II is the endogeneity of the real interest rate (this was exogenously given in Hermin). This has a serious consequence, as a catch-up process usually involves the real appreciation of the domestic currency. When the interest rate is endogenous, it will rise in periods of real appreciation, leading to a crowding out of private investment. Through this channel QUEST-II has a tendency to estimate smaller growth effects in general than does Hermin.

For the former cohesion countries of the EU-15 (Greece, Ireland, Portugal and Spain) Hermin estimated an additional GDP-growth from 1 to 1.5% on average over the horizon of a seven-year financial programming period. With the assumption, that no further inflows from convergence funds take place following the expiry of the financial programming period, on a longer term the level of GDP would only be 1% higher than in the baseline scenario. As it was already hypothesised, QUEST-II estimates an even smaller extra growth in the range of 0.5 to 1% during a seven-year financial programming period. One can thus see, that while the estimated effects of convergence funds on economic growth are indeed positive, the size of the induced changes are not so impressive.

There were experiments with Hermin to assess the possible effects of convergence funds on the Hungarian economy as well. The simulation was made on data available in 2004 (the year when Hungary joined The European Union) and estimations were made to the 2007-2013 financial programming period as well as for the financial programming period beginning in 2014. At the time of the calculations it was assumed that the own contribution from the Hungarian state budget would be 40% on average, but by now it is obvious, that between 2007 and 2013 the average own contribution will be only around 20%. The average annual inflow is also expected to be larger than it was anticipated at the time of the simulation exercise. Another important aspect of the simulation was the composition of the inflows: it was assumed that some 60% of the funds will finance infrastructural developments, approximately 20% will be devoted to investments into human capital and the remaining 20% will be an addition to private investment resources.

With these assumptions it was estimated, that the level of Hungarian GDP by 2013 (the end-year of the recent financial programming period) would be 8.4% larger than in the baseline case (i.e. without convergence interventions). A significant increase in employment is another result from the simulation: compared to the baseline 4.5% more jobs could be filled in 2013, should the inflow of convergence funds proceed according to the given assumptions. The level of investments would be outstanding (41% higher than in the baseline scenario), but this would imply a deterioration in the external balance: the external financing requirements could be on average 3% higher (relative to GDP) in each year of the financial programming period than in the baseline case.

Assuming no more inflows from convergence funds after 2013, the estimated effects would all diminish by 2020. The level of GDP would be only 4% higher than without the inflow of convergence funds between 2007 and 2013, while there would remain virtually nothing from the additional jobs (compared to the baseline) that were present in 2013. With the huge amount of the investments maturing in this period, however, external financing requirements would be on average 1.5% of GDP less than in the baseline model.

We have no knowledge of similar simulation for Hungary with QUEST-II, however there is a Hungarian model, the EcoRET, which was developed by the University of Pécs to evaluate the effects of development policy. Its first bloc estimates the effects of the inflow of convergence funds

on total factor productivity, then its second bloc goes on to infer the effects of the main macroeconomic variables. The first experiments with EcoRET indicated a rather modest contribution of the convergence funds to both economic growth and employment and yet a sharp deterioration in the external balance indicators. However, these first results were not comparable to the ones from Hermin, as the database and the forecasting period were all different. To gain more reliable and comparable estimations, EcoRET were integrated into a spatial computable general equilibrium (SCGE) type model, the RAEM-Light, which is also capable of quantifying regional (spatial), not just economy-wide effects.

This modified version of EcoRET resulted in quite a similar estimate in the case of additional GDP-growth than did Hermin. By 2013, the level of Hungarian GDP could be 7.5% higher than in the baseline case (i.e. without inflows from EU funds). In the case of employment and investment, however, the estimated gains are much lower than in the case of Hermin.

Table 1. Hungary: Estimated growth effects compared to the baseline in the 2007-2013 financial programming period

	Hermin	EcoRET
Level of GDP (2013)	+8,4%	+7,5%
Level of employment (2013)	+4,5%	+2,6%
Level of GFCF (2013)	+41,0%	+13,3%
External financing requirement (% of GDP, annual average)	-3,0%	-

Econometric analyses

In contrast to simulations from general equilibrium models, econometric analyses do not estimate the potential effects convergence funds, but only the actual ones that can be inferred from past observations. Since in reality the use of the convergence funds is far from being perfect (efficient allocation is not guaranteed, absorption is not complete and the principle of additionality is often violated[14]), the estimated effects from econometric analyses are usually significantly smaller than in the case of model simulations, or are almost negligible. However, one should be aware of the weaknesses of the econometric approach: data are often rare and of poor quality (overly heterogeneous), thus the estimates are not always reliable.

Boldrin and Canova[15] found that convergence funds did not have a marked contribution to economic growth. They explained this by the system of convergence support itself. Since neither the setup of the system, nor the use of the funds is market oriented, they are essentially under the influence of political targets and ambitions instead of economic ones. Based on this, the authors proposed the thorough restructuring of the system of EU funding in the case of convergence goals.

Ederveen et al[16] were able to detect some convergence that is to be attributed to the convergence funds themselves, however, it was at best conditional and definitely not absolute convergence. They also pointed out to the fact, that the effects of convergence funds are crucially determined by

[14] As additionality is a crucial element in EU funding, it is of course rare, that it is violated, at least in legal terms. But in fact by manipulating the structure of public investments the principle of additionality is often violated in economic terms.

[15] Boldrin, M. – Canova, F. (2001): Inequality and Convergence in Europe's Regions: Reconsidering European Regional Policies. In: Economic Policy: a European Forum. (32) pp 205-245.

[16] Ederveen, S. – Gorter, J. – de Mooij, R. – Nahuis, R. (2003): Funds and Games: The Economics of European Cohesion Policy. ENEPRI, Occasional Paper Nr. 3.

the quality of the institutions that are responsible for the coordination and allocation of funds within the individual economies. To illustrate, how imperfect these institutions are, they gave an estimation to the extent, with which additionality was violated between 1989 and 1993. According to their findings, 17% of all convergence support financed in fact such investments, which should have been undertaken even without the common cohesion policy tools.

Econometric analyses thus resulted in much smaller estimated growth effects of convergence funds than did model simulations. The main reason behind this is the poor quality of the institutions, which was not acknowledged in general equilibrium models. There was, however, another important finding in econometric analyses: more open economies (i.e. those, which trade more intensively with the rest of the world) can enjoy larger growth effects from the inflow of convergence funds than closed ones. While the quality of the institutional environment is also a source of concern in the case of Hungary, it is still one of the most open economies among the new member states of the EU, thus at least we can expect some positive impulses from the inflow of convergence funds as well.

Effects on the external balance, prices and the exchange rate

When examining the effects of convergence funds on the external balance we can also distinguish direct and indirect effects. Direct effects are exhibited in financial flows that accompany projects that are co-financed by the EU, while indirect effects can be traced in future financial flows originating from projects that were finished earlier.

Direct effects can thus be easily identified in the balance of payments statistics: inflows are registered either among current transfers in the current account or in the appropriate credit line of the capital account[17]. However, as EU member states are not just net recipients from the EU budget, but also contribute to it, this payment should also be classified as a direct effect on the external balance. And finally, since the incoming flows finance projects that usually have high import content, this additional import should also be included in the direct effects.

From the above it doesn't come as a surprise, that net direct effects should not necessarily be positive (i.e. decreasing the external financing requirement o fan economy). While the contribution to the EU budget should be transferred on a regular basis, in periods, when there are only a few projects that are co-financed by the EU, direct effects can temporarily be negative. But even if inflows completely offset the payments to the EU budget, some of the projects might have such high import need, that combined direct effects still turn out to be negative. This can especially be characteristic for the first years of EU membership, as co-financed projects are typically import intensive in this period (in lack of domestic suppliers), and the absorption rate is relatively low due to institutional weaknesses and inexperience. This was already seen above, when interpreting results from the Hermin model for Hungary (the estimated average annual external financing need was 3 percentage point higher relative to GDP between 2007 and 2013 than in the case of no convergence interventions), but it was also observed in former cohesion countries.

Indirect effects are not so easy to trace, as these originate from such co-financed projects that created extra export capacities or infrastructural facilities that are also used by non-residents in exchange of paying a fee. These indirect effects are predominantly positive, and in time they are supposed to dominate over direct effects. This can also be confirmed by model simulations. As we

[17] Whether an inflow from convergence funds belong to current or capital transfers is not always straightforward. In principle, the current account records such financial flows between residents and non-residents that also influence the generation of national income. Capital transfers, on the other hand, only influence the international investment position of the country, but not the national income. While for balance of payments statisticians this problem is there to be solved, from our viewpoint it is irrelevant, since it is mainly the volume of the inflows that really counts.

could already see, Hermin predicted lower external financing requirement for Hungary in the financial programming period that begins in 2014 than in the baseline case of no EU funding, and again, the experience of former cohesion countries also confirm, that total effects on the external balance can be positive.

Why the direction of the effects of convergence funds on absolute and relative costs of capital are relatively clear, this is not so in the case of other costs and prices. A natural starting point is to assume that incoming EU funds help improving total factor productivity. This will lead to a decrease in production costs, which in turn can lead to lower final sales prices (thus eventually also bringing down inflation). This last link, however, is rather weak even on a pure theoretical basis, and neither it is confirmed by model simulations. EcoRET for example estimates slightly higher inflation assuming EU funding that in the baseline scenario. This is because convergence funds also have a significant positive effect on domestic demand, that creates some inflationary pressure. But the inflation difference between the two scenarios is quite small and can easily be neglected.

It is also recurring from time to time, that a massive inflow of convergence funds can lead to the nominal appreciation of the domestic currency. Since, however, the inflow of EU funds is always connected to definite projects (definite demand), and a good part of them surely has high import requirement, in fact there is only a limited increase in liquidity, thus the exchange rate should remain intact. Indeed, the recent appreciation of the currencies of some of the new member states rather reflect increased investor interest in these economies, and in no way can they be attributed to the inflow of convergence funds.

Fiscal effects

When speaking about the fiscal effects of convergence funds, it has to be noted, that there are other forms of support from the EU than Structural and Cohesion Funds, and these all affect the fiscal stance. Thus, EU subsidies to the agricultural sector, direct aids and sources allocated for rural development also flow through the budget and can temporarily modify the fiscal balance.

Again, we can distinguish between direct and indirect effects. Direct effects are partly costs: the compulsory payments to the EU budget (as described in the previous section of the paper), the costs of meeting the legal, environmental and safety standards of the EU, partly benefits: inflow from pre-accession funds, convergence funds, agricultural subsidies and direct aids. Indirect fiscal effects emanate from extra economic growth generated by convergence funds, the expected convergence of interest rates (the narrowing of the risk premium) and the positive or negative effects of the harmonisation of the tax system with the rest of EU economies.

Direct effects, especially in the first years following EU accession, are mostly negative. This is because the costs of compliance with the prescribed EU standards can be high (the creation of a new legal and institutional environment, the implementation of safety rules and environmental regulation etc.). In their studies Backé[18] as well as Kopits and Székely[19] find, that the short-term direct fiscal effect of EU funds are negative. A rough estimation from the latter authors is an average annual 0.75 percentage point deterioration (relative to GDP) in the budget balance for Hungary for the 2004-2006 period.

Both papers go on to discuss the possible extent of indirect effects and come to the conclusion that these are predominantly positive. Yet, the combined long-term effect of EU funds on the fiscal balance is more likely to be neutral or very slightly positive at best. This is because the cost of maintenance of the infrastructure that was created by the use of EU funds will also be significant on a long run. Thus, in fact, the total effect of EU funds on the fiscal stance is far from being certain. Some factors that do influence the final size of these effects are (i) whether additionality is violated or not, (ii) the rate of absorption of the funds and (iii) the eventual share of co-financing.

Conclusion

The new member states of the EU will enjoy a significant inflow from the Structural and Cohesion Funds of the common budget throughout the 2007-2013 financial programming period. Assuming complete absorption, these inflows could account for 3-4% of GDP annually, which is a sizeable addition to development resources. The prime reason of these funds is to promote the convergence process, thus it is encouraging to see, that quantitative analyses mostly confirmed a positive effect of these funds on economic growth. While model simulations predicted relatively stronger effects, econometric analyses resulted in modest improvements compared to the baseline scenario of no convergence funds. It is also a common finding of these models, that employment can only increase temporarily, and on a longer run employment rates are not really higher due to these inflows.

The development of external balance indicators exhibit a different pattern: in the first years external financing requirements mostly deteriorate reflecting faster investment activity that has high import content, but on a longer run – due to increased export capacities and improved competitiveness – the reliance on foreign funds will decrease. The effects on prices and the exchange rate are only minor and can in fact be neglected. The fiscal balance can worsen especially in the early period of the receiving of funds, since many institutional and legislative changes should be done to efficiently allocate EU funds. On a longer horizon here are positive indirect effects as well, but in general the convergence fund's long-term effects on the state budget will be neutral or at best very slightly positive.

[18] Backé, P. (2002): Fiscal Effects of EU Membership for Central European and Baltic EU Accession Countries. In: Oesterreichische Nationalbank: Focus on Transition Nr. 2. pp 151-164.

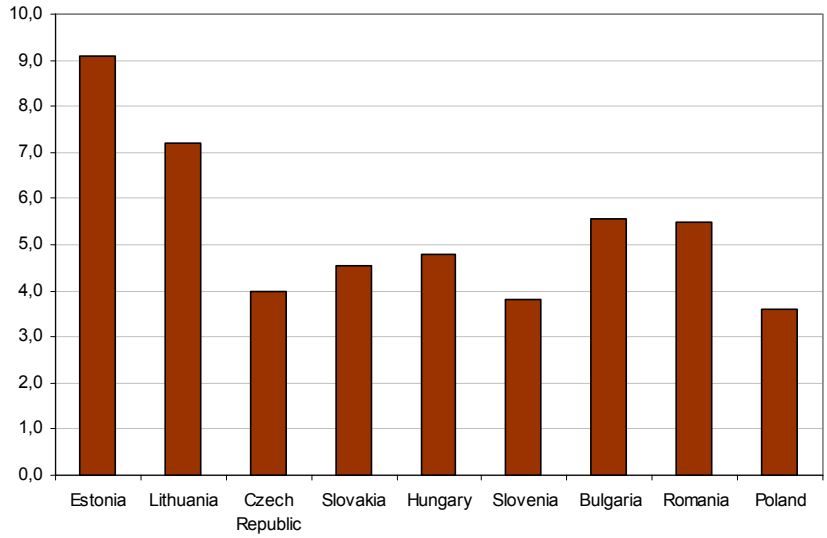
[19] Kopits, Gy. – Székely, I. (2003): Fiscal Policy Challenges for the Baltics and Central Europe. In: Tumpel-Gugerell G. – Mooslechner, P.: Structural Challenges for Europe. Edward Elgar Publishing.

Growth and competitiveness in the new member states

- Szabolcs Erdős (ICEG European Center) -

Growth theories predict that low-income economies tend to grow faster because of higher marginal product of capital. This claim seems to hold true when we examine the macroeconomic situation of the new member states[20] in the past decade. Since 1996 real GDP growth has resumed in all examined countries, reflecting progress in macroeconomic stabilisation and the implementation of a wide range of structural reforms. The relatively strong growth performance in EU8 countries relative to the euro area also led to some progress in real convergence, defined here as convergence in per capita income levels.

Figure 1. Annual average GDP-growth, 2000-2006

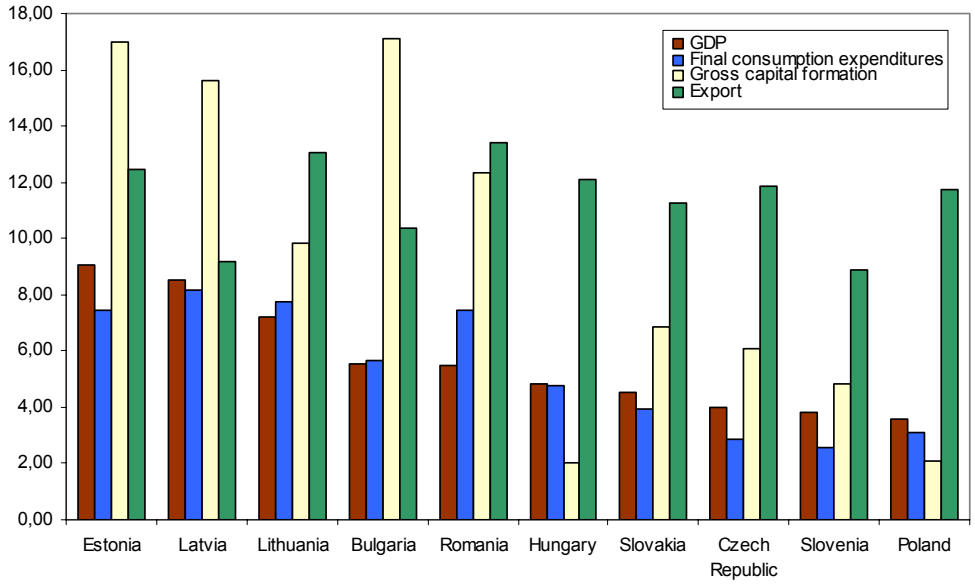


Source: Eurostat

Over the past years, new member states have seen strong economic growth. Gross capital formation, fostered by rapid foreign direct investment growth, has been the main driving force. In most new member states, the reasons for relocations to (or within) the region were: low labour costs and soft labour market regulations; tax incentives; explicit subsidies granted by public authorities; proximity to large consumer markets (mainly the old member states themselves).

[20] Throughout this text we use this term to cover eight countries that became members on May 1, 2004 (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia) and two countries that joined the EU on January 1, 2007 (Bulgaria and Romania).

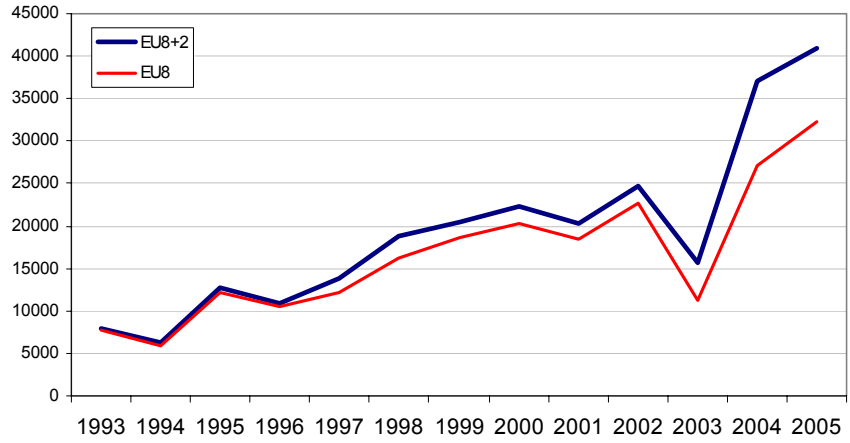
Figure 2. The composition of growth (average annual rates, 2000-2006)



Source: Eurostat

Correlation analyses suggest that countries that have received more FDI have built up their capital stock in recent years more rapidly, with Latvia and Lithuania being exceptions, as investment growth in these two countries was the highest among the new member states, yet, their FDI inflows were among the lowest. The role of foreign direct investments in the most attractive new member states was quite important given FDI's huge potential in the modernization process, the renovation of managerial qualification, and, in particular, contributing to the spreading of technology and skills.

Figure 3. FDI inflows in the new member states (in EUR million)

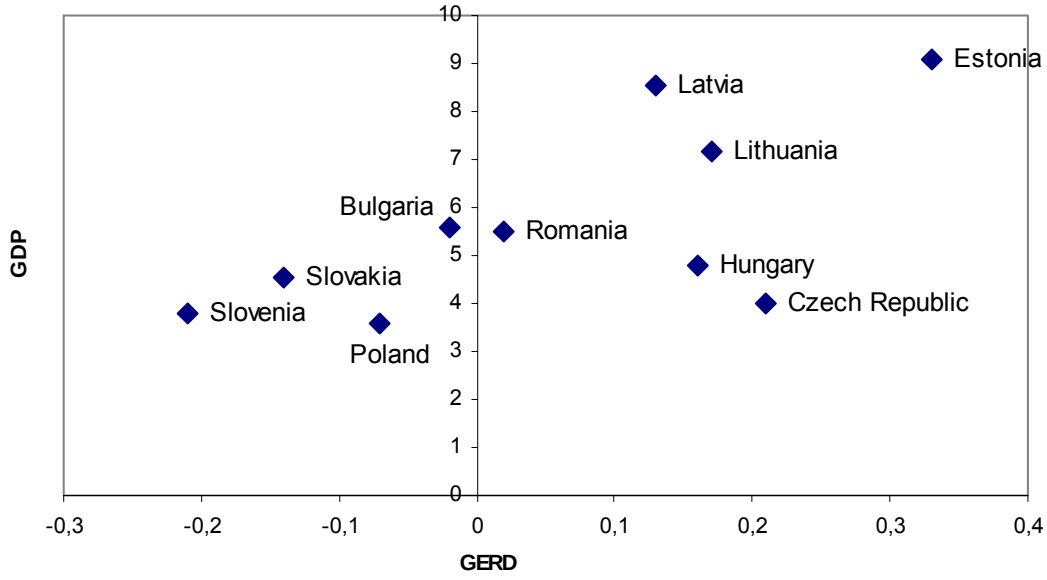


Source: Eurostat
EU8+2: new member states as specified in Footnote 1; EU8: except Bulgaria and Romania

As to the prospects for further FDI inflows, privatisation has largely ceased to be a main driver of FDI in these countries. Against this background, the institutional and business environment, as well as economic factors that attract non-privatisation-related FDI, will become increasingly more important. In particular, a stable macroeconomic environment, labour costs that develop in line with productivity, the availability of skilled labour and a sufficiently developed infrastructure are needed to secure future FDI inflows.

R&D and innovative capacities play a key role for competitiveness. A relatively low involvement of the business sector in the financing of R&D projects appears to be one of the prime reasons behind the poor R&D performance of the EU8.

Figure 4. R&D and GDP (average annual growth rate, 2000-2005)

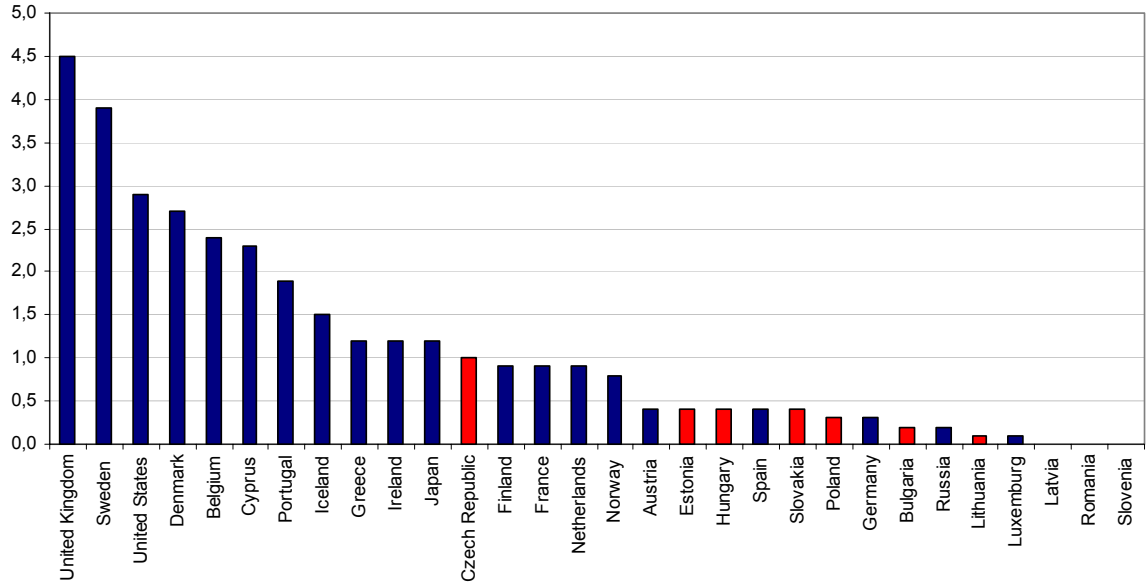


Source: Eurostat

Although the new member states belong to the European single market, attracting FDI (that has a large contribution to export growth) in the longer run will require better skills and better technologies. The new member states need to restructure their exports towards more technologically advanced products and services. But as the experts of ECB say: „Since the EU8 are not yet at the technological frontier, in the short term lower R&D spending does not necessarily hamper their chances of catching up".[21]

[21] http://www.ecb.eu/pub/pdf/scpops/ecbocp61.pdf

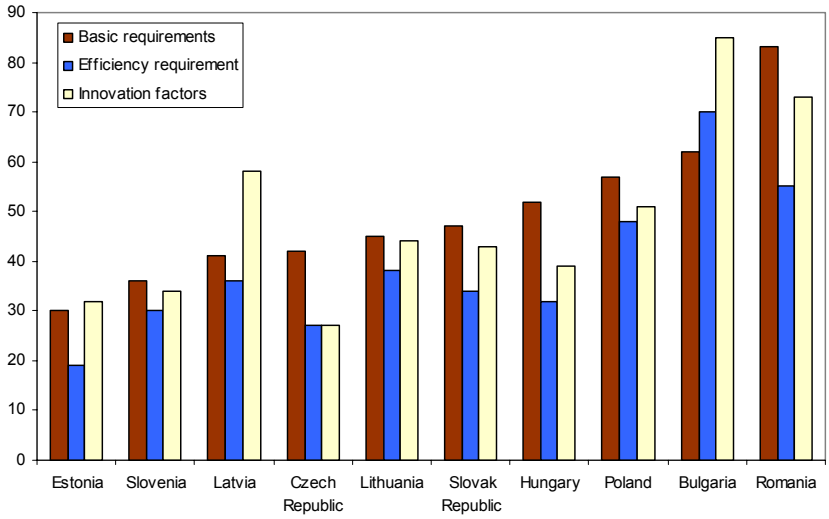
Figure 5. Business enterprise R&D expenditure (% of GDP, 2005)



Source: Eurostat

On a longer run it is important to ensure the credible monetary policy and appropriate fiscal policy mix for further growth and convergence. The new member states need to address structural labour market problems, in particular by reducing regional disparities and skill mismatches. These countries also must make further efforts to improve the structural funds related institutions, in order to ensure that investments increase and are productive. Many of the above-mentioned factors of growth-enhancing policies will also help to ensure a continued inflow of FDI, which is expected to help accelerate the convergence process.

Figure 6. Global Competitiveness Index, 2006



Source: World Economic Forum

Some of the new member states now face serious risks: there are large current account deficits in many of them, and some also has fiscal problems. In the latter economies (especially Hungary and to a lesser extent Poland) the adjustment program of the government is not fully credible. Credible policy provides provide an anchor for investors expectations.

Looking at investment into human capital development, the new member states exhibit a mixed picture. Some indicators of educational attainment (public expenditure on education, share of the labour force with at least secondary education) suggest a favourable situation for these countries relative to the Euro Area. However, other indicators – for example those related to research input (R&D spending as a percentage of GDP) – offer a less favourable view. The still ongoing process of sectoral transition (away from agriculture and industry to services) has been accompanied by an increasing degree of mismatch between labour supply and job vacancies. From a forward-looking perspective, structural policies aimed at improving the accumulation of human capital will play a crucial role in overcoming labour market mismatches, in particular educational mismatches.

According to the latest figures, unemployment rates continued to fall. In several countries unemployment rates declined to historically low levels. Employment rates in Latvia, and also in Estonia reached the highest levels since the start of transition. Nevertheless, further employment increases may be limited because of the structural nature of joblessness and emigration.

In May 2004 eight post-socialist countries joined the European Union, and two additional countries joined three years later. Almost all regions of the new member states have per-capita GDPs that are below 75 percent of the EU average, so all the new member states qualify for the EU's structural and cohesion funds, which are intended to help them „catch up". If they are well used, the structural funds offer the new member states unparalleled opportunities for economic growth, social cohesion, and human development.

The experiences clearly show that a high absorption rate of these funds requires solid preparation of the central administration, in the form of strong national policy frameworks, inter-ministerial coordination, well designed national programmes and implementation capacity. Partnerships with regional and local governments, private sector business and non-governmental organisations are also essential. In sum, preparation for absorbing the structural funds is often less about market democracy than about modernizing state bureaucracy and helping them to work with local governments and NGOs.

The new member states have come a long way since the early 1990s, but this is not the end of their transition. Many challenges are still ahead and the real convergence process is far from being finished. Although living standards have improved considerably, the per capita income gap versus the average levels in the EU is still significant.

Jobless growth in the new member states?

- Béla Galgóczi (European Trade Union Institute) -

Transformation economies in Central-Eastern Europe (CEE) are often framed as countries with high growth but low job creation. Is jobless growth in the region indeed a general phenomenon? In the next sections we take a look at the specific macroeconomic features of the CEE transformation economies; then we examine certain developments on their labour markets between 2000 and 2006. Finally we devote some space to macroeconomic policy considerations with a focus on the application of the Stability and Growth Pact criteria for the region.

Different socio-economic framework of CEE transformation economies

CEE economies are still in transformation and have a genuinely different macroeconomic profile than the stable market economies of the EU15. National economies still under transformation are characterised by dynamic growth, including high but uneven productivity increases.

A fundamental restructuring of these economies took place in the second half of the nineties as they became reintegrated into the world economy. The driving force of this was mostly foreign direct investment and to a lesser extent mobilisation of internal resources through redistribution of income from the population towards the enterprise sphere. Even so transformation remains incomplete in most countries (the issues include large and inefficient agricultural sectors in some countries, as well as unresolved problems related to steel, coal and mining). Their 'transformational character' also manifests itself in terms of distortions (different price and cost structures) as an inheritance of the previous economic model and disproportionalities (wage and productivity relations) due to turbulent transformation processes. The dynamism of industry (and of the tradable sector in general) is much greater than that of the non-tradable sector.

The most important factors that underline the different macroeconomic framework of CEE transformation economies compared to the developed market economies of the EU15 are the following:

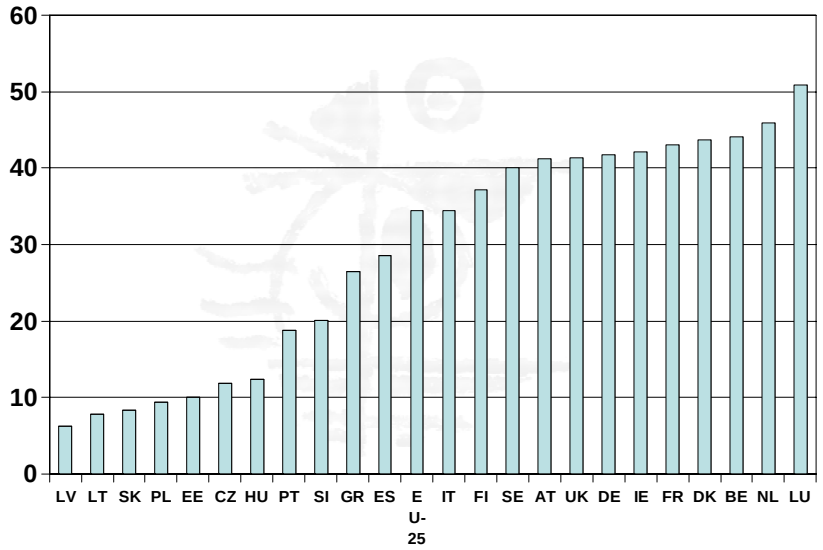
- Lower GDP per capita levels, with more dynamism (close to 10% nominal growth rates, with high but uneven productivity growth), ongoing transformation and convergence (catch-up process). Real convergence proceeds dynamically, as GDP per capita levels at PPP compared to the Eurozone average between 1995 and 2005 illustrate:

Czech Republic:	63.6 – 67.3
Estonia:	29.8 – 49.7
Hungary:	46.6 – 59.2
Lithuania:	30.4 – 46.1
Latvia:	25.7 – 43.8
Poland:	36.6 – 45.1
Slovenia:	64.0 – 77.1
Slovakia:	42.0 – 52.1

- Low wage levels and high wage dynamics can be seen as a sign of wage convergence backed by high productivity increases. This however conflicts with the fulfilment of the Maastricht inflation criterion.

ETUI REHS

Yearly compensation per employee, 2006 (1000 Euro)

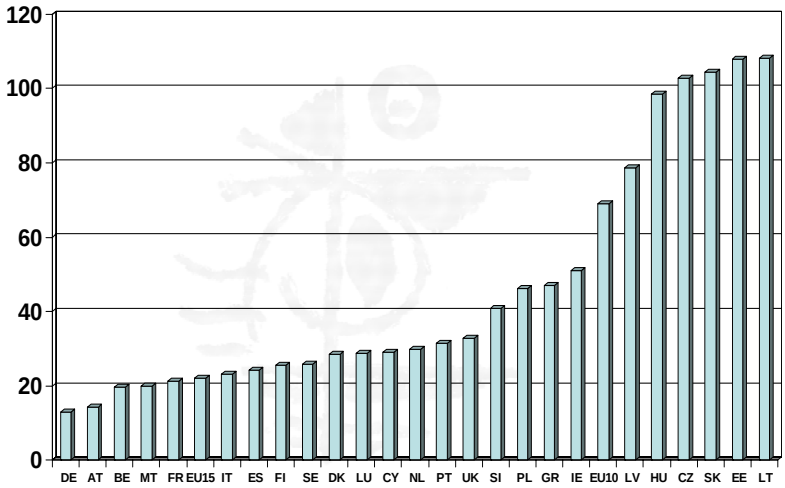


Source: AMECO

As the above figure shows, differences of wage levels within the EU25 are tenfold, with Latvia and Luxembourg being the extreme cases (with the EU accession of Bulgaria, differences within the EU27 have grown to 1:20). On the other hand, wage dynamics show precisely the opposite picture, as the next figure illustrates. Since the introduction of the single currency, wage increases in five of the new member states were roughly 10 times those of Germany or Austria when calculated on euro basis.

ETUI REHS

Change in nominal yearly compensation per employee in Euro, 1999-2006 (%)

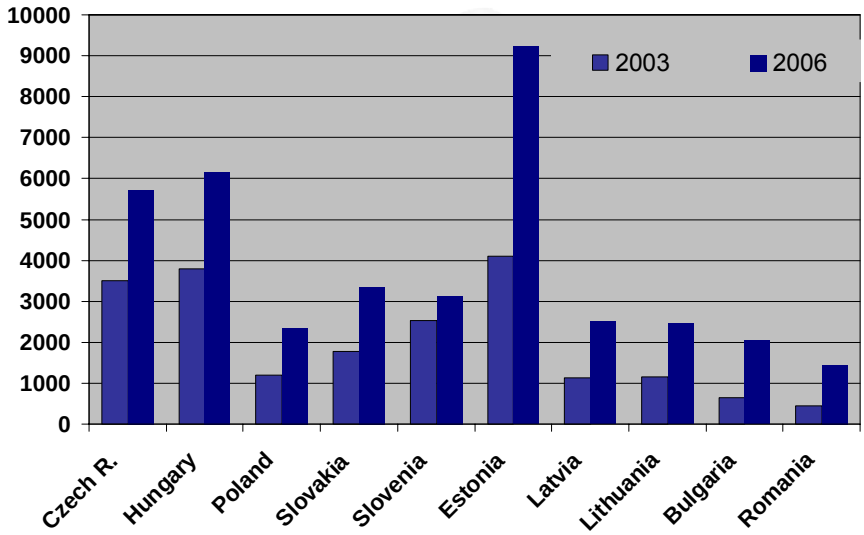


Source: AMECO

- Prices in the new member states are significantly below the EU25 level, ranging from 76.4% in Slovenia to 54.7% in Lithuania.

Inward FDI stock per capita in NMS-5

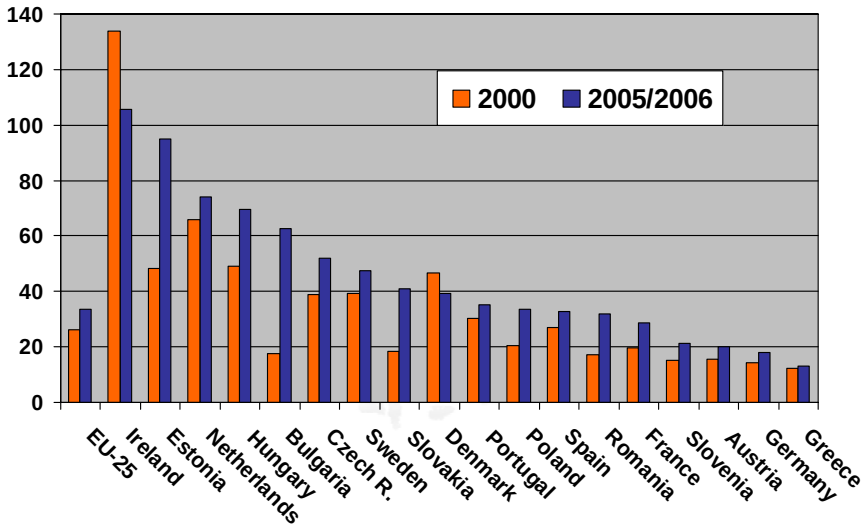
in EUR, 2003-2006



Source: WIIW 2007

- Transformation and the fundamental structural change of the economy is driven by foreign direct investments (FDI) and foreign investment enterprises (FIE) have contribute greatly to exports, GDP growth and productivity growth. Some of the CEE countries have the highest levels of per capita inward FDI stock within the EU and the trend is growing as figures from 2003 and 2006 demonstrate.

Inward FDI stock per GDP in selected EU members, %



Source: WIIW 2007

- Uneven productivity growth with a huge gap between the tradable (triggered by the high productivity of foreign investment enterprises) and the non-tradable sectors is characteristic for all CEE economies. This is in line with general trends of catching-up economies, where productivity in tradable goods sectors will tend to rise faster than in non-tradable sectors (Balassa-Samuelson effect). Since wage increases tend to be more or less similar in all sectors, relatively faster productivity growth in the tradable sector of accession countries will convert into a higher inflation rate if the exchange rate remains constant.

- Higher social risks in the form of a 'welfare deficit' accumulated during transformation, including severe labour market tensions (low employment and/or high unemployment) and an increase in poverty and inequality. These need special attention, especially if the European Social Model is taken as reference.[22]

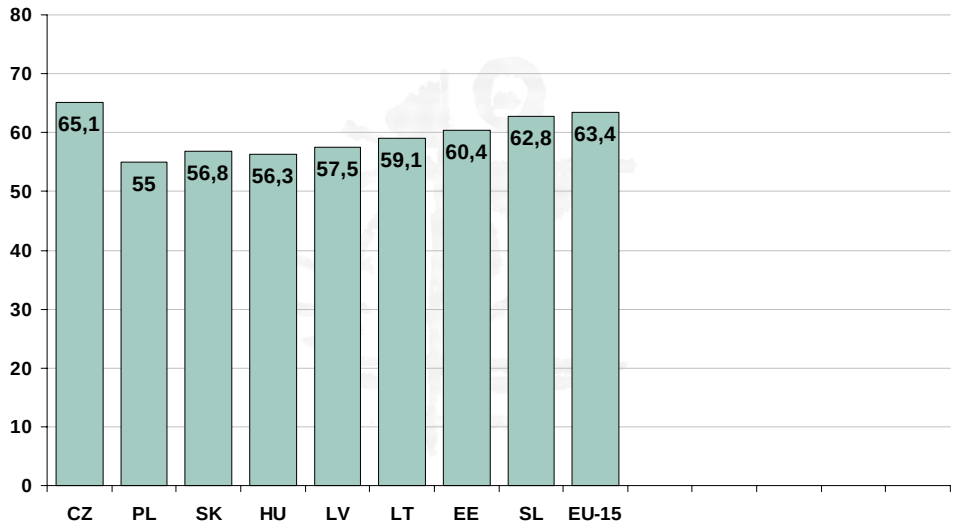
- Economic backwardness, implying a need for greater investment. Public investments in infrastructure, health care, education, research and development and environmental protection are badly needed for these countries to induce convergence with their more developed EU counterparts and to comply with their commitments related to adoption of the *acquis communautaire*.

Labour market developments

It is widely known that employment rates were characteristically low throughout the transformation process in most of the CEE countries, with the exception of Slovenia and the Czech Republic. In some countries this has been aggravated by high unemployment (especially Poland and Slovakia). Data from 2000 show employment rates characteristically under 60% of the population aged between 15 and 64 years, while the corresponding rate for the EU15 was 63.4%. The unemployment rate was the highest in Poland, Lithuania and Slovakia in 2000 (16.1%, 16.4% and 18.8% respectively) and the lowest in the Czech Republic, Slovenia and Hungary (8.7%, 5.7% and 6.1% respectively), while it stood at an average 7.6% in the EU15.

[22] See more on this in. Rhodes, M and M. Keune (2006): EMU and Welfare State Adjustment in Central and Eastern Europe. In: K. Dyson (ed.): *Enlarging the Euro-Area: External Empowerment and Domestic Transformation of East Central Europe*, Oxford University Press, Oxford, pp 279-301.

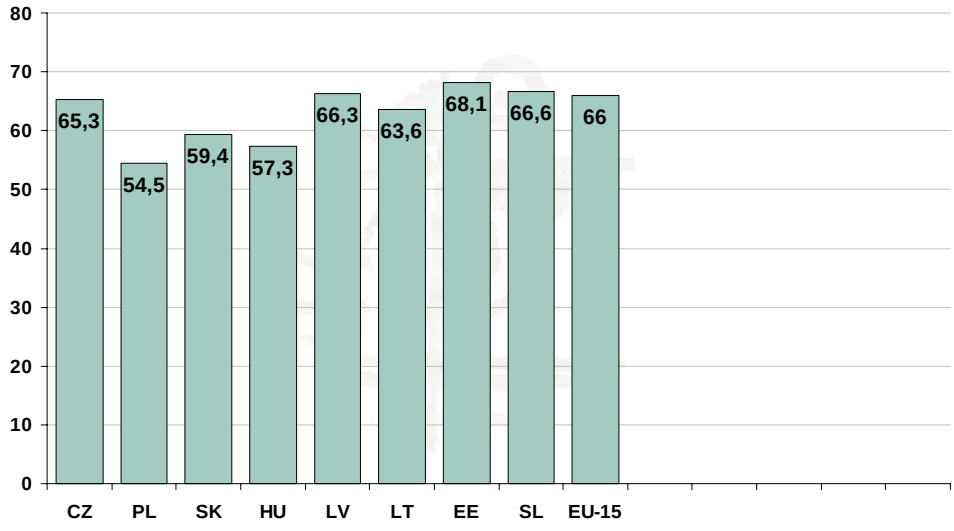
Employment rates, 2000



Source: European Commission, EIE 2007

The situation shows certain shifts after six years. Only the Baltic states showed substantial employment creation in this period with 7.7 and 8.8 percentage points growth in the employment rate in Estonia and Latvia. In the case of Poland the already very low rate fell further. At the same time, the EU15 showed a rise of the employment rate by 2,6 percentage points.

Employment rates, 2006



Source: European Commission, EIE 2007

Job creation thus did not take place in most of the CEE countries, even though growth rates were at the level of 4-5% and inward FDI had been high. Only the Baltic states with 8-10% GDP growth could manage to reach significant employment growth.

It is peculiar that unemployment decreased at the same time in most of the countries (with the exception of Hungary). Poland and Slovakia showed significant decreases of unemployment, which was not reflected in job creation. Especially in Poland and Lithuania the decrease of unemployment was more due to outward labour migration than to job creation. In Lithuania the spectacular improvement of the unemployment rate ran parallel with a modest increase of the employment rate, whereas in Poland the rate of unemployment decreased substantially, while the employment rate also fell somewhat.

Jobless growth is thus not verifiable on absolute terms, but indeed on relative terms, as much of the growth is due to productivity improvement and mostly due to FDI. It seems, at least on basis of the experience of the period 2000-2006 that CEE countries need growth levels above 5% in order to achieve stable employment growth. Especially countries with high foreign investment activity the employment effects are modest as in these cases GDP growth is fuelled by productivity increases.

It is also remarkable that when taking averages into account, job creation was more solid in the EU15, where economic growth is much slower than in the CEE NMS.

Contradiction between European objectives regarding CEE countries

However, it is an objective of most new member states to abandon their low wage profile and promote the development of a knowledge-based economy. However, forcing inflation rates to meet the SGP level could hamper productivity development, growth and real convergence.

There are also problems with the fiscal criteria. The aim behind the Stability and Growth Pact (SGP) was sustainable public finances by maintaining an appropriate public debt to GDP ratio. The rigid SGP criteria – including a 3% public deficit to GDP ratio – were tailored to the growth rates of the current EMU countries and to the debt levels of the most indebted countries, such as Belgium and Italy. EMU candidates with public debt levels well below the 60% mark and nominal growth levels close to 10% could well maintain annual deficits of 4–4.5% without increasing their public debt to GDP ratios.[23] Given that the 'straitjacket' of the current SGP rules is unlikely to fit the specifics of these countries, growth, employment and real convergence would seem to be in real danger.

Further arguments refer to welfare risks and public investment, as already mentioned. Most transformation countries are afflicted by a 'welfare deficit' and are in desperate need of well targeted public investments. Here the principles of the European Social Model and the Lisbon agenda are indicative. It should also be seen that there is a clear contradiction between the objectives of the Lisbon agenda and the current SGP criteria in the CEE new Member States. The relation between the SGP criteria and the principles of the European Social Model can also be seen as ambiguous.

The clash of objectives is apparent if the principles of the European Social Model are considered. While on the one hand the EU15 countries are becoming increasingly concerned about what they call 'social dumping' from the East, rigid application of the SGP criteria imposes serious constraints on CEE countries, preserving distortions in price and cost structures, and disproportionalities between wage and productivity levels.

If we look at employment issues and objectives, the National Action Plans for Employment (NAPE) of most countries have formulated ambitious goals to improve the situation, with particular attention to the employment rate, youth unemployment, long-term unemployment and at-risk groups. However, labour market policy expenditure is very low and in most cases declining. It is worth

[23] Surányi, Gy. (2005) The euro framework must be reformed, *The Banker* (March), London.

adding that expenditure on active measures makes up a tiny – and in most cases declining – proportion of total spending. NAPE provisions on upgrading active labour market policies were often pushed into the background, as budgets were insufficient to cover even the passive measures. It is also worth asking how the ambitious NAPE objectives of the new member states match up to their monetary and fiscal convergence plans in the run-up to the euro.

It seems therefore that the main story in relation to EMU accession and its timing is not the ability of these countries to cope with the SGP criteria (as is almost universally declared) but rather its rationale and impact. Naturally, the timing of the process is most amenable to rational action. The main question in policy terms concerns how the agenda of EMU accession suits the national priorities of the new member states.

Growth and jobs in the Eastern EU Member States

- Gábor Pellényi (ICEG European Center) -

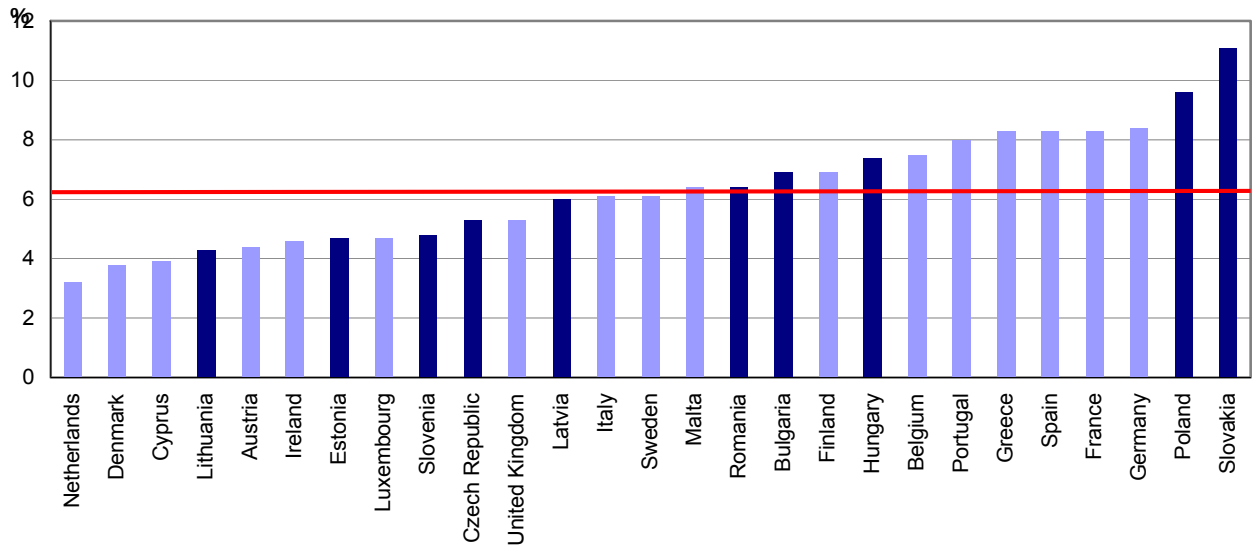
Introduction

Jobless growth remains a problem throughout the Eastern EU Member States (EEUMS).[24] Activity and employment is low in many countries and economic growth does not create as many jobs as in Western Europe. This phenomenon has far-reaching consequences; besides being a drag on public finances, it also creates social tensions. This paper gives a brief overview of job creation in the EEUMS. It assesses the role of labour market institutions and education in job creation before pointing out some policy-relevant observations.

Problems with job creation

Headline unemployment figures give a favourable first impression of the EEUMS. Although the highest rates are still observable in Poland and Slovakia, the rest of the region is either around or below the EU average in terms of unemployment.

Figure 1. Harmonised unemployment rates in EU Member States, 2007



Note: the horizontal red line indicates the EU27 average. Source: Eurostat

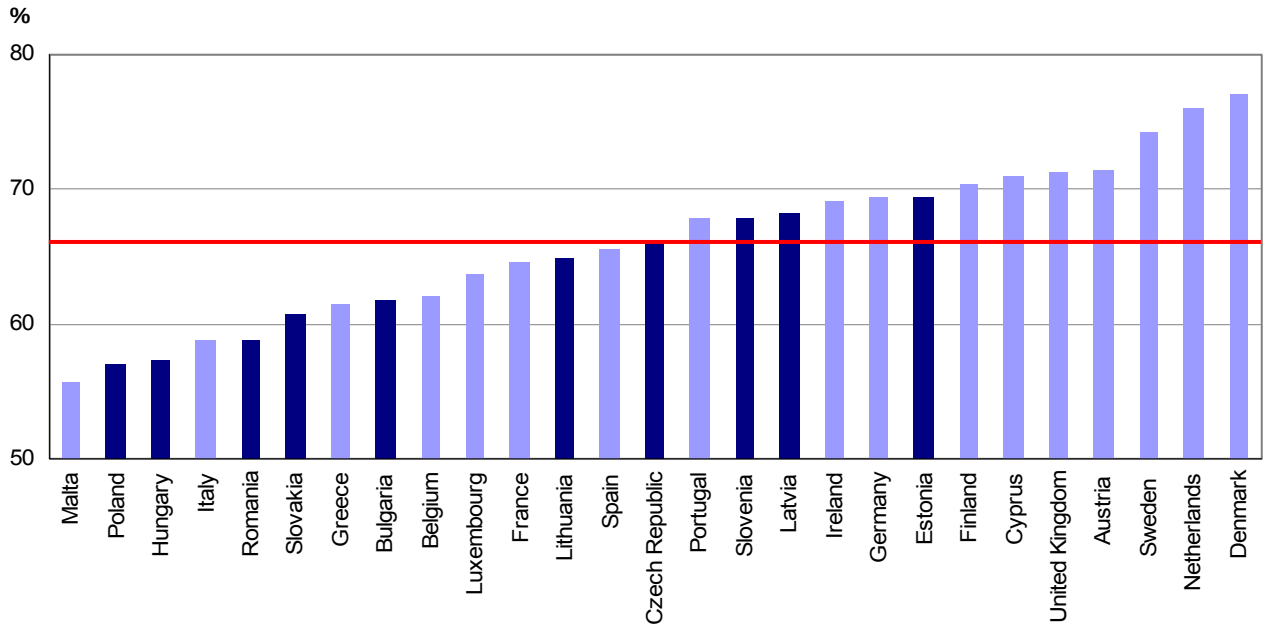
The ranking of EEUMS by unemployment rates changed greatly between 2000 and 2007. The Baltic countries managed to reduce their double-digit rates effectively to full employment; Bulgaria is following their path. Poland and Slovakia also managed to cut their unemployment rates by 6-7 percentage points since 2000. Improvements were smaller in the rest of the region and Hungary is the only country with rising unemployment since 2000.

However, employment rates show a less favourable picture. On average these figures are typically lower than the EU27 average. Three of the five worst performers in the EU are in Central and Eastern Europe with employment figures comparable to that of Italy. More worryingly, the

[24] Throughout this paper the Eastern EU Member States (EEUMS) country group consists of Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.

employment rate rose by five percentage points in Italy between 2000 and 2007 while it fell in Romania and increased by no more than two points in Hungary and Poland. The fast-growing Baltic states and comparably richer Slovenia and Czech Republic are in better shape although they too lag behind the top performers in Europe.

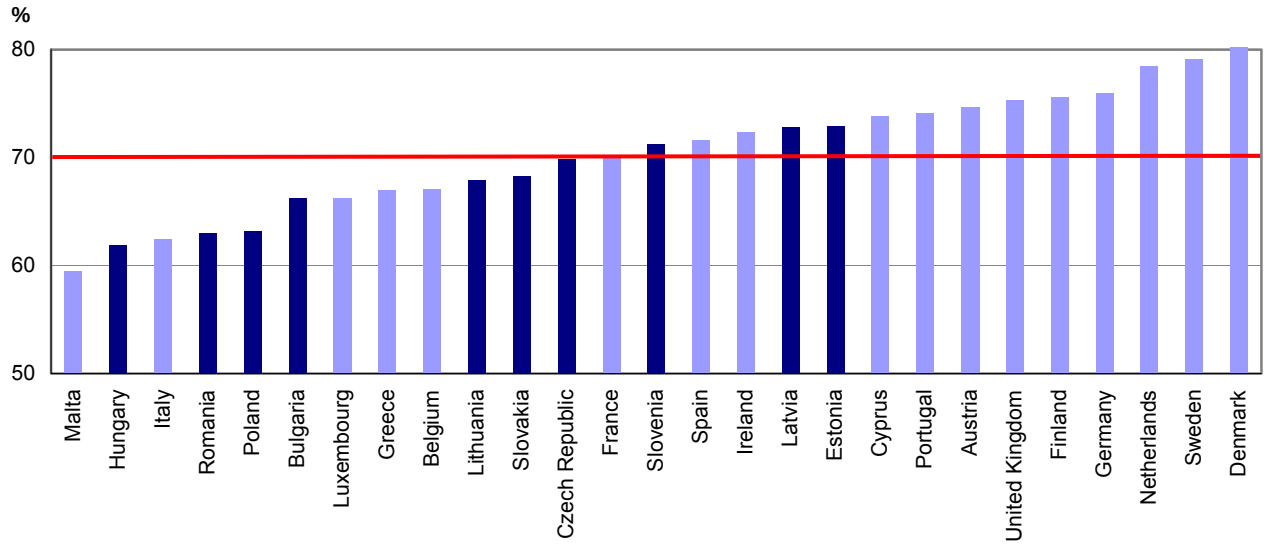
Figure 2. Employment rates in EU Member States, 2007



Note: the horizontal red line indicates the EU27 average. Source: Eurostat

Activity figures depict similar tendencies. They are especially problematic in Bulgaria, Hungary, Poland and Romania who are all among the laggards of the EU in this respect. Low activity can be due to a number of factors: the disillusionment of those unemployed for a long period, inadequate incentives to seek employment, or the outward migration of jobseekers, among others. A particularly important issue is early retirement, which was often encouraged to tackle high unemployment following transition but in effect irreversibly drove out legions of potential workers from the labour market.

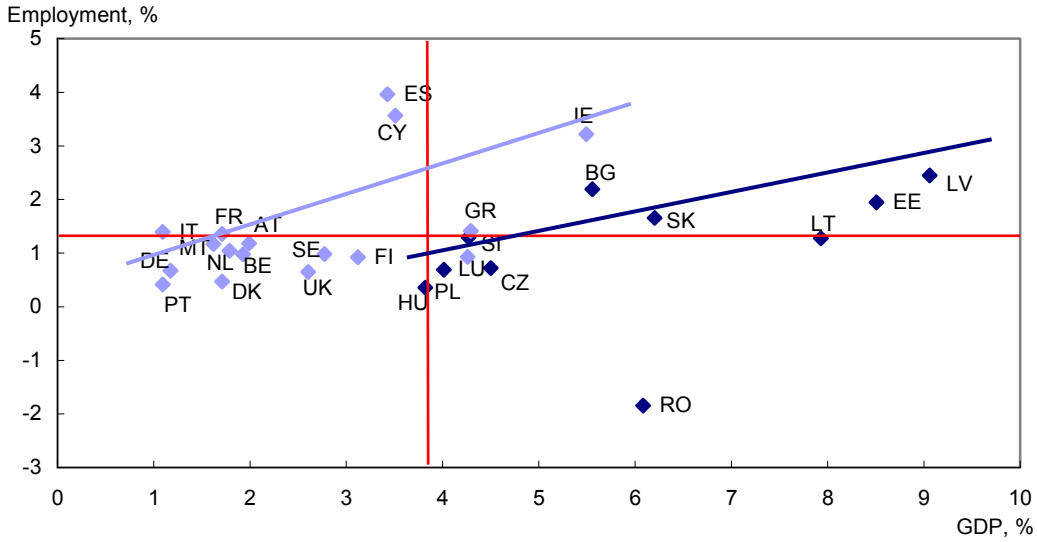
Figure 3. Activity rates in EU Member States, 2007



Note: the horizontal red line indicates the EU27 average. Source: Eurostat

It is striking that the EU15 countries created more jobs with less growth between 2000 and 2007 than the EEUMS. The 2001-03 period was characterised by a worldwide economic slowdown in growth; some EEUMS countries even experienced recessions, leaving a mark on job creation. Since 2004 growth and job creation picked up, thanks to EU accession and a favourable business cycle. Still, with more than twice as fast growth the EEUMS could create jobs only as fast as the EU15 (see chart 4). Romania is an outlier but its inclusion does not change results.

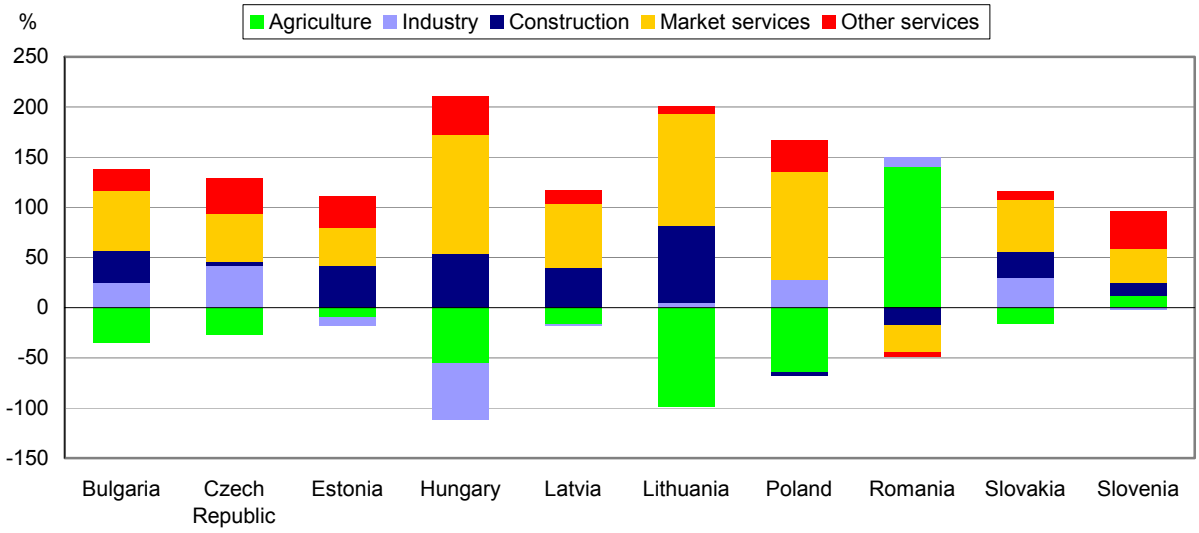
Figure 4. GDP and employment growth in EU Member States between 2000 and 2007



Note: compound annual growth rates, employment according to LFS definition. Light and dark blue dots represent EU15 (plus Cyprus and Malta) and EU8+2 countries, respectively. Light and dark blue lines represent linear trends for EU15 and EU8+2 countries respectively. Red lines represent EU27 averages. Source: own calculations based on Eurostat

Behind this gloomy overall picture there are mixed individual performances, which can be better understood by looking sectoral job creation (chart 5). The fastest employment growth was recorded in the Baltic states and Bulgaria, at around 1-2% per year. The role of construction booms behind this performance is apparent since construction alone accounted for 40-80% of net employment growth between 2000 and 2007 in these countries. Market services were particularly great contributors in Hungary, Lithuania and Poland. Industrial employment typically grew at a moderate pace but declined in Hungary as traditional low-tech industries were priced out of the market by wage increases. The secular decline in agricultural employment is observable throughout the region; however the Romanian recession during the period apparently channelled jobseekers back to agriculture.

Figure 5. Sectoral contribution to net employment growth between 2000 and 2007 in the eastern EU Member States



Source: Eurostat

Do institutions matter?

What explains this apparent weakness in job creation? The literature often turns to institutions to explain divergent labour market performance. More generous unemployment benefits, more stringent employee protection legislation, sectoral wage bargaining and high tax wedges on labour are supposed to be detrimental to job creation and can lead to persistently higher unemployment.

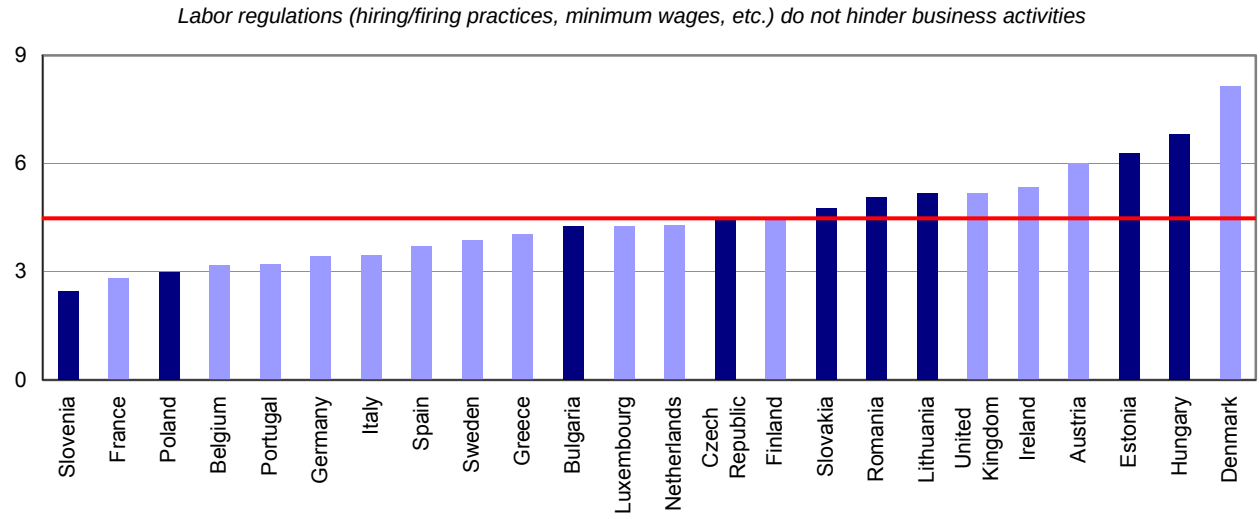
This argument has been put to test by a number of authors in recent years. Boeri and Garibaldi noted that labour market flexibility in Central and Eastern Europe is not bad: they managed to reallocate their labour force following transition.[25] They point out that employee protection legislation is in fact less restrictive in most EEUMS than in Western Europe while minimum wages were generally around 30% of average wages as opposed to the OECD average of 60-70%. Union density is fairly low, wage bargaining takes place at the company level and they find little evidence for unemployment or low wage traps. In other words, actual institutions appear to be favourable for job creation. In their opinion the low job content of growth in the 1990s is attributable to the fact that productivity growth was associated with job destruction after labour hoarding in the socialist

[25] Boeri, T. and P. Garibaldi (2006): Are Labour Markets in the New Member States Sufficiently Flexible for EMU? Journal of Banking and Finance, 30, 1393-1407.

era. Nevertheless, they fail to explain why the growth elasticity of employment remained low in the new millennium. Ederveen and Thissen concluded that labour market institutions explain only a small share of the variation in unemployment rates in EEUMS.[26]

A casual look at chart 6 gives a similar impression. In most EEUMS labour market regulations do not hinder business activities more than in Western Europe. Indeed, Hungary and Estonia are perceived by corporate leaders to have business-friendly labour regulations. However, the employment rate is just as high in Hungary as in Poland, where regulations are less satisfactory for employers. On the other hand, regulations are the most 'rigid' in Slovenia, but the country's employment rate is similar to that of Ireland with more 'flexible' regulations.

Figure 6. Labour market regulations in selected EU Member States, 2007

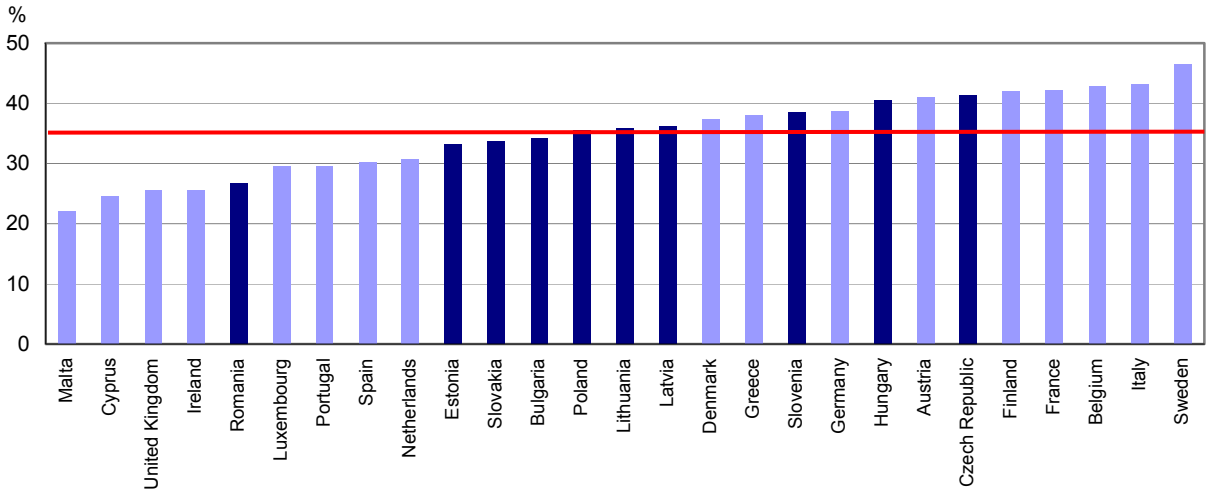


Note: the horizontal red line indicates the average of available EU members. Source: Eurostat

The implicit tax rate on labour is generally around the EU average, therefore it is not obvious that high taxes cause low job creation. Still, one should keep in mind that most EEUMS aim to attract investors by offering low tax rates on capital and then compensate for smaller capital tax revenues by over-taxing consumption and especially labour. This can induce a bias towards capital-intensive investments which have a lesser impact on employment growth.

[26] Ederveen, S. and L. Thissen (2007): Can Labour Market Institution Explain High Unemployment Rates in the New EU Member States? Empirica, 34, 299-317.

Figure 7. Implicit tax rates on labour in EU Member States, 2005



Note: the horizontal red line indicates the average of EU members. Source: Eurostat

Furthermore, since some EEUMS (particularly in Central Europe) maintain costly welfare systems relative to their development level, there is little scope to reduce tax rates on labour. Cuts in public spending could still be the way forward. Indeed, Central and Eastern European countries with higher public spending have recently performed worse than other transition economies.[27] Likewise, there is evidence that tighter fiscal policies are associated with more employment growth in the region, presumably because fiscal discipline strengthens the confidence of investors and public pay rises do not crowd out private employment.[28]

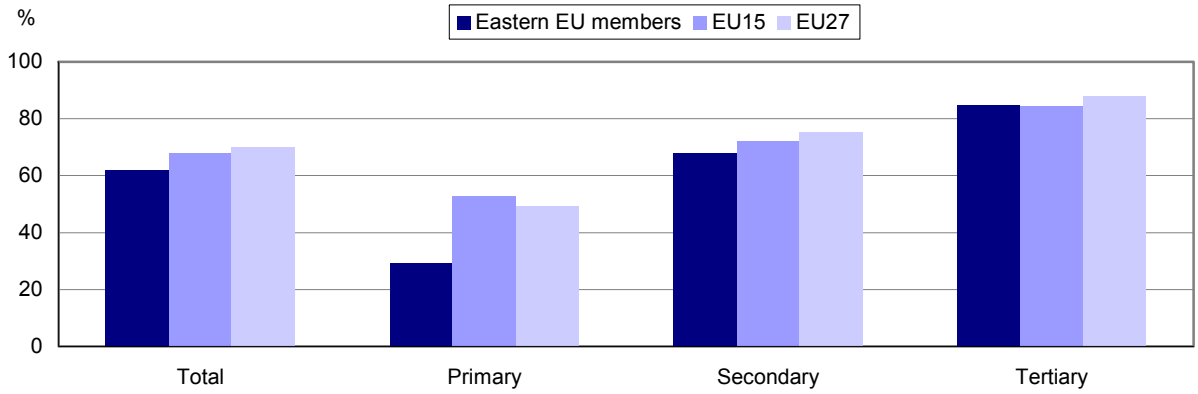
The role of education

Another set of explanations for low employment growth in the EEUMS concerns education. Chart 8 indicates that the employment rate of those with at most primary education differ markedly from Western European levels, while the employment prospects of people with secondary or higher education are very similar in the two regions. If the share of low-skilled was as high in the EEUMS as in the EU15, this gap would imply an 8 percentage point lower employment rate. This turns out to explain the entire difference between the employment rates of the two regions.

[27] Åslund, A. and N. Jenish (2007): The Eurasian Growth Paradox. In: Bourguignon, F. and Pleskovic, B. (eds.): Beyond Transition. Annual World Bank Conference on Development Economics – Regional, World Bank, Washington.

[28] Boeri and Garibaldi (2006)

Figure 8. Employment rates among the 15-64 years old in the EU by the highest level of education, 2007



Source: Eurostat

What are the reasons for this? First, the low-skilled had lost employment disproportionately following transition. Second, the skills of these workers were highly firm- or process-specific and their ability to adapt and learn has remained limited.[29] This is due to their lack of basic skills and competences. Köllő (2006) analysed results from the 1994-1998 in European countries. Adults in Central and Eastern Europe with only primary education performed worse in the 1994-1998 International Adult Literacy Survey (IALS) tests than their Western European counterparts. Also, the gap between the performance of younger and older adults with the same level of education was greater in central and Eastern Europe. In other words, low-skilled people educated in the socialist system are at a particular disadvantage in terms of skills and competences.[30]

Third, job creation in the private sector was biased against low-skilled workers; more so, than in Western Europe. Although jobs in Central and Eastern Europe were less skill-intensive than in Western Europe, low-skilled workers were strongly discouraged from jobs requiring higher skills. Since their competences were deemed inadequate, candidates with higher education were chosen for these positions.[31] Fourth, technological progress (the diffusion of ICT technology) has led to the substitution of low-skilled workers with machinery and skilled labour as the skill content of jobs rises. This implies that uneducated workers will continue to be squeezed out of the labour market.

These findings point to the deficiency of education systems in some EEUMS. This is in some cases reflected for example in PISA test scores which measure the competences of 15 year-olds in reading, mathematics and science. Bulgaria and Romania are lagging far behind other EU members. Latvia, Lithuania and Slovakia also fall below the EU average, which itself lags significantly global leaders (such as Finland). The poor state of vocational education is also to blame; it suffers from falling investments, poorly trained teachers and the decline of traditional industries. The curriculum of these schools often does not match market demand. While the industry-specific skills of graduates deteriorate quickly, not enough emphasis is placed on general competences and adaptability. Due to their deteriorating quality general secondary education is

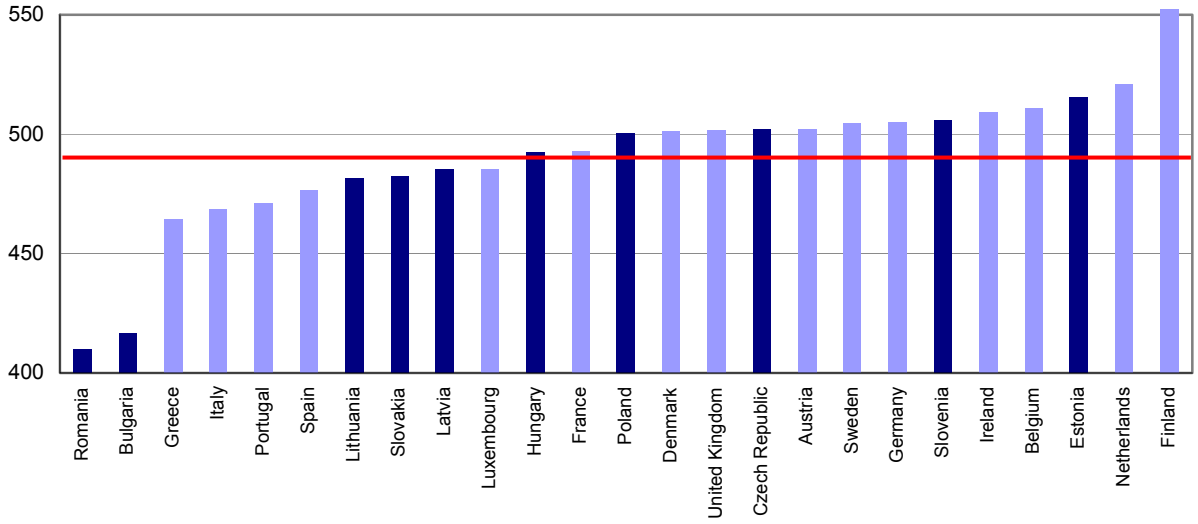
[29] Commander, S. and J. Köllő (2008): The Changing Demand for Skills: Evidence from Transition. Economics of Transition, 16 (2), 199-221.

[30] Köllő, J. (2006): Workplace Literacy Requirements and Unskilled Employment in East-Central and Western Europe: Evidence from the International Adult Literacy Survey (IALS). Budapest Working Papers of the Labour Market, BWP 2006/7.

[31] Köllő (2006)

preferred, and only children with poorer skills are enrolled into vocational schools. This contributes to the further deterioration of these schools' quality.[32]

Figure 9. Average PISA scores of EU Member States, 2006



Note: score = average of reading, mathematics and science scores. The horizontal red line indicates the average of available EU members. Source: OECD

Conclusions and policy implications

The EEUMS have lower employment rates than Western European counterparts. Moreover, they need faster economic growth to achieve the same rate of employment growth as the West. This poor performance is due to structural factors: in some cases inadequate incentives to work, and in most cases problems with basic and vocational education. Economic growth appears to be more biased against the low-skilled than in Western Europe. This suggests that jobless growth may remain a long-term problem in the EEUMS. There is no simple solution to this issue, but a number of policies can help:

Although the long-term objective of EEUMS is the shift to a knowledge-based economy, this will be the task of future generations. A large share of working-age population lacks the skills for this transition and can only be employed in low-tech (hence low-wage) occupations. If wages converge to Western levels too fast, these jobs become endangered. Without working parents, children's chances of receiving proper education and participating in the knowledge economy deteriorate. The desire to quickly reach Western living standards can thus contribute to more polarised societies.

Disciplined fiscal and income policies help to build up the confidence of investors and can prevent industries employing low-skilled workers from being priced out of the market. Construction booms (a common phenomenon in the region) can raise employment in the short term, but they can give rise to dangerous macroeconomic imbalances.

[32] Canning, M., M. Godfrey and D. Holzer-Zelazewska (2007): Vocational Education in the New EU Member States: Enhancing Labor Market Outcomes and Fiscal Efficiency. World Bank Working Paper No. 116.

Reforms to welfare and tax systems should enhance the incentives to work. Labour markets in the region are generally flexible enough, but social assistance can still become more targeted. Early retirement should not be encouraged to maintain the sustainability of pension systems. Tax incentives for capital income at the expense of labour need to be reconsidered since they can lead to the adoption of technologies with low labour intensity in countries where cheap labour is still the main comparative advantage.

Education is the key to long-term growth and employment prospects. Since highly educated jobseekers face few difficulties in finding employment, policies should be targeted at children left behind in schools. Primary education should aim to provide sound basic competences to the widest possible range of population. Among others, vocational education needs to adapt to market needs; shift its focus to offer more general skills; and shed the stigma attached to blue-collar occupations.