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Limited Fiscal Space in CESEE: Needs and Options for Post-Crisis Reform

68th East Jour Fixe of the Oesterreichische Nationalbank

February 28, 2011

Stability and Security.

No. 17

The issues of the "Workshops – Proceedings of OeNB Workshops" comprise papers presented at the OeNB workshops at which national and international experts – including economists, researchers, politicians and journalists – discuss monetary and economic policy issues. One of the purposes of publishing theoretical and empirical studies in the Workshop series is to stimulate comments and suggestions prior to possible publication in academic journals.

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Contents

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Editorial

Markus Eller

Peter Mooslechner

Doris Ritzberger-Grünwald

Oesterreichische Nationalbank

On February 28, 2011, the Oesterreichische Nationalbank (OeNB) organized its 68th East Jour Fixe entitled *Limited Fiscal Space in CESEE: Needs and Options for Post-Crisis Reform*. The East Jour Fixe workshop series was initiated by the OeNB in 1991 as a high-profile policy discussion forum on economic reforms and developments in Central, Eastern and Southeastern Europe (CESEE). In this context, participants from a wide range of backgrounds present their academic, political and professional expertise two or three times a year to a selected audience.

The 68th East Jour Fixe focused on the limited room for budgetary maneuver and on the limited resilience of public finance systems, which were revealed in the CESEE economies[1] during the 2008–09 financial and economic crisis. The workshop aimed at providing answers to three main questions: (1) What were the reasons for limited fiscal space? (2) What are the related implications and what kind of reforms are necessary to provide more fiscal space in the future? (3) Can an improved access to and a more effective use of international funds be considered as a possibility to create more fiscal space in CESEE?

The knowledge on fiscal policy developments is crucial for a central bank in order to properly guarantee price stability, to contain inflation expectations and to keep financial markets stable. Moreover, the workshop's focus on CESEE economies does not only reflect a strategic research priority of the OeNB but was also highly topical as the financial and economic crisis was the first real test for fiscal positions and institutions in most CESEE countries since the start of transition. During the crisis, only a few countries were able to implement significant stimulus packages, while fiscal headline positions deteriorated strongly in most countries of the region (however, on average, public deficit and public debt ratios increased less in the CESEE EU Member States than in the EU-27).

[1] The 68th East Jour Fixe focused mainly on the ten EU Member States from Central, Eastern and Southeastern Europe (CESEE) and partly on other countries in the region, such as Russia or Croatia.

To answer the above mentioned questions, the workshop brought together distinguished experts in the field, from both international institutions and public entities located in CESEE. Two introductory keynote speeches and the presentations in session 1 tried to identify the main reasons for limited fiscal space and showed how the crisis has affected fiscal policy in CESEE. *Bas Bakker* from the IMF outlined in his keynote speech unprecedented fiscal adjustment measures that were necessary during the crisis. Besides, he emphasized the importance of appropriate fiscal consolidation in the region. In the second keynote address, *Karsten Staehr* from Tallinn University of Technology and Eesti Pank proposed the use of funded pensions as a countercyclical tool to create more fiscal space in CESEE.

In Session 1, *Nadine Leiner-Killinger* from the ECB discussed the impact of fiscal policy structures and budgetary discipline on fiscal vulnerabilities, while *Markus Eller* from the OeNB elaborated the reasons of liquidity constraints that several governments in the region faced at the beginning of the crisis.

Session 2 featured a panel discussion among fiscal policy experts from CESEE public institutions – *Tomasz Jędrzejowicz* from Narodowy Bank Polski, *Petr Král* from Česká národní banka, *Neven Mates* from Hrvatska narodna banka and *Ľudovít Ódor* from the Slovak Ministry of Finance – debating country-specific lessons and reform options to create more fiscal space in CESEE in the future.

Session 3 addressed the role of international funds in the expansion of fiscal space in CESEE as they are deemed to have served as valuable buffers during the crisis. *Philippe Monfort* from the European Commission brought in the respective European Commission's experience with Structural Funds. *Jean Vrla* from the European Investment Bank debated the role of countercyclical financing via multinational banks. Finally, *Christian Kummert* from Kommunalkredit Austria AG discussed the role of commercial banks in co-financing large-scale infrastructure projects via multinational banks and specifically elaborated on the funding of public-private partnership (PPP) projects in CESEE.

After an introductory article by Markus Eller, Peter Mooslechner and Doris Ritzberger-Grünwald (OeNB), which elaborates the issue of limited fiscal space more broadly and summarizes the main conclusions and policy implications of the 68th East Jour Fixe, this conference volume collects the papers according to their presentation order in the workshop. The underlying presentations and the workshop program are available at *http://ceec.oenb.at (Activities)*.

Limited Fiscal Space in CESEE: The Issue, Underlying Economic Conditions, Related Implications and Policy Options

Markus Eller

Peter Mooslechner

Doris Ritzberger-Grünwald

Oesterreichische Nationalbank

1. Limited Fiscal Space: The Issue

The extraordinary intensity of the economic downturn during the 2008−09 "Great Recession" posed demanding challenges for an appropriate fiscal policy reaction almost globally, not only in advanced economies but also in Central, Eastern and Southeastern Europe (CESEE) – a region where for the first time since the start of transition in the early 1990s the capacities of public finance systems were put under real pressure, even if the starting position in terms of public sector size and level of the government debt ratio was better than in many advanced economies. Theoretically, in such a situation, fiscal policy makers can resort to (1) strong automatic stabilizers, (2) discretionary stimulus packages and (3) favorable borrowing conditions in order to properly cushion the downturn. In reality it is, however, very hard, if not impossible, to rely on all three of these options at the same time, especially in emerging countries with poor fiscal institutions, a lack of trust in the government or an insufficient historical track record for fiscal adjustment. As a consequence, countries might not be able to provide sufficient fiscal support when it is actually most needed. These significant policy limitations were complicated even more by a general shift in mood against the effectiveness of fiscal policy driven by high refinancing needs, rising sovereign risk premia and all sort of spillovers as a consequence of the ongoing crisis.

The notion of fiscal space, as it is used here, captures the capability of fiscal policy makers to properly respond to a business cycle shock.[1] Both sides of the same coin have to be considered in this context: on the one hand, the business cycle stabilization capacities of public finance systems via discretionary measures and free operation of automatic stabilizers; on the other hand, the capacity of public finance systems to remain resilient to a shock, i.e. to avoid a budget or debt crisis because of the shock.

A brief diagnosis of limited fiscal space in the CESEE EU Member States (CESEE-10[2]) contains the following elements:

- First, discretionary fiscal policy was expansionary in most countries of the region in the pre-crisis boom period (basically due to excessive public spending), while during the crisis it was only possible in exceptional cases to implement sizeable stimulus packages (Poland).[3]
- Second, despite the overall lack of fiscal stimuli, fiscal headline positions strongly deteriorated during the crisis (with the very specific exception of Hungary), which can be traced back to a stronger-than-expected revenue erosion (this will be elaborated in more detail in subsequent contributions). At the same time, it should also be noted that during the crisis public deficit and public debt ratios deteriorated, on average, less strongly in the CESEE-10 than in the EU-27 (see chart 1). However, the tolerance threshold for public indebtedness might be lower for emerging economies than for advanced economies.
- Third, financing conditions deteriorated remarkably during the crisis. This is illustrated by the development of CDS premiums for government bonds, which rapidly increased at the end of 2008 and at the beginning of 2009 and, despite some recovery thereafter, are still above the levels observed before the crisis (see chart 2).[4,5] A few countries were accordingly confronted with sovereign

[1] There are several definitions of fiscal space in the literature, e.g. financing the deficit without either a sharp increase in funding costs or undue crowding out of private investment (see Ostry et al., 2010).

[2] Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.

[3] Baldacci et al. (2009) show for a worldwide sample that during systemic banking crises the effectiveness of fiscal expansions (if they were implemented at all) and the quality of fiscal performance were undermined in countries with insufficient fiscal space. This evidence backs the view that countries with limited fiscal space are constrained in using fiscal policy for effective business cycle stabilization.

[4] Darvas (2010) expects that risk premiums in CESEE will remain higher than their pre-crisis levels for a prolonged period as a consequence of the crisis-related rise in overall risk perceptions ("flight to quality") and unjustifiably low CDS levels before the crisis.

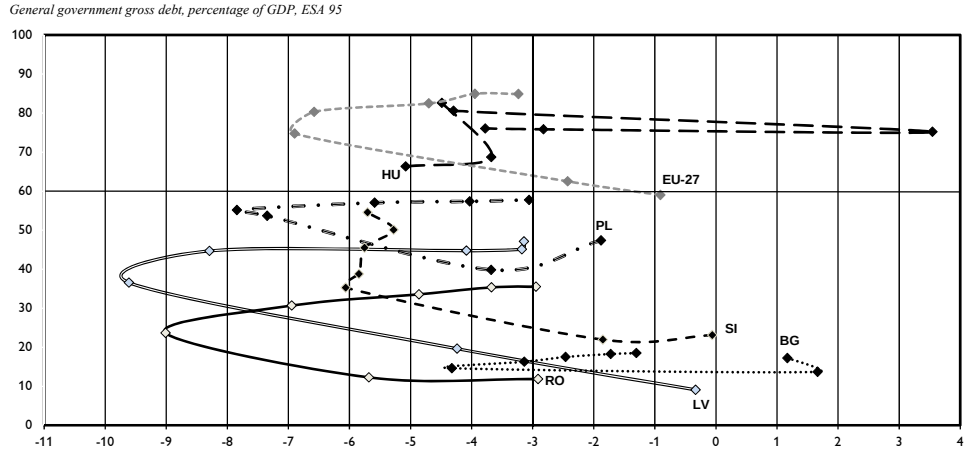
[5] Interestingly, at the beginning of the crisis the sovereign CDS premiums for euro area periphery countries (left panel in chart 2) were considerably lower than those in the

liquidity problems and had to resort to the IMF and the EU for multilateral assistance (Hungary, Latvia, Romania).

Altogether, this brief diagnosis indicates that public finance systems in most of the CESEE-10 have neither been able to appropriately contribute to business cycle stabilization nor to withstand a large business cycle shock, which points to both limited crisis mitigation capacity and limited crisis resilience.

The remainder of this introductory contribution to the overall topic of this workshop is structured as follows. Section 2 elaborates the reasons for limited fiscal space in CESEE. Section 3 outlines fiscal peculiarities of the CESEE countries in comparison to Western Europe and discusses some related implications for euro area enlargement. Finally, section 4 summarizes the policy options to create more fiscal space in the future as discussed in the workshop.

Chart 1: Development of the General Government Budgets of Selected CESEE EU Member States, 2007–2013

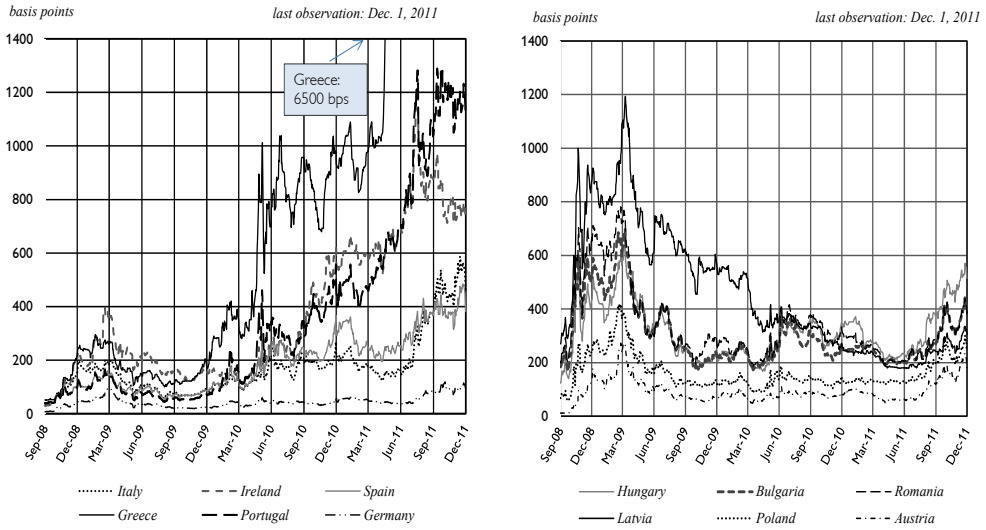


Source: European Commission, AMECO database. 2011−13 data are forecasts as at end-October 2011.

Note: The first observation point (2007) is marked by the country code.

CESEE EU Member States. This picture has, however, been reversed once several euro area periphery countries were confronted with serious sovereign solvency concerns as from early 2010.

Chart 2: Credit Default Swap Premiums for Government Bonds with 5-Year Maturity

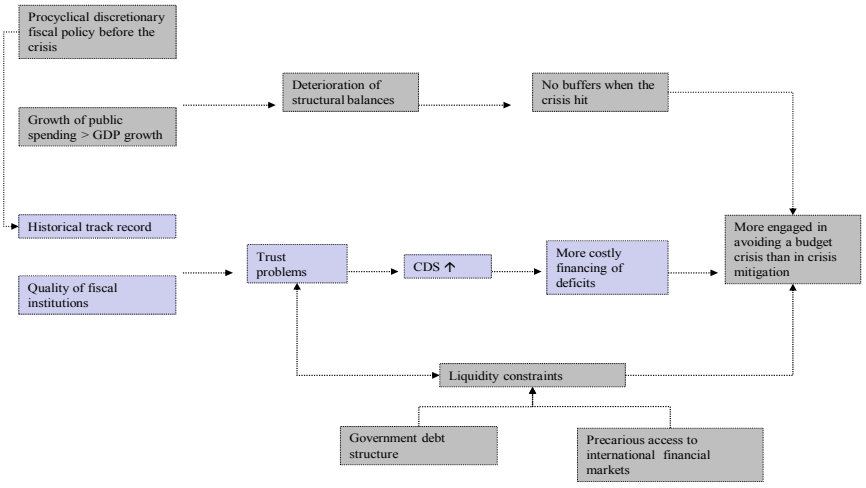


Source: Thomson Reuters, compiled by the OeNB.

2. Reasons for Limited Fiscal Space in CESEE

At least three different channels can be distinguished that illustrate why during the crisis most of the CESEE countries had to put more effort into avoiding a budget crisis instead of being able to use fiscal policy for crisis mitigation (see chart 3). These channels are elaborated in this section in detail by providing some diagnostics and referring to related empirical evidence.

Chart 3: Reasons for Limited Fiscal Space in CESEE



2.1 Procyclicality

In general, procyclical discretionary fiscal policy before the crisis and growth of public spending that exceeded potential GDP growth led to a deterioration of structural balances, leaving no buffers when the crisis hit the CESEE region. Exceptions to this overall picture are Bulgaria and Estonia, which in the pre-crisis boom period had accumulated fiscal reserves from budgetary surpluses and used them during the crisis for financing increased deficits (with the result that the debt-to-GDP ratio remained fairly low).

Available empirical evidence broadly points to procyclical fiscal policy in the CESEE-10. Kaminsky et al. (2004) and Ilzetzki and Végh (2008) made a case for procyclical government expenditure in developing and emerging market countries during good times. Rahman (2010) elaborated for the CESEE-10 that procyclicality in total government expenditure was driven in the period 1995–2007 primarily by capital outlays, while compensation to employees and social expenditure were rather insensitive to output gaps. Eller (2009) showed that discretionary fiscal easing in boom times was especially pronounced in Romania, the Baltic countries and also in Slovenia. In contrast, Staehr (2010) found that the *overall* budgetary balance had been moderately countercyclical in the CESEE-10 in the period 1999–2008 (stemming primarily from the revenue side).

According to an optimal fiscal policy model developed by Talvi and Végh (2005), the procyclicality of fiscal policy in developing countries is ascribable to large fluctuations of tax bases which lead to abundant fiscal resources during good

times. Given a lack of appropriate fiscal rules and/or institutions, budgetary surpluses are, however, not saved for subsequent bad times but are rather spent immediately due to political pressure. As a consequence, governments in developing countries are unable to generate large-enough surpluses during expansions, which forces them to borrow more during recessions. This reasoning is quite likely also valid for the emerging economies in CESEE. In a similar vein, scholars are arguing that political pressures can lead to expansionary fiscal policies regardless of the cyclical position. For instance, Brender and Drazen (2005) showed that political budget cycles (i.e. pre-electoral fiscal expansion to increase the probability of re-election) are more prevalent in new democracies than in established democracies. As another reason for procyclical fiscal policy, one should consider that fiscal policy decisions might have been based on information that later turned out to have incorrectly indicated the stage of the business cycle. Real-time and ex post output gaps may considerably differ. This holds in particular for emerging economies as they are prone to substantial and frequent shocks.

2.2 Historical Track Record and Quality of Fiscal Institutions

Fiscal space in its policy sense and very much related to policy credibility strongly depends on the historical track record for fiscal adjustment (see Ostry et al., 2010). The comparative period for the CESEE countries is relatively short. Nevertheless, various CESEE countries have consistently failed to meet their structural balance targets before the crisis (partly due to the procyclicality bias discussed above and a lack of qualitative fiscal institutions). As a consequence, trust in fiscal discipline had been undermined and once the crisis hit these economies, CDS spreads and thus the financing costs steeply widened although the debt-to-GDP ratios were still in a comparatively good shape.[6] A strong linkage between failed implementation of fiscal plans and worse fiscal outcomes is revealed by Beetsma et al. (2009) for the EU-15.

2.3 Sovereign Liquidity Constraints and Government Debt Structure

Domestic capital markets in CESEE are still less developed than in advanced countries and, as a consequence, governments in the region tend to and have to borrow more externally and more in foreign currency than advanced economies. At the beginning of the crisis, when CESEE governments had to rely on these external

[6] This also points to tolerance thresholds for public indebtedness that are lower in emerging economies than in advanced economies. Sturzenegger and Zettelmeyer (2006) highlighted that sovereign debt defaults occurred in several emerging economies at reasonably low debt-to-GDP ratios.

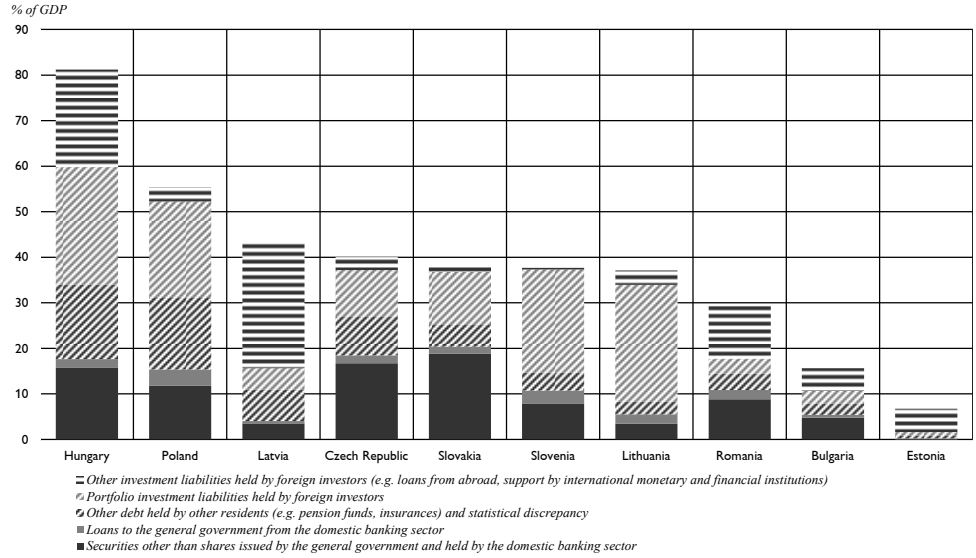
financing sources in order to meet maturing liabilities or roll them over, access to international capital markets became precarious (not least enforced by trust problems) and a few, but not all, governments in CESEE faced serious liquidity constraints. Thus, external funding weakened when it was actually needed most, corroborating the "when it rains, it pours" phenomenon that had been frequently observed in emerging market economies (Kaminsky et al., 2004).[7]

For a respective assessment, a brief description of the structure of government debt in the CESEE-10 is a necessary ingredient[8], as important cross-country differences have to be considered. The share of government debt *held by nonresidents* (see chart 4) is particularly large in the Baltic countries, with more than 75% of total government debt, but also in Slovenia and Hungary, with about 60%. In the other CESEE-10 countries it ranges between 30% in the Czech Republic and 50% in Romania. Foreign portfolio investors, who are most likely to withdraw their money earlier in bad times than other investors, hold a considerable share of total debt in Lithuania and Slovenia (more than 60%), but also in Hungary and Poland (between 30% and 38%). Throughout the crisis the share of government debt held by nonresidents strongly increased in most CESEE-10 countries, partly due to multilateral support programs (Hungary, Latvia) and partly due to the issuance of euro bonds by state-guaranteed banks (e.g. Slovenia). At the same time, the share of securities (other than shares) held by the domestic banking sector also increased in a few countries (most notably in the Czech Republic, Slovakia and Romania), pointing to improved domestic absorbance capacities there.

[7] In contrast to earlier crises and the evidence provided by Kaminsky et al. (2004), countries in CESEE did *not* experience large-scale capital outflows during the Great Recession, which can be attributed, among others, to the so-called *Vienna Initiative* that was launched at the height of the financial crisis to provide a framework for coordinating the crisis management and crisis resolution of financial sector issues (see Nitsche, 2010, and http://www.ebrd.com/downloads/research/factsheets/viennainitiative.pdf).

[8] Reported data refer to the consolidated general government gross debt and were collected by the OeNB from Eurostat, the IMF and national central banks.

Chart 4: Structure of Government Debt by Holder (End of Q3 10)



Source: Eurostat, IMF, national central banks.

Note: Whole bar represents consolidated general government gross debt as % of GDP.

Besides the holder structure, also the *currency structure* of government debt is important for liquidity assessments. If the share of government debt denominated in foreign currency is high and the country has a flexible exchange rate arrangement, a depreciation of the domestic currency, which typically can be observed during a downturn, increases the debt-to-GDP ratio and the debt servicing costs. Thus, the most vulnerable countries are those with a flexible exchange rate system and a high share of foreign currency-denominated debt. Based on the currency composition of debt as at the end of 2009, this is mostly an issue for Romania, with a foreign currency share in total general government gross debt of about 60%, while this share is comparatively small in other CESEE-10 countries with flexible exchange rate systems: it stands at 16% in the Czech Republic, at about 30% in Poland and at about 40% in Hungary. Government debt in the remaining CESEE-10 countries is to a major extent denominated in euro. For a few of them – the euro area countries Slovakia, Slovenia and Estonia – it is by now already denominated in their domestic currency; for the others – Bulgaria, Latvia and Lithuania with their fixed exchange rate pegs vis-à-vis the euro – it is still denominated in foreign currency.

Regardless of the currency composition of government debt, if its *maturity* is biased toward the short term, interest rate movements have a substantial impact on debt servicing costs. An increase in interest rates – which is very likely in emerging

markets during downturns because of higher risk premiums – in the case of sizable short-term debt immediately translates into a higher servicing burden and thus limits fiscal space. Based on the maturity structure of total general government debt as at the end of 2009, in most CESEE-10 countries, maturities of less than one year account not for more than 7% of total maturities. Exceptions are Romania, Latvia and Hungary with a corresponding share of 23%, 15% and 11%, respectively.

Altogether, while the currency and maturity structure of government debt, with a few exceptions, is rather favorable in the CESEE-10, the share of domestic holders is still comparatively low and has in several cases even decreased throughout the crisis. Moreover, in several countries, foreign portfolio investors hold a sizeable share of government debt. This has to be seen in the context also that a significant consequence related to the recent crisis experience is a certain change in mood in this respect: Has a high share of foreign debt holders be seen as an advantage before the crisis, revealing the country's attractiveness to foreign investors, nowadays this is qualified as a certain disadvantage due to the potential volatility of this type of investment. A key solution to this mismatch seems to be the strengthening of domestic capital markets (see also section 4).

Finally it should be noted that all the three different channels presented in this section are obviously also interrelated. For instance, a lack of trust in fiscal institutions exacerbates external borrowing constraints during recessions. Sovereign liquidity problems, in turn, undermine the trust in fiscal sustainability and translate into higher risk premiums. Furthermore, a long track record of procyclical discretionary fiscal policy raises concerns about the quality of fiscal institutions, reduces the debt tolerance threshold for these countries and thus increases borrowing costs during recessions. This constellation requires fiscal tightening during downturns and thus further aggravates the procyclicality bias.

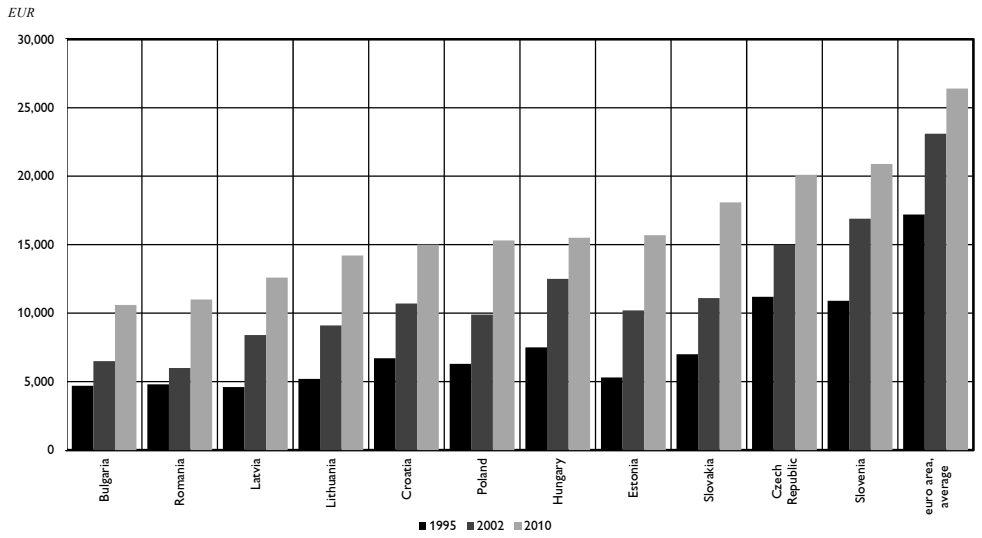
3. How Different Are CESEE Countries as Far as Fiscal Needs Are Concerned?

3.1 Some Fiscal Peculiarities of CESEE Countries

Most of the ongoing fiscal debate in CESEE is very similar to the one faced in Western EU countries. In both regions there is broad agreement that consolidation has first priority because of the impact the crisis had on budgets and because of the higher market sensitivity regarding refinancing needs. This is not surprising as economic policy sets – via the Stability and Growth Pact and, more recently, via the EU scoreboard for the surveillance of macroeconomic imbalances – exactly the same benchmarks. In the same vein, equal measures are suggested, and, as a result, the same pros and cons are widely debated. For instance, should the consolidation process be more revenue or more expenditure driven? Should the consolidation

process go along with some redistribution? How far does consolidation endanger growth? From a bird's-eye view this homogeneous approach raises the question "Does one size really fit all"?

Chart 5: Real GDP per Capita in Purchasing Power Parities

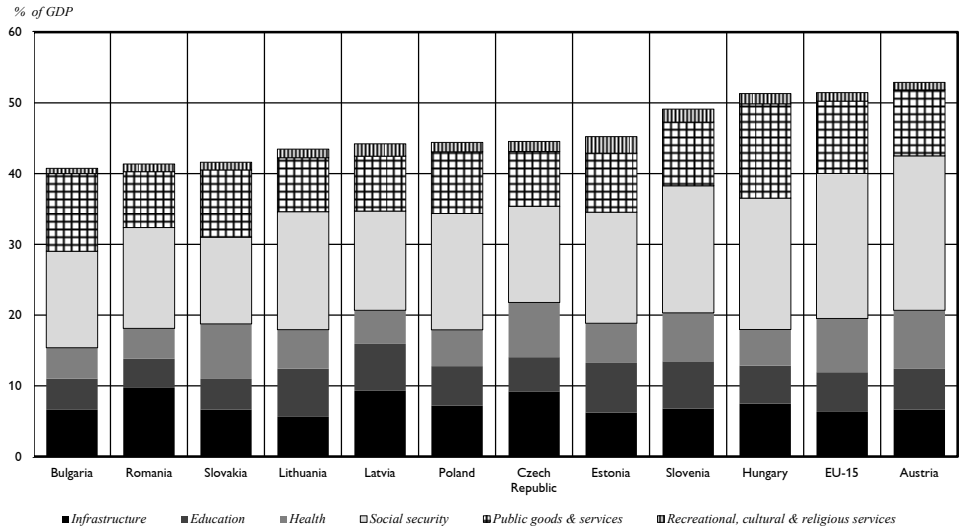


Source: Eurostat, European Commission's AMECO database, wiiw.

Obviously, more or less the same framework of economic thinking, but also institutional rules and guidelines, are applied. As a result, economic peculiarities of CESEE countries are not taken into account, although relevant economic differences are still huge even from a macroeconomic point of view. On the one hand, Western EU countries are highly developed, GDP per capita is above average (see chart 5) and markets of all kinds are quite deep. On the other hand, emerging European countries still undergo a significant catching-up process. The EU fiscal framework applies the same rules to all of them, raising the question that there may be special needs which should be taken into account by fiscal policy. Fiscal needs can be located in several fields:

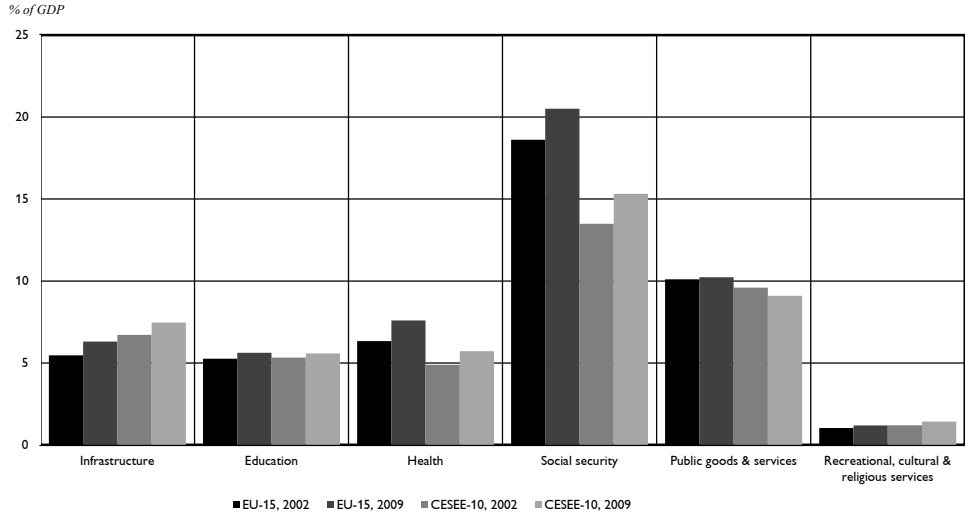
General government expenditures as a percentage of GDP are (slightly or significantly) lower in the CESEE EU Member States than in the EU-15 (see chart 6), reflecting the transformation period in which the public budget had played only a minor role as institutions were nonexistent and tasks had to be newly defined. This is also one of the reasons why fiscal stabilizers are not as developed in CESEE as in Western EU countries (see Eller, 2009), which contributes to relatively volatile real GDP growth.

Chart 6: General Government Expenditures as % of GDP by Functional Classification, 2009



Source: Eurostat.

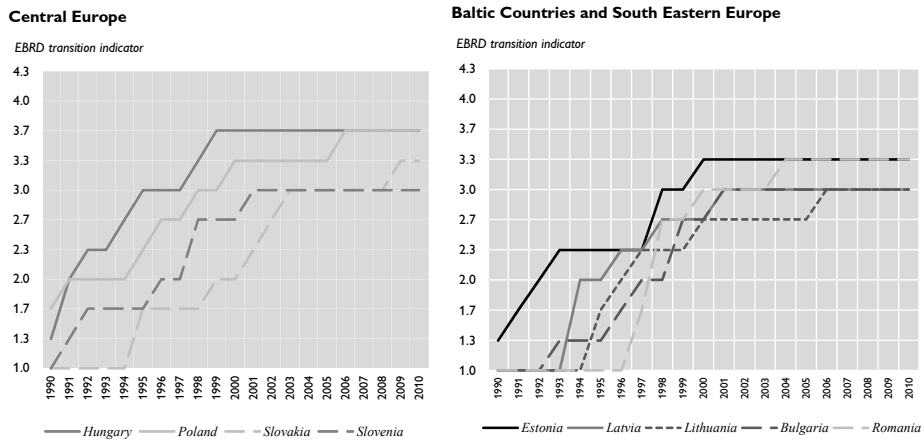
Chart 7: General Government Expenditures by Functional Classification: EU-15 versus CESEE-10, 2002 and 2009



Source: Eurostat.
Note: Unweighted averages are reported.

While government expenditures for public infrastructure have steadily increased and show a larger share of GDP in the CESEE-10 compared to the EU-15 (see charts 6 and 7), the overall supply of infrastructure obviously still lags behind Western European standards. The European Bank for Reconstruction and Development (EBRD) regularly publishes a public infrastructure reform indicator: Although public infrastructure improved significantly in the 1990s, the last decade rather attests to a standstill in this respect (see chart 8). At the same time, the demand for new and for deepening existing infrastructure projects – e.g. in the context of Trans-European Networks – remains at a high level. This is illustrated by the fact that the European Investment Bank (EIB) nearly doubled its annual lending to the CESEE EU Member States from EUR 6 billion in 2007 to EUR 11 billion until 2009, of which a major part (40%–50%) consists of financing large-scale infrastructure projects. Programs of the EIB or the EBRD have the precondition that the country finances at least part of the project itself. The same is also true for structural funds from the EU, which play a significant role in CESEE; however, their financing share is limited to 85% of the total investment costs, so whenever Brussels supports a project, the national budget also has to contribute. If this mechanism is subject to stringent consolidation rules, one of the major instruments to support the catching-up process (and implicitly convergence between EU member countries) no longer works.

Chart 8: Overall Infrastructure Progress in CESEE



Source: EBRD (2010).

Note: The indicator is the average of five infrastructure indicators, covering electric power, railways, roads, telecommunications, water and waste water; ranked from 1 (little progress in commercialization and regulation, minimal private sector involvement) to 4.33 (fully autonomous regulator exists with complete authority to review and enforce tariff levels and quality standards). Data for the Czech Republic are not available (not an EBRD country of operation since 2007).

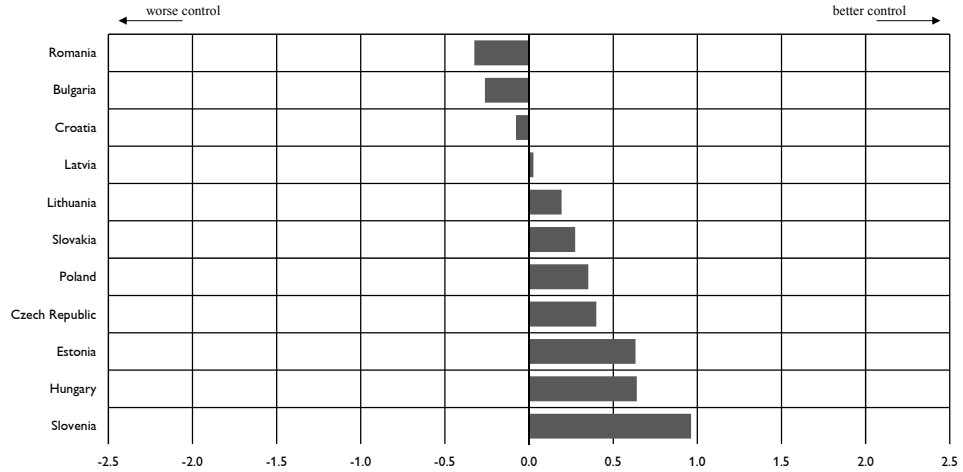
Another possibility of financing infrastructure projects is that the private sector steps in. But this possibility is quite limited for several reasons. First, competition for FDI has become fierce recently. As other emerging market regions have been growing at an incredibly fast pace, especially China, but also Latin America, some investors have left the CESEE region, opting for more promising markets. Second, the financial market crisis has made investors more hesitant, as they take increased risk premiums, but also reduced lending opportunities into account. Banks, deleveraging at home but also in the region, are putting on additional breaks. Although growth rates of lending had been more or less excessive before the crisis, and lower ones are definitely welcomed, several projects, especially small and medium ones, will not be financed any longer. Third, many infrastructure projects have a limited possibility for earnings. Therefore public private partnerships (PPPs) have their merits, but overall this concept is limited by nature to a relatively small number of projects (e.g. highways, public transport).

Fiscal policy instruments and their effective implementation differ quite a lot. In general, tax systems in CESEE are less sophisticated (diversified), as income, wealth and land registers sometimes started from scratch and have yet to function fully. Some kinds of taxes do not exist at all, or are not widespread, or the tax structure as a whole is different. Flat rate tax systems are much more popular in CESEE compared to Western Europe, as domestic (re)distributional aims are perhaps valued less important. Instead, public finance systems in CESEE offer incentives for both domestic investors (e.g. via favorable corporate tax rate structures) and foreign investors (e.g. via subsidies for FDI). There is only rare evidence in the literature that fiscal multipliers in emerging Europe differ systematically from those in advanced Europe (see Eller, 2009). However, there are several reasons to expect that the economic transmission channels, to which the mentioned fiscal instruments are applied to, work differently. For instance, households and private-sector firms may react differently, especially as social security systems in CESEE are less developed and far fewer government expenditures are earmarked for this kind of purpose (see charts 6 and 7). These different approaches to social security systems trigger different consumption, investment and, naturally, savings behavior. In addition, a relatively large shadow economy, fiscal circumvention or fraud may not only reduce tax revenues, but also the overall efficiency of fiscal measures.

Corruption, regularly monitored by the World Bank (see chart 9), as well as fighting corruption has a strong fiscal link. Quite often it is forgotten that an improvement in fighting corruption is not only the result of political willingness, or – more economically – the result of reducing social inequality and income differentials. Low corruption is also the result of fiscal spending. Institution-building is costly, not only in terms of facilities, but also in terms of education and building up knowledge. Without qualified civil servants who are able to detect,

fight and finally prevent corruption, a sound basis for successful institution-building and long-term sustainable growth rates is lacking.

Chart 9: Control of Corruption in CESEE



Source: World Bank.

Note: Control of corruption represents the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Range: –2.5 to +2.5. Higher values correspond to better governance outcomes.

Expectations of the local population regarding the speed of the catching-up process are high. Western politicians and economists ask CESEE countries for more patience, as rebuilding of many Western economies after World War II took several decades. But the situation is hardly comparable. Complete information about the alternatives, as presented by the world-wide web, in combination with a consumption-oriented society enhances expectations. In the last decade high credit growth rates enabled households to increase their personal standards of living relatively quickly, which led to similar expectations concerning the modernization of the infrastructure and the public environment. Politicians have a hard time coping with these very high expectations, which leads to short-lived governments and frequent political changes. As a result, consolidation in good times, which, by the way, did not function in Western Europe either, did not function in CESEE at all. The best-known example is Hungary, which still suffers from running an over-expansionary budget before the crisis.

3.2 Theoretical Needs and Practical Possibilities

It is of particular importance that the catching-up process of the region does not come to a halt neither in general nor in specific countries. A further prosperous development of emerging Europe is not only crucial for its own well-being, but also has significant implications for their meagerly growing neighbors, in particular the euro area countries. Besides that, growth and property are key for political and social stability in emerging Europe. One should not forget that the whole region underwent a regime shift only twenty years ago, and although the political landscape has changed completely and the development seems to be irreversible, social unrest, becoming visible in chasing minorities, is not totally unlikely.

In this respect we should always keep in mind to which extent fiscal measures have so far supported this catching-up process, and what are the risks for economic growth and political stability if fiscal measures cannot be used any longer at all because of very strict consolidation efforts. This is not a plea against consolidation, but one should look for a more differentiated fiscal approach which takes into account the special needs of the region. No country easily runs a fiscal consolidation process. But for a transition country it is even more complicated, so as not to damage fundamental economic growth prospects nor interrupt the catching-up. The transition process does not only consist of an above-average GDP growth rate. It also goes hand in hand with structural and institutional fundamental changes triggered by fiscal measures. Sustainable fiscal consolidation should take these needs into account.

3.3 Implications for Euro Area Enlargement

For the moment a further euro area enlargement is not part of the agenda. Slovenia, Slovakia and Estonia, which introduced the euro recently, will not be followed by another CESEE country soon. Major disruptions in the euro area itself, but also quite successful experiences in weathering the crisis without the euro (see e.g. Poland in 2009 and 2010) have led to a postponement of euro introduction plans. Regardless of these decisions, non-euro area countries are facing the same fiscal rules. In addition, they are also facing the same reactions of the financial markets. Although many countries still enjoy relatively low debt ratios, financial markets are sensitive to increasing budget deficits, data revisions, tensions in the money market, devaluations of the exchange rates, unsustainable credit growth rates, and high foreign currency credit shares. These financial market sensitivities and reactions are definitely an additional argument for a prudent fiscal policy. But as in other periphery countries one should not forget about necessary growth, which is more difficult to enhance in an environment where the private sector has been established only recently, and where international investors are as mobile as the labor force, checking out more rewarding investment opportunities every day.

4. Policy Options

What are the main policy options to be discussed with a view to create more fiscal space in the CESEE countries in the future?

First of all, *reforms of fiscal governance and implementation of appropriate fiscal rules* have to be referred to as the first-best solution. In particular, it is important to apply adequate expenditure ceilings in order to contain government spending during good times. Expenditure growth should be kept in line with cautious estimates of potential GDP growth. To allow for fiscal space, excess revenue during boom times should be saved and used during the next economic downturn (see Talvi and Végh, 2005). Besides numerical fiscal rules, it is also important to improve the quality of fiscal institutions by enforceable and transparent multi-year rules and by independent fiscal councils which provide regular assessments to decrease information asymmetries between fiscal policy makers and the public (see Darvas, 2010, and Ódor, 2011). Beetsma et al. (2009) showed that both planned budgetary adjustment and adherence to these plans are positively related to a strong medium-term budgetary framework and tight numerical fiscal rules. As a result, fiscal discipline should be enhanced and trust in fiscal policy making be endorsed, which, in turn, should keep borrowing costs during recessions in check. Iara and Wolff (2010) provide respective evidence for eleven euro area countries: stronger fiscal rules contain sovereign bond spreads, particularly in times of elevated market uncertainty and if the rules have a strong legal foundation. While the beneficial effects of fiscal rules are acknowledged, it is also important to monitor their impact on the composition of public spending. During episodes of rule-enforced fiscal adjustment, politicians may have an incentive to abandon long-term investment projects instead of cutting current outlays. Pitlik (2010) found for the EU-15 that government investment has indeed been limited by stringent quantitative fiscal constraints.

Sovereign liquidity constraints during recessions cannot be *mitigated* by appropriate fiscal rules alone. Equally important is an improvement of the liabilities' composition in the public sector balance sheet (see Baldacci et al., 2009). To reduce vulnerabilities, government debt should be redirected to domestic holders, longer-term maturities and domestic currency denomination (the latter is especially important for countries with a flexible exchange rate system). The strengthening of domestic currency capital markets is crucial in this context. Another policy option would be the implementation of suitable financial market instruments which help governments in adjusting their cash flows in line with the business cycle. One example are GDP-indexed bonds as proposed by Borensztein and Mauro (2004), whereby interest payments on government bonds are reduced in bad times and increased in good times. This forms a kind of insurance against economic slowdowns and should help to strengthen the countercyclical pattern of fiscal policy. However, implementing this instrument means that the respective

business cycle position has to be identified in real time, which is very difficult in emerging economies, given pronounced macroeconomic volatilities. Moreover, the demand reaction is unclear ex ante; it might be rather difficult to place GDP-indexed bonds with longer-term maturity.

Staehr (see the contribution in this conference volume) presents a concrete policy option in proposing to *use funded pensions actively as a countercyclical instrument*, thereby enhancing the crisis resilience and stabilization capacity of public finance systems in CESEE. This could be done by allowing for lower contributions and/or withdrawals of accumulated pension savings during bad times and by taxing released pensions in such a way that burdens on public budgets can be reduced in a recession. The ensuing discussion in the workshop revealed that it is important to consider the asset composition of funded pensions as, e.g., the price of stocks behaves procyclically and, therefore, withdrawals of pension savings during bad times can amplify price declines and increase systemic risk. The design of appropriate incentives for rebuilding savings during good times is equally important.

Clearly, the application of these policy options has to account for a considerable degree of heterogeneity within the CESEE region that was also revealed during this crisis – not only in terms of macroeconomic outcomes, but also in terms of fiscal responses (for instructive country groupings, see Staehr, 2010, or the contribution of Neven Mates in this conference volume). Moreover, it is also important to account for peculiarities in CESEE which are different from those in Western Europe. Politically they are members of the same union; economically the CESEE countries are still in a catching-up process, facing different goals, certain needs and particular constraints.

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Crisis and Consolidation – Fiscal Challenges in Emerging Europe

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Abstract

The global crisis has led to a sharp increase in fiscal deficits in emerging Europe.[2] Many countries have already implemented significant adjustment measures, but further consolidation is needed. The immediate cause of the large deficits was the sharp revenue declines during the crisis, but the underlying problem was too rapid spending growth during the boom times, and it will be important to keep spending growth under control during future booms.

1. The Impact of the Global Crisis on Public Finances in Emerging Europe

Prior to the global economic and financial crisis, public finances in emerging Europe seemed in good shape. In 2007, the average fiscal balance in the region showed a surplus of more than 1½% of GDP, well above other emerging markets in Latin America and Asia (chart 1). Average gross debt was less than 25% of GDP

[1] The views expressed in this paper should not be reported as representing the views of the IMF. They are those of the authors and do not necessarily represent those of the IMF or IMF policy.

[2] Countries included in this paper comprise Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Hungary, Kosovo, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Turkey, and Ukraine. Estonia was reclassified as an advanced country by the IMF after it adopted the euro on January 1, 2011. Hence, Estonia is not included in emerging Europe averages.

– less than half of the average in advanced countries. However, there were a few exceptions: Hungary's debt was high (66% of GDP) (chart 2), and deficits in Hungary, Albania, and Romania were above 3% – in Romania increasing to almost 5% of GDP in 2008, despite very rapid GDP growth.

These favorable headline figures masked a significant deterioration of the underlying structural fiscal situation during the pre-crisis boom years. A capital-inflows-fueled domestic demand boom had led to a surge in government revenues, which had been used to increase government spending, rather than building up buffers (chart 3). Public expenditure growth was particularly rapid in the countries that had the strongest private sector boom – including the Baltics, Romania, Belarus, Ukraine and Russia. With rapid public spending growth, many countries barely had a balanced budget – despite years of very strong GDP growth above potential. In turn, cyclically adjusted balances were significantly worse than headline numbers suggested.

This deterioration became visible during the crisis when revenues dropped sharply. The drop in revenues was the result of a sharp contraction in real GDP and an unprecedented decline in domestic demand. The revenue drop was sharpest in the countries that had previously had the biggest revenue booms (chart 4). While during the boom years rapid expenditure increases exacerbated imbalances (chart 5), during the crisis expenditure cuts further reduced domestic demand.

At the same time, financing deficits became much more difficult. Financing pressures first became evident in Hungary, where auctions in the primary market failed in early October 2008, forcing the government to suspend the issuance of government bonds,[3] but also became visible in other countries.

While immediate financing pressures were addressed through substantial IMF/EU packages, including in Hungary, Latvia, Romania, Serbia, and Ukraine, many countries needed to take unprecedented adjustment measures. Adjustment was particularly pronounced in the Baltics, Serbia, Romania, and Hungary (chart 6). Only a few countries, including Poland and Russia, were in a position to let automatic stabilizers work or even stimulate the economy (box 1).

[3] Foreign investors sold more than one quarter (EUR 3.5 billion) of their holdings of domestic currency denominated government bonds between mid-September and end-November 2008.

Box 1: Fiscal Adjustment in Selected Countries

In **Latvia**, expenditure cuts dominated the close to 13% of GDP fiscal tightening during 2009 and 2010. Measures included a 4% of GDP cut in remuneration (an average 30% wage cut for central government employees) and a 3% of GDP cut in investment. Revenue measures were also part of the consolidation efforts, including a 3 percentage point increase in the personal income tax (PIT) to 26%, a decrease in the tax-free PIT allowance, and a VAT increase from 18 to 21% (in addition to increasing the reduced rate VAT from 5 to 10%). Though the size of the fiscal tightening is impressive, measures included across-the-board cuts, and public sector wage cuts were uneven. Additionally, pension cuts were initially also among the consolidation measures but these were later reversed after the Constitutional Court deemed them unconstitutional (IMF, 2010a).

In **Hungary,** several expenditure cuts were implemented in 2009, including cuts in operating budgets of line ministries and health care institutions, reductions in housing subsidies, and reductions in top-up payments on farm subsidies. On the revenue side, personal income tax payments were reduced but offsetting measures were implemented, including a 3 percentage point increase in the VAT rate (IMF, 2009a). In 2010, the new government, which formed after the April 2010 elections, changed course and allowed the IMF/EU-supported program to lapse and initiated fiscal stimulus, including tax relief for households and enhanced family benefits. It was partly financed by temporary revenue measures. In order to contain the deficit, the government in mid-2010 adopted an emergency package, including a special levy on financial institutions, some spending cuts, and reductions in the corporate income tax (CIT). Later in the year, a second package included the imposition of sectoral taxes and a diversion of 2nd pillar private pension contributions to the budget (IMF, 2011a). In 2011, asset transfers from the 2nd to the 1st pillar of the pension system are estimated at 10.1% of GDP.

In **Romania**, fiscal policies included a focus on rationalization of public sector institutions, employment, and costs, and strengthening structural reform commitments in wage and pension areas (IMF, 2009b). Measures in the 2010 budget on the expenditure side included a rationalization of the public sector wage bill, better control on fraudulent disability pensions, and reorganization of state agencies. Budget revenue measures included a new turnover tax on medical goods suppliers and net lending repayments (IMF, 2010b). However, due to weaker than expected fiscal performance, an adjustment package was implemented in mid-2010, including a 25% cut in public sector wages, a 15% cut in most social transfers, and a 5 percentage point increase in the standard VAT rate (IMF, 2010c).

Box 1: Fiscal Adjustment in Selected Countries – Continued

In **Estonia**, fiscal consolidation started early in 2008 following an early onset of recession. In 2009, the government passed supplementary budgets in February and June, totaling 7½% of GDP in measures of which the expenditure side accounted for about 2/3. In September, further measures were taken, which included one-off dividends from state-owned enterprises. However, the consolidation also comprised structural reforms, including VAT increase, increase in excise taxes, and decreased social benefits. Other measures included operating spending cuts and one year measures such as land sales and discretionary spending cuts (IMF, 2010d). Overall, the efforts led to a 2009 fiscal deficit of 2.1% of GDP (or 1.7% of GDP in ESA terms) – below the 3% Maastricht criterion – which allowed for euro adoption on January 1, 2011. In 2010, strict expenditure control and one-off revenues, including the sale of CO_2 emission rights, led to a better-than-expected fiscal outcome (IMF, 2011b).

In **Poland**, limited pre-crisis imbalances allowed room for policy-makers to provide fiscal stimulus to the economy, which was further backed by Poland's Flexible Credit Line arrangement with the IMF. This helped avoid an outright recession during the crisis, and overall growth reached 1.7% in 2009. The estimated 2½% of GDP fiscal relaxation in 2009 (1¾% of GDP in 2008) included already planned tax cuts, which were not offset by expenditure measures (IMF, 2010e). As a result, the fiscal deficit, which in 2007 was below 2% of GDP, increased above 7% of GDP in 2009. In 2010, the deficit was even higher – estimated at 7.9% of GDP. Subsequently, in 2011 Poland is consolidating public finances with measures in the 2011 budget that amount to about 1% of GDP, including a limit on discretionary expenditure growth – which in turn includes a freeze in the central government wage bill – and lower spending on active employment promotion as well as a 1 percentage point increase in VAT rates and lower VAT refunds on corporate cars (IMF, 2011c). Additionally, measures redirecting part of contributions from the 2nd to the 1st pillar of the pension system are expected to lower the deficit by 1% of GDP over the medium term.

In **Russia**, pre-crisis oil windfall created room for fiscal expansion. However, the fiscal expansion, which amounted to about 9% of GDP, mostly comprised permanent measures and will therefore require subsequent fiscal consolidation. Furthermore, despite the substantial fiscal relaxation in 2009, most of the stimulus was not implemented until the second half of the year and was poorly targeted at low-multiplier areas such as strategic sectors and defense and security. As a result, the stimulus could not prevent a sharp real GDP contraction of close to 8% (IMF, 2010f).

As a result of the crisis, and despite large adjustment in a number of countries, fiscal deficits in emerging Europe deteriorated significantly and by 2010 were no longer low compared to other emerging market regions. The region's estimated fiscal deficit exceeded 4% of GDP in 2010 – a deterioration of more than 6 percentage points of GDP from 2007. While fiscal balances in emerging Asia and Latin America also deteriorated from 2007 to 2010, the regional averages did not fall far below –3% of GDP (chart 7).[4]

2. The Need for Fiscal Consolidation

The current level of fiscal deficits[5] in the region raises a number of concerns:

High deficits create fiscal vulnerabilities. While debt ratios are still lower than in advanced countries, the vulnerability threshold of public debt is lower than in advanced countries (see for example IMF, 2003). An additional consideration is that without fiscal consolidation, concern about high sovereign debt, so far contained to advanced Europe, could spread to emerging Europe.

High deficits may be difficult to finance. Financial markets may be particularly unwilling to finance high deficits that are largely structural.

High deficits leave no buffer for next crisis. Automatic stabilizers can cushion the social and economic impact of recessions. However, to allow for fiscal space, they require that excess revenue during boom times is saved for recessionary periods.

For several of the new EU Member States, fiscal consolidation is also necessary to meet the Maastricht criteria and associated Medium term budgetary objectives. It should be noted that in order to remain below the 3% deficit ceiling during the entire business cycle, during good times, the deficit should remain well below that ceiling.

Containing deficits and debt levels is also desirable in light of the aging of the population, which over time will add to expenditure pressures.[6]

To reduce the deficits, further consolidation is needed – even though in some countries substantial adjustment has already taken place.

[4] As of the time of writing, 2010 fiscal deficits in many countries still relied on projections and were not yet final.

[5] The paper focuses mainly on headline balances rather than structural balances. While from a theoretical perspective, structural balances are clearly a superior measure to headline balances, in practice it is very difficult to measure structural balances properly, as both the output gap and the impact of the cycle on the public finances are subject to large uncertainty and frequent revisions.

[6] Pension reform is discussed in the subsequent chapter of this conference bundle (contribution of Karsten Staehr).

2.1 How Should Fiscal Consolidation Occur?

The judgment that further consolidation is needed leads to a number of questions: how much consolidation should occur, how fast, and should it occur through expenditure or revenue measures?

How Much Consolidation Is Needed?

Ideally, fiscal consolidation should bring countries back to a situation where revenue and expenditure are structurally in balance. Some countries are close to this level, while others still have a longer way to go. In Estonia, following a very deep recession, preliminary data suggest a fiscal surplus of ¼% of GDP in 2010, while Poland, which avoided an outright recession – in large part a result of fiscal stimulus measures – had a deficit of 7.9% of GDP.

It is important that fiscal consolidation leads to a genuine improvement in government solvency. Some measures, such as reducing contributions to the second pillar pension system may reduce deficits and financing pressures in the short run, but do not improve government solvency and thus are no substitute for fiscal consolidation.

How Fast Should Fiscal Consolidation Be?

The desired pace of fiscal consolidation depends on the cyclical situation, the amount of fiscal pressures, and political economy considerations. There is no "one size fits all" approach as these elements differ across countries.

Demand management considerations suggest that a country should not adjust too quickly before recovery has firmly taken hold. The quality of adjustment may also improve if it is carried out more slowly, as it is difficult to avoid across-the-board cuts when consolidation needs to be carried out quickly.

Countries that are under severe fiscal pressure have little choice but to improve their public finances quickly. Moreover, political economy considerations suggest that large upfront adjustment during a crisis may in fact be easier than years of steady adjustment that continues after the economy has recovered – which may lead to adjustment fatigue.

Overall, with the recovery taking hold more firmly and with output gaps closing, arguments in favor of rapid adjustment have become more powerful. It is not just that worries about the impact of fiscal consolidation on the recovery have diminished, in some countries faster consolidation would now also be *desirable* from a demand management perspective. Moreover, a faster adjustment would also reduce the risk that sovereign debt concerns in advanced Europe spill over to emerging Europe.

Should Fiscal Consolidation be Expenditure or Revenue-Based?

In general, expenditure-based consolidations tend to be more successful than revenue-based ones. IMF (2010g) found that fiscal consolidations that rely on spending cuts tend to be less contractionary than tax-based adjustment.[7] The European Commission in its 2010 report on public finances in EMU in a summary of the literature over the past twenty years noted that successful fiscal consolidations were preponderantly expenditure-based. Such consolidations tended to be longer lasting than those based on tax increases or investment cuts. However, options for expenditure consolidation differ by country. During the recent crisis, expenditure measures included cuts in civil servants' wage bill, transfers, inefficient health care costs, pensions, and structural reforms.

Nonetheless, revenue increases can also play a role, particularly in countries where expenditure is already low. The level of government expenditure differs substantially across countries (chart 8), and in some countries there may be less room to cut expenditure further. In OECD countries, spending cuts have generally been favored due to the relatively large size of the public sectors in many of these countries. However, in some emerging and developing economies, revenue measures have had a more prominent role as they have typically started from low revenue-to-GDP ratios (Everaert, 2010).

While the choice of revenue measures depends on the particular country situation, some taxes are less distortionary or have higher compliance rates than others. For example, single-rate VATs will tend to have lower administration costs than more complicated VAT systems (ITD, 2005). A residential real estate tax can provide an important revenue source, and may be less distortive than alternative taxes as it is levied on an immobile factor (Bahl, 2009). Reforms to improve tax compliance may also increase revenues in several emerging European countries.

2.2 What Are Countries Planning?

Most countries in the region are planning continued deficit reductions in 2011 and 2012. Latvia plans to reduce its deficit by around 6 percentage points of GDP in 2011 and 2012 (chart 9), which will enable the country to meet the Maastricht deficit criterion. Poland and Romania aim at improving their fiscal balances from their 2010 positions by around 3½ percentage points of GDP by 2012. There are, however, a few exceptions. In Hungary, the fiscal deficit is not expected to decline between 2010 and 2012[8], partly as a result of the introduction of a 16% flat-rate personal income tax, aimed at spurring growth (IMF, 2011a).

[7] Based on a sample of advanced countries.

[8] The improvement in 2011 reflects the transfers of assets from the 2nd to the 1st pillar of the pension system.

Even with planned improvements in fiscal balances, deficits in 2011 and 2012 will remain high in some countries. Based on announced policies to date, IMF staff projects 2012 fiscal deficits to exceed 3% of GDP in Lithuania, Kosovo, Croatia, Hungary, Albania, and Poland (chart 10).[9] Thus, with growth strengthening (chart 11), it will be important that any revenue overperformance is used for deficit reduction.

3. Using Fiscal Policy Wisely in the Next Boom

While fiscal policy has not been the *cause* of the boom-bust cycle in emerging Europe, it has definitely *contributed.* An important lesson from the crisis therefore is that fiscal policy should be more prudent during good times, and temporary revenue windfalls should not be used for permanent increases in expenditure. Fiscal rules may help anchor fiscal policy during good times, when pressures to increase spending are strong. Empirical studies suggest that fiscal rules have been generally associated with improved fiscal performance (IMF, 2009c). Of course, fiscal rules can only be successful if there is sufficient political commitment to them: without this, they are unlikely to be sustained.

Among fiscal rules, expenditure ceilings are probably the best tool to contain expenditure during good times, while rules that set debt or deficit ceilings may still be too pro-cyclical:

Debt ceilings are unlikely to be binding during good times. They are more likely to become binding during downturns, necessitating fiscal tightening at the wrong moment.

Deficit ceilings suffer from similar problems. In theory, these problems could be addressed by using cyclically adjusted deficit targets. In practice, however, structural deficits tend to be underestimated during good times, both because potential GDP growth tends to be overestimated, and because the impact of the cycle on revenues tends to be underestimated.

Expenditure ceilings address the problem of too rapid expenditure growth during boom times directly. Expenditure ceilings should set a steady path for real expenditure that does not depend on the cyclical situation. By setting the growth rate of real expenditure in line with *cautious*[10] estimates of potential GDP, the expenditure to GDP ratio will fall during good times and rise during bad times, and

[9] Forecasts may assume more ambitious fiscal policy for program than for non-program countries. Forecasts for non-program countries reflect announced policies; forecasts for program countries typically reflect program goals.

[10] During the boom years, potential output was often overestimated. Therefore, to avoid procyclical fiscal policy due to procyclical potential output estimates, it is important that *cautious* potential output estimates are used.

be constant seen over the entire cycle[11] (see IMF (2009c) and EC (2010) for further discussion about fiscal rules).
If these rules had been in place during the previous boom, many countries would have run large fiscal surpluses. While it should be acknowledged that running large surpluses during boom times may be politically difficult, such a policy would have left the countries in a much better position to deal with the downturn, and would have pre-empted the need for sharp fiscal tightening during the recession.

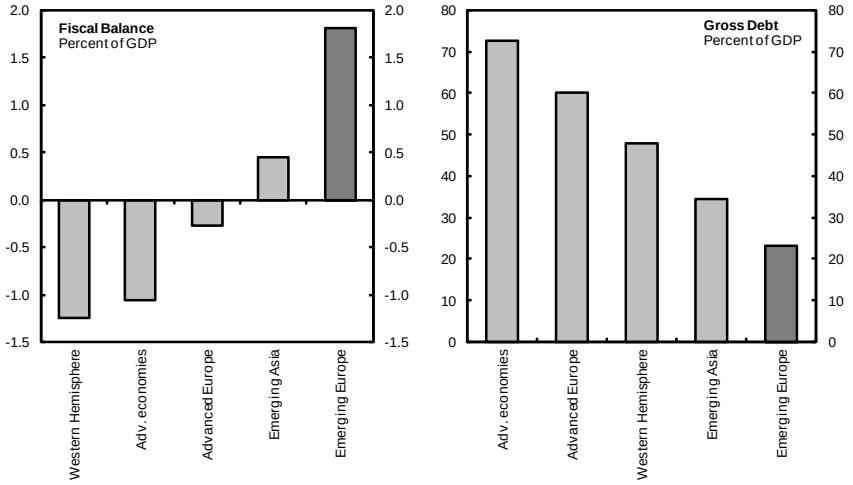
4. Concluding Remarks

The crisis in emerging Europe has shown that focusing on headline balances during boom times can lead to a false sense of security. In times of rapid revenue growth, fiscal authorities can easily keep headline deficits low while also increasing expenditure. Going forward, it will therefore be important that medium-term frameworks help counter future potential fiscal crises and include the creation of fiscal buffers. It will be important that expenditure does not display excessive growth during boom times. The implementation of fiscal rules can help obtain this. In particular, expenditure ceilings that keep expenditure in line with cautious estimates of potential GDP growth would allow governments to use revenue surprises to build up buffers, which can be used during the next downturn. Had this been standard practice in emerging Europe prior to the crisis, the fiscal situation in emerging Europe would have been in much better shape and fiscal space would not have been as limited.

[11] Expenditure ceilings that are set as a percent of GDP still have a procylical character as they allow for rapid expenditure growth during good times.

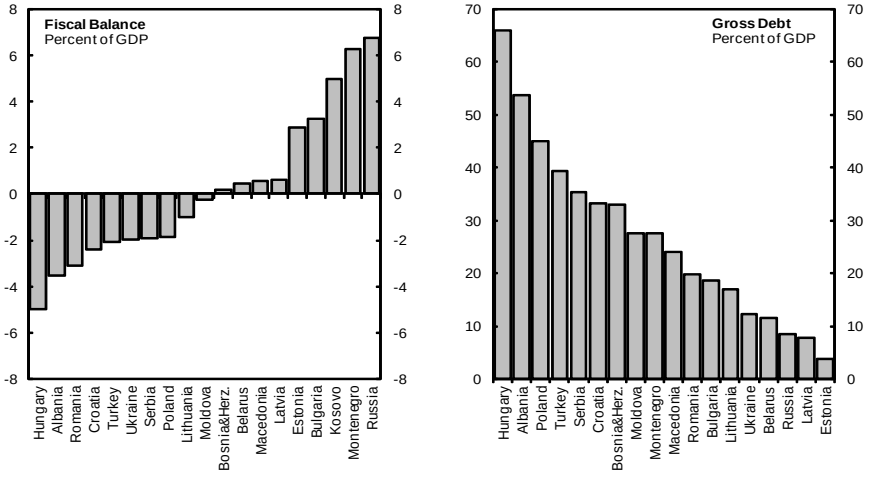
Annex

Chart 1: General Government Deficits and Debt in Emerging and Advanced Regions, 2007



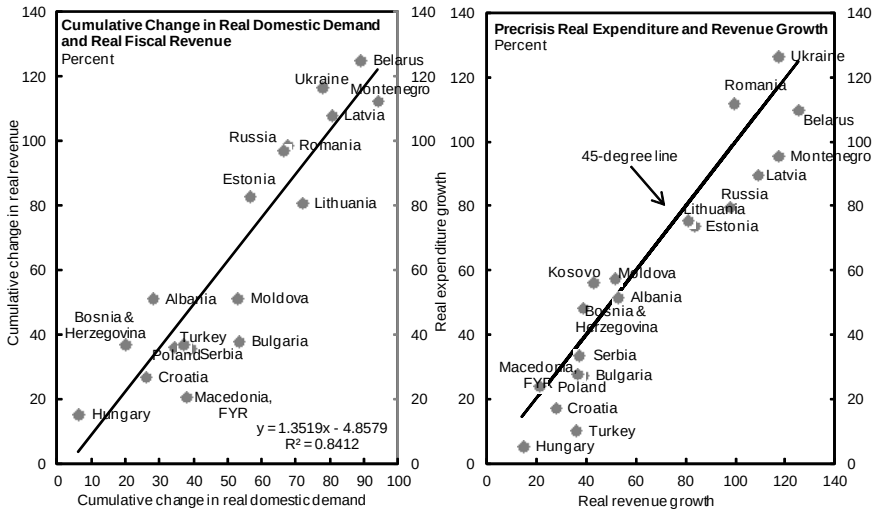
Source: IMF, World Economic Outlook database and IMF staff calculations.

Chart 2: General Government Deficits and Debt in Emerging Europe, 2007



Source: IMF, World Economic Outlook database and IMF staff calculations.

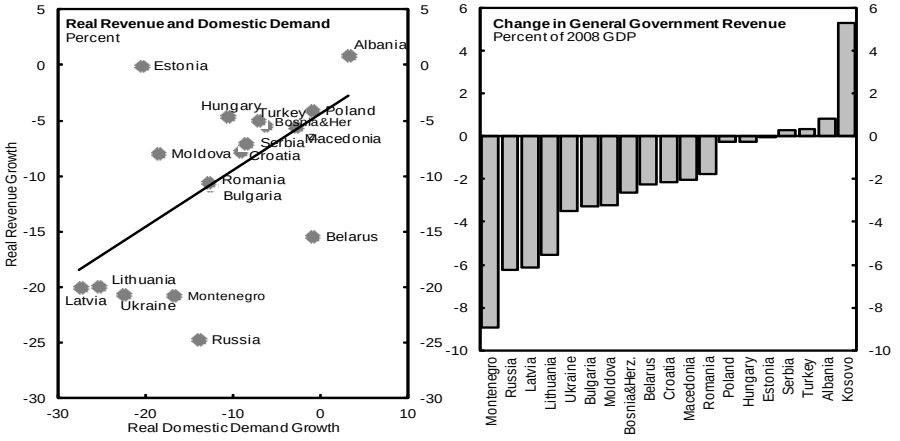
Chart 3: Revenue and Expenditure Growth, 2003–2008



Note: As the boom in the Baltic states ended in 2007, data for the Baltics refer to 2002–2007.

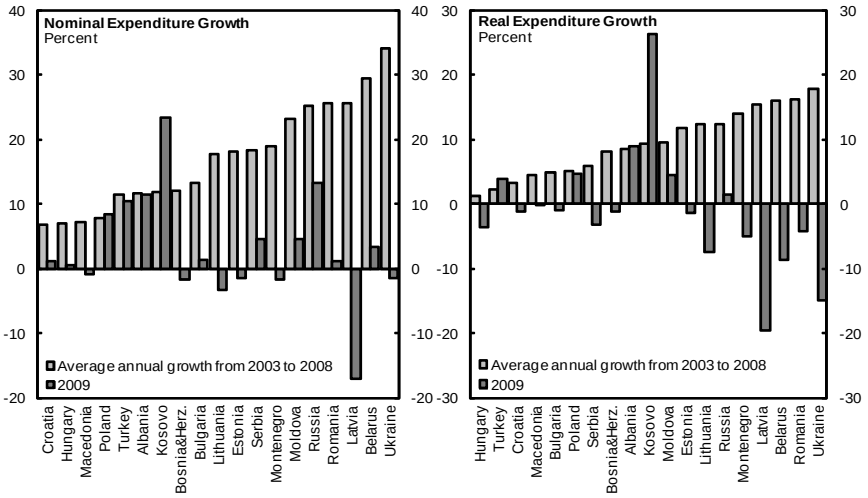
Source: IMF, World Economic Outlook database, Government Finance Statistics, and IMF staff calculations.

Chart 4: General Government Revenue, 2009



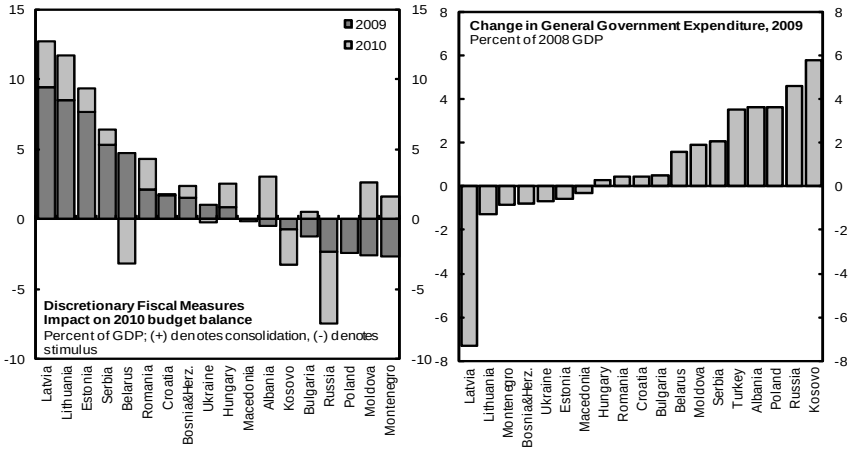
Source: IMF, World Economic Outlook database and IMF staff calculations.

Chart 5: General Government Expenditure Growth, 2003–2009



Source: IMF, World Economic Outlook database and IMF staff calculations.

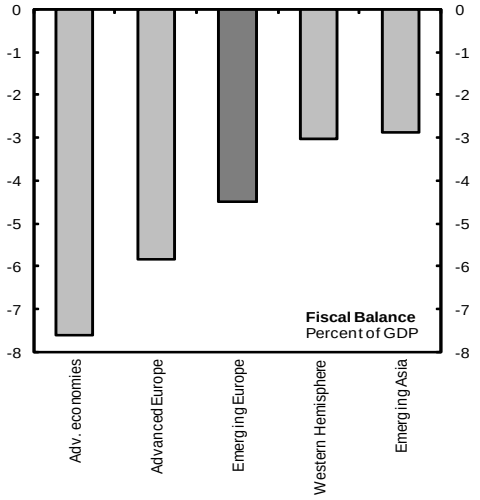
Chart 6: Fiscal Consolidation



Note: The left chart depicts the fiscal measures as estimated by IMF staff. For Romania, several measures (including 25% wage cut, 5 percentage point increase in VAT) were taken in mid-2010; hence, only half was effective in 2010 – the rest is effective for the 2011 budget only.

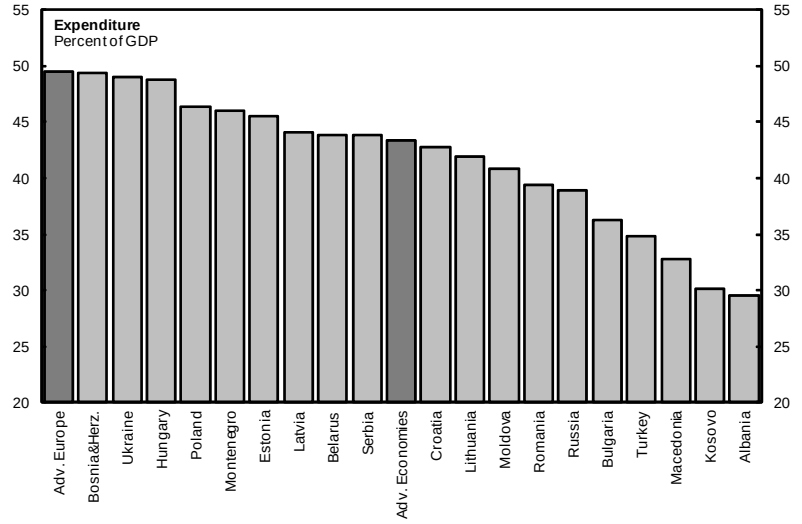
Source: IMF (2011d) and IMF staff estimates.

Chart 7: General Government Deficits in Emerging and Advanced Regions, 2010



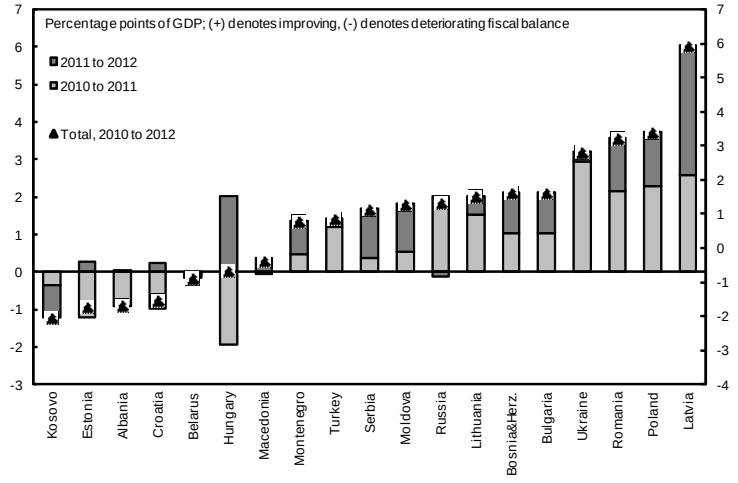
Source: IMF, World Economic Outlook database and IMF staff calculations.

Chart 8: General Government Expenditure, 2010



Source: IMF, World Economic Outlook database and IMF staff calculations.

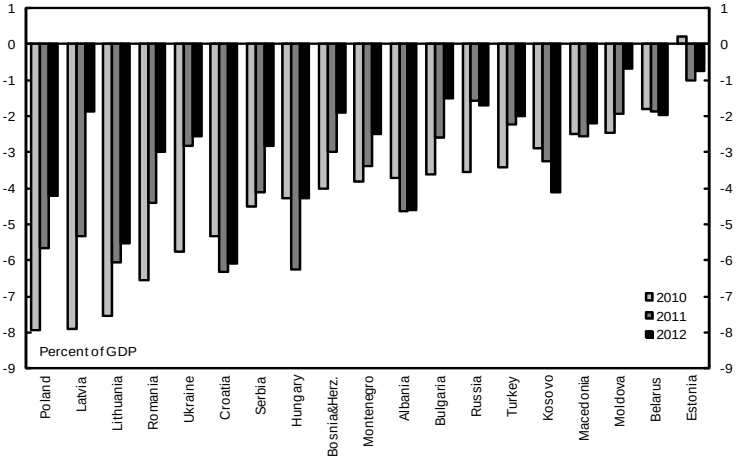
Chart 9: Change in General Government Fiscal Balance, 2010–2012



Note: Data refer to IMF staff forecasts. Data for Hungary are adjusted for the transfer of assets from the 2nd to the 1st pillar of the pension system.

Source: IMF, World Economic Outlook database and IMF staff calculations.

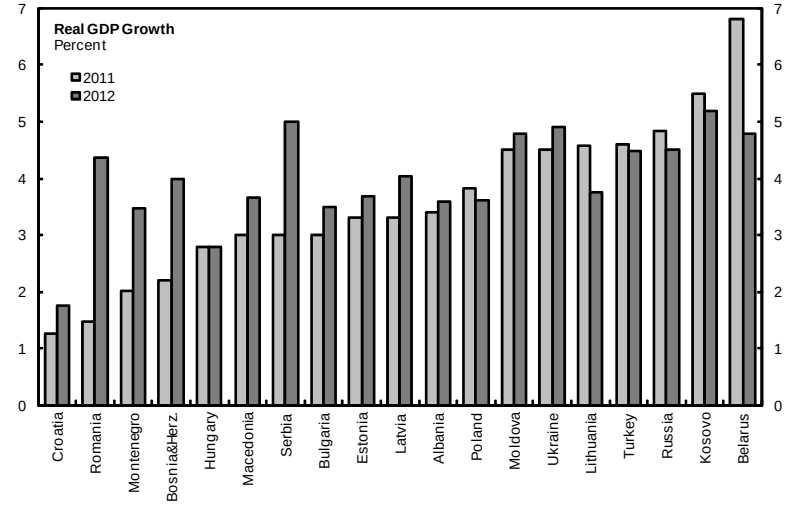
Chart 10: General Government Fiscal Balances, 2010–2012



Note: Data refer to IMF staff forecast. Data for Hungary are adjusted for the transfer of assets from the 2nd to the 1st pillar of the pension system.

Source: IMF, World Economic Outlook database and IMF staff calculations.

Chart 11: Real GDP Growth, 2011–2012



Note: Data refer to IMF staff forecast.

Source: IMF, World Economic Outlook database and IMF staff calculations.

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Funded Pension, Fiscal Strain and Stabilisation Policy in Central and Eastern Europe

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Abstract

The EU Member States from Central and Eastern Europe have generally strong business cycles with substantial fluctuations in production and unemployment. Most of the countries have implemented funded pension systems. This paper discusses linkages between such systems and the ability of governments to stabilise business cycle fluctuations without jeopardising fiscal performance. It is argued that the funded pension schemes lead to maturity mismatches that may aggravate business cycle while making it harder to pursue active fiscal policies. This paper advocates measures to manage the pension systems more actively by making the contributions to the compulsory funded pension depend on the cyclical stance of the economy and by letting individuals withdraw accumulated funds during severe cyclical downturns. Such measures may help stabilise the business cycle and enhance fiscal resilience.

JEL classification: E32, E64, G23, H55

Keywords: Business cycles, stabilisation policy, fiscal policy, funded pension, compulsory saving

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"But we still have one more card to play"

John Maynard Keynes (1940, p. 66)

1. Introduction

The EU Member States from Central and Eastern Europe (CEE) have been subject to pronounced booms and busts since adopting market-based economic systems at the beginning of the 1990s.[2] Strong trend growth has coincided with much stronger business cycle fluctuations than in Western Europe. Meanwhile the scope of using expansionary fiscal policies to dampen downturns has been confined by a rapid deterioration of the fiscal balance and in some cases severe financing problems. These observations suggest that there is a need to devise policies that can help stabilise the business cycle in the CEE countries while enhancing the crisis resistance of public finances. This paper suggests that the funded pensions that have been implemented in most CEE countries can be managed more actively and, hence, be used to address both policy objectives, i.e. stabilisation of business cycle fluctuations and enhancement of fiscal resilience.

Beginning from the end of the 1990s most CEE countries implemented pension reforms that replaced traditional pay-as-you-go (PAYG) systems with 3-pillar systems in which the second and third pillars are funded. The funding of the second and third pillars is implemented in the way that individuals save in individualised retirement accounts, which are in escrow until retirement. The second pillar is typically financed through compulsory contributions paid alongside the normal social security contribution, while the third pillar is voluntarily but subject to tax incentives.

This paper argues that the funded pension systems could be used actively to stabilise the business cycle and fiscal performance. The paper considers two different policy measures. One measure is to reduce the second-pillar pension contribution during downturns and increase it during booms. This measure entails active use of the *compulsory saving* inherent in the second pillar, depending on the business cycle situation. The other measure is to allow individuals to withdraw already accumulated saving from the individualised pension savings accounts of the second and third pillar during a recession or at times of personal economic hardship.

This paper has affliction points to several strands of literature. It relates to the century-old discussion of the option of using active demand management to

[2] This paper focuses on the 10 countries from Central and Eastern Europe that joined the European Union in 2004 or 2007. The choice is based on the availability of data and on the fact that EU Member States share many institutional features. The discussion is generally applicable also to other countries from Central, Eastern and Southeastern Europe (CESEE).

smooth business cycle fluctuations. This discussion is still at the core of macroeconomics (Romer 2005, chapters 4–6). The efficacy of the policy measures above rests on changes in aggregate demand, having an effect on production level, unemployment etc. The second affliction point is the literature on budget policies, financing limits and fiscal crises (Reinhart, 2002; Manasse et al., 2003). Emerging market economies and high-income economies may have a very different ability to take on public debt without encountering financing problems.

The third affliction point is the extensive literature on pension economics, including the benefits and challenges of funded pension schemes (World Bank, 1994; Orszag and Stiglitz, 2001; Bovenberg et al., 2008). The main focus of this literature is, however, on the long-term effects of different pension systems, including how adequate pensions can be ensured along with long-term solvency of public finances. Only a small number of papers consider linkages between business cycle fluctuations and the pension system and the focus is then on the impact of business cycle fluctuations on different parts of the pension system. One area of concern is the solvency of defined benefit pension schemes under different economic and demographic scenarios (e.g. Impavido, 2011; Keeley and Love, 2010). Weller and Baker (2005) discuss the strains that privately defined benefits schemes may encounter during cyclical downturns, when interest rates are low, asset prices fall and contributions are reduced. Burtless (2010) discusses the challenges facing individuals who have accumulated substantial pension funds when the economy is subject to a large downturn, such as the global financial crisis in 2008/09. The present paper differs from most previous policy studies by focusing on the short-term linkages between the pension system and the business cycle.

The final affliction point is the use of compulsory saving for stabilisation purposes. John Maynard Keynes recommended the use of compulsory saving already in 1940 as a means to avoid overheating of the economy and to make resources available for the British war effort (Keynes 1940, pp. 69–70). The measure was subsequently adopted. Other European countries have later implemented different temporary schemes of compulsory saving in order to dampen excessive upswings. Based on these experiences, this paper suggests that the pre-existing economy-wide funded pension systems in the CEE countries are adapted in order to affect economic activity in the economy. Previously the proposals have been discussed in a short form in Staehr (2009).

The rest of the paper is organised as follows. Section 2 provides some details on the business cycles and budgetary challenges afflicting the CEE countries. Section 3 outlines the rationale for funded pension and the introduction of the 3-pillar system in the CEE countries. Section 4 considers the possible effects of funded pensions systems on the business cycle. Section 5 is the main section and discusses possible policies that use the funded pension system to dampen business cycle fluctuations. Finally, section 6 concludes.

2. Business Cycles, Public Finances and Stabilisation Policies

The CEE countries have been subject to strong business cycle fluctuations since they cast off communism and central planning. All of the countries saw dramatic output declines and rising levels of unemployment at the beginning of the 1990s during the transition from planned to market economy. Since the mid-1990s the countries have seen strong trend growth, but also large fluctuations as frequently observed in emerging markets. Rapid capital inflows and bursts of optimism have led to booms, while financial crises, trade disruptions and shocks have caused recessions. The most noticeable example of the latter was the substantial downturn experienced during the global financial crisis. While Poland managed to rake up positive output growth in both 2008 and 2009, the Baltic States saw accumulated output losses amounting to about 20% during these two years (Gardo and Martin, 2010).

Statistics show that the CEE countries have had stronger trend growth and also more volatile growth than the EU-15 Member States from Western Europe. In the period 1996–2010 the average annual growth rate was 3.7% in the CEE countries and 2.4% in the EU-15 Member States, while the average standard deviation was 4.5% and 2.5%, respectively (Eurostat, author's calculations). Similarly, the unemployment rate has been higher but also more fluctuating in the CEE than in the EU-15 countries.[3]

The CEE countries have generally pursued prudent fiscal policies since the mid-1990s, helped by relative strong trend growth and various forms of foreign support. The average stock of public debt in the 10 CEE countries was 32% of GDP in 2001 and 25% in 2007 (Eurostat, author's calculations).[4] The budget situation deteriorated in most CEE countries during the global financial crisis, resulting in an average budget deficit of 6.6% of GDP and an average debt of 35% of GDP in 2009. In comparison with many EU-15 Member States, such deficit and debt figures appear moderate, but there is substantial heterogeneity across the CEE countries and debt stocks are forecast to increase rapidly in 2010 and beyond (European Commission, 2010).

Cyclical downturns have generally had an adverse effect on the budget balance in the CEE countries, while booms have had the opposite effect. The sensitivities of the budget balance to cyclical fluctuations in the CEE countries are somewhat

[3] In 1995–2010 the average unemployment rate was 10.1% in the CEE countries and 7.5% in the EU-15 Member States, while the standard deviation was 2.8% and 1.7%, respectively (Eurostat, author's calculations).

[4] Some countries stand out. Bulgaria managed to reduce its public debt from 108% of GDP in 1997 to 17% in 2007, while Estonia had budget surpluses in most years from 1995 to 2007 and a debt stock of 4% of GDP in 2007. Hungary, at the other extreme, pursued expansionary fiscal policies in the years prior to the global financial crisis, resulting in a government debt of 66% of GDP at the end of 2007.

disputed. The institutional features of the public sectors suggest relative low sensitivities: the public sectors are relatively small, tax systems exhibit modest progression and welfare provisions are limited (Staehr, 2010a). This view is supported by Eller (2009) who reports data from the European Commission on the size of the automatic stabilisers in the overall budget balance in individual CEE countries. The automatic stabilisers are, on average, smaller in the CEE (0.37) than in the EU-15 (0.49), but they are in all cases positive (from 0.27 to 0.47).

Staehr (2008) estimates budget balance reaction functions using panel data for the CEE and the EU-15 Member States separately. In this study the measured effect of GDP changes on the overall budget balance pertains to the effects from the automatic stabilisers and from discretionary changes correlated with GDP changes. Using this broad measure, Staehr (2008) finds, across a number of specifications, that the impact of GDP growth on the overall budget balance is larger in the CEE than in the EU-15.

It is reasonable to conclude that business cycle fluctuations have a substantial effect on the budget balance in the CEE countries. This helps to explain the substantial variations in budget balances and seems to be consistent with developments during the global financial crisis when most CEE countries experienced a considerable deterioration of their public finances. Negative output growth, increasing unemployment and, in the case of Latvia, the recapitalisation of a major bank exerted significant downward pressure on the budget balance in 2008–2010. Most of the budget deterioration can be attributed to automatic stabilisers, but the balance was also affected by expansionary discretionary measures in Poland and Bulgaria, and contractionary discretionary measures in Estonia and Hungary (Staehr, 2010b).

Government debt ratios in the CEE countries are relative low compared to the EU-15 average, but the fiscal policy space is still very restricted in the former. Empirical research has shown that sovereign debt crises appear at much lower debt ratios in emerging markets compared to advanced economies, although it is generally not possible to predict a sovereign debt crisis solely on the basis of the stock of debt (Reinhart et al., 2003; Manasse and Roubini, 2009). Events during the global financial crisis confirmed that CEE governments were easily subject to confidence crises and financing problems. Latvia and Romania sought international financial assistance as their financing dried up even though their government debt levels at the end of 2007 stood at 9% and 13% of GDP, respectively (Staehr, 2010b).

Regardless of the relatively benign public finance figures, the scope of using fiscal policies to stabilise the business cycle is limited in the CEE countries. The countries may easily face financing problems if they pursue expansionary fiscal policies to counteract cyclical downturns. Moreover, since the countries are members of the EU, the Stability and Growth Pact imposes – at least at the formal level – relatively tight constraints on the size of fiscal deficits.

The upshot is that the CEE countries face substantial policy challenges regarding their macroeconomic management. On the one hand, the countries are subject to considerable fluctuations in output and unemployment with expectedly adverse welfare consequences. On the other hand, fiscal policies have limited scope to stabilise business cycle fluctuations, at least as pertains to cyclical downturns.

3. The Introduction of Funded Pension

Most of the CEE countries have 3-pillar pension systems but their specific designs vary across countries and the systems are changed frequently. The first pillar comprises a PAYG component with defined benefits, the second pillar comprises a compulsory funded system component with defined contributions, and the third pillar is a voluntary funded system of defined contributions with tax incentives. The second and third pillars comprise the funded part of the 3-pillar system and the funds are typically held on individual saving accounts that are in escrow until retirement.

As discussed in section 1, compulsory saving schemes were used during World War II. They have also been used occasionally in some advanced economies for the purpose of macroeconomic management. In some cases, funded pension schemes have also been part of employment contracts and collective agreements.

The use of compulsory saving as a means to provide economy-wide pensions was pioneered in Chile in 1981. The existing PAYG system was replaced by a fully funded system in which contributions were accumulated in private sector pension funds. This *substitutive system*, relying almost entirely on individual private funding, has later been adopted by a number of countries across the world (Orenstein 2008, chapter 1). From among the post-communist countries, only Kazakhstan had adopted the system by the beginning of 2011.

The funded pension system was seen as a means to ensure adequate pensions in societies where aging meant that the number of retirees increased relative to the number of working-age individuals. In a PAYG system the increased pension burden must be financed by higher taxes, which would lead to an increasing excess burden and possibly more tax evasion (Lindbeck and Persson , 2003).

The funded pension system was seen to provide a number of additional benefits, such as increased national saving, higher returns to pensioners than the implicit return in the PAYG system, and improved incentives for labour market participation. Many of these benefits have since been cast in doubt, based on both theoretical and empirical research (Orszag and Stiglitz, 2001, Mesa-Lago 2002).

The substitutive system in which the eventual pension depends entirely on the assets accumulated by the individual and the return of the pension fund implies that substantial risks rest on the individual. The pension received may be very low if the

individual faces hardship while in the labour market and/or invests in a fund with a low ex-post return.

From a macroeconomic viewpoint the fiscal consequences of a transition from a PAYG to a funded system are challenging (Feldstein, 1998; Lindbeck and Persson, 2003). During the transition the working-age population must accumulate funds for their own retirement while also paying taxes to pay for PAYG system that provides pensions to the current pensioners. The pressure on the working-age population may be reduced by lowering their tax burden, but the side effect of this may be that public finances are strained in the short term.[5] Broadly speaking, the long-term fiscal problem is turned into a short-term problem forcing policymakers to make difficult decisions. The consequences are, ceteris paribus, deterioration of the budget balance and accumulation of additional financial debt. In practice, the effect of this exercise in "starving the beast" is difficult to ascertain, since so many other factors affect the budget stance.

The two problems discussed above became evident already in the 1980s. The straightforward solution was to combine the PAYG and funded pensions. The result was the 3-pillar pension model, for which the World Bank became a strong proponent (World Bank, 1994; Orenstein, 2008).

The 3-pillar system had been adopted by more than 20 countries at the beginning of 2011. The first pillar is modelled along a traditional PAYG system, but with lower pay-out rates. The second pillar amounts to a compulsory saving scheme with the objective to provide additional resources for an individual's retirement. The third pillar is voluntary but allows the individual to accumulate pension funds with a tax advantage. The accumulated fund of both the second and the third pillar are usually in escrow until the individual retires.

The 3-pillar system has the advantage that the risks of an individual participant are somewhat diversified as compared to systems fully based on PAYG or funded pension. At the same time the required accumulation for the second pillar is relatively modest and does not impose an excessive burden on the individual. A major drawback has turned out to be the substantial management fees charged by private pension funds that invest the second and third pillar funds (Orszag and Stiglitz, 2001, Mesa-Lago, 2002).

Most of the CEE countries adopted the 3-pillar system at the end of the 1990s and in the following years. The World Bank provided economic and technical advice in all cases, but each country adopted its own version, which led to substantial variation across the CEE countries (Orenstein, 2008). For instance, the

[5] The short-term fiscal problems may be easier to manage in economies with strong trend growth where tax revenues grow owing to the high rate of economic growth. This may be one of the explanations why the funded pension system has been adopted largely in emerging market economies.

rules for admissible investment objects exhibit substantial variance.[6] Table 1 provides a short overview of the second pillar systems in place at the beginning of 2011. All CEE countries have third pillar saving schemes with tax benefits.

Table 1: Second Pillar Funded Pension in the CEE Countries at the Beginning of 2011

	Second pillar	Start year	Contribution rate, % of payroll
Bulgaria	Yes	2002	5.0
Czech Republic	No[a]	..	..
Estonia	Yes	2001	6.0
Latvia	Yes	2001	4.0
Lithuania	Yes	2002	5.5
Hungary	Yes[b]	1998	8.0
Poland	Yes	1999	7.3
Romania	Yes	2008	3.0[d]
Slovenia	No[c]	..	..
Slovakia	Yes	2003	9.0

[a] *A second pillar funded pension is scheduled to be introduced in the Czech Republic.*
[b] *The second pillar funded pension is schedule to be abolished in Hungary.*
[c] *Compulsory second pillar funded pension exists for public employees.*
[d] *The contribution rate in Romania is scheduled to increase gradually to 6% of payroll.*
Note: The information applies as to the beginning of 2011 and does not include temporary reductions introduced during the global financial crisis.
Sources: Whiteford (2005, pp. 19–20) and Orenstein (2008, p. 27), updated using information from www.ipe.com and news media.

The pension systems in the CEE countries have changed repeatedly since the introduction of the first 3-pillar systems at the end of the 1990s. This picture appears to continue. As of the beginning of 2011, Hungary is set to "repatriate" the assets accumulated in the second pillar funds, essentially abandoning the 3-pillar system. Poland is planning to reduce the contributions to the second pillar and instead transfer the resources to the first pillar. The Czech Republic is slated to introduce a second pillar although it might not become compulsory. Repeated changes to the pension systems suggest that policymakers have shown great willingness to alter the systems in light of shifting priorities and changing economic conditions.

[6] De Menit (2000) discusses the introduction of the 3-pillar system in the transition countries and emphasises the importance of prudential regulation and macroeconomic stability.

4. The Effect of Funded Pension on Economic Fluctuations

There is virtually no research on the role of pension systems in influencing the depth and severity of business cycles. This section discusses a number of possible channels, through which a funded pension system may amplify the effects of economic shocks. Beyond those mentioned, other channels and effects undoubtedly exist.

Pro-cyclicality of consumption

Funded pension may have the potential to exacerbate tendencies for pro-cyclical consumption. First, if an individual engages in intertemporal smoothing of consumption, the accumulation of pension assets may entice the individual to borrow in order to increase consumption in the short term.[7] An economic boom, which increases the value of pension assets via higher stock and bond prices, may thus create incentives for additional consumption that are financed by borrowing. Second, individuals that are approaching the retirement age during a downturn face the prospect of lower payouts from their funded pension (Burtless, 2010; Bosworth and Burtless, 2010). Intertemporal smoothing of consumption implies that individuals reduce consumption prior to retirement with a possible effect on aggregate consumption and economic activity.

Maturity mismatches and susceptibility to shock

In the CEE countries, the main tangible assets of a young or middle-aged individual are typically residential property and accumulated second and third pillar savings, while the main liability consists of short-term loans, often issued in foreign currencies such as the euro or the Swiss franc. The funded pension systems may aggravate the maturity mismatch of assets and liabilities if individuals take into account the accumulated pension assets and borrow in anticipation of future payouts.

The composition of assets and liabilities described above may be reasonable for individuals living in rapidly growing economies such as those in Central and Eastern Europe. The mismatch, however, leaves individuals very exposed to rapid changes in the economic environment, for instance the negative shocks resulting from unemployment, wage cuts or interest rate increases. In case of a negative shock, an individual typically does have access to his or her potentially substantial accumulated pension saving.[8] A negative shock may therefore lead to abrupt consumption retrenchment, forced sale of residential property or even personal

[7] Empirical research shows that this may indeed be the case, cf. Attanasio and DeLeire (2002) and Gale (1998).

[8] In principle, it may be possible to use accumulated pension assets as collateral, but it is unlikely that a lender would accept an asset that is so illiquid as collateral.

bankruptcy. Such developments would likely affect the macroeconomic situation if shared by many. In summary, if a funded pension system leads to more short-term borrowing, the effect may be more susceptibility to shocks and potentially amplified economic fluctuations in the economy.

Counter-cyclical fiscal policy

The transition from a PAYG pension system to a 3-pillar system may strain public finances as discussed in section 3. During the transition, working-age individuals must save for their own retirement through the funded system and also pay taxes to pay for the PAYG pensions to the present pensioners. The result may be accumulation of financial debt, if policymakers react by reducing taxes for the current working-age population. Moreover, as discussed in section 2, governments in emerging markets have typically narrow limits on their borrowing. In combination, these factors may undermine the ability of governments to pursue expansionary fiscal policies during a downturn. Consequently, business cycle fluctuations may be aggravated if the introduction of a funded pension system strains government finances and thereby impedes counter-cyclical policies.

5. Using Funded Pension Systems to Stabilise Business Cycles

The CEE countries have strong business cycle fluctuations, potentially aggravated by the funded pension systems in many of the countries. Meanwhile, public finances are stretched and counter-cyclical fiscal policy is not always feasible during downturns. It is outside the scope of this paper to discuss the whole range of possible remedies. It suffices to state that a prudent fiscal policy, maintained during booms, will reduce vulnerabilities and leave more policy options open during downturns.[9]

5.1 Two Measures

This paper proposes the implementation of policy measures, which use the funded pension systems in the CEE countries actively in order to stabilise fluctuations in the real economy and increase the resistance of public finances to financing problems during downturns. Two different measures are considered: measure A changes the contributions to the compulsory second pillar, measure B allows withdrawal of accumulated pension asset.

A) The contributions to the compulsory funded pension pillar depend on the state of the economy. Contributions are lowered during recessions and increased

[9] Governments may choose to accumulate reserves from privatisation revenues and budget surpluses during booms. This policy prescription has been practiced with some success in Estonia since the 1990s (Kaasik, 2009).

during booms.[10] This may be implemented in the form of a "normal" contribution rate during most parts of the economic cycle and a reduced rate, possibly equal to zero, during recessions. The measure essentially amounts to *compulsory saving* during upturns in the economy and *compulsory dissaving* during downturns.[11]

B) Individuals are allowed to withdraw funds from their accumulated second and third pillar savings during economic downturns. The released funds are subjected to ordinary income taxation or may alternatively be taxed by a reduced rate, if the government seeks to give individuals additional incentives to withdraw their funds.

There are a number of specific details of the two measures to be considered. Three issues are discussed here. First, measures A and B are specified so that the overall macroeconomic stance determines whether, for instance, contributions to the second pillar are reduced or whether withdrawals from the second and third pillars are allowed. This choice of trigger mechanism entails that the measures seek to address imbalances in the overall macroeconomic situation. The trigger could alternatively be based on microeconomic or individual criteria, such as whether or not the individual is affected by a substantial income shortfall, unemployment or serious health problems. This trigger suggests that the measure has largely social or socio-economic objectives, although there may also be a macroeconomic effect.

Second, the lowering or elimination of contributions to the second pillar during a downturn (measure A) may be compulsory or voluntary. It is likely easier to administer a compulsory lowering or elimination of contributions, in which case individuals who want to maintain the previous contribution will have to find alternative pension saving instruments. In countries with a 3-pillar system, these individuals can save in the third pillar.

Third, it may be important to establish rules for the portfolios of the pension funds affected by measures A and B. In case the measures are put in place during a downturn, the ceasing or reduction of transfers to the pension funds (measure A) or the withdrawal of funds (measure B) may cause disruptions in domestic financial markets, if pension funds abruptly cease buying or start selling domestic securities. Such disruptions may be highly disadvantageous during a downturn. The risk of disruptions of domestic financial markets will be reduced if pension funds are initially heavily invested in foreign financial assets. It may alternatively be possible

[10] A variation of measure A is that all or part of the compulsory second pillar saving is diverted to the government budget (as ordinary social security contributions) during recessions, while the forgone contributions can be paid back into the second pillar by the government during booms.

[11] The measure shares, in this respect, the basic configuration of the compulsory saving scheme suggested in Keynes (1940, pp. 69–70).

to set out rules establishing, for instance, that the funds should primarily sell foreign financial assets.[12]

5.2 Examples of Changes in Funded Pension Rules

The measures proposed in subsection 5.1 are not merely theoretical thought experiments; versions of the measures have been implemented in a number of countries at various times.

Variations of measure A were implemented in the aftermath of the global financial crisis by many CEE countries, including Estonia, Latvia, Lithuania, Hungary and Romania. The rapid deterioration of public finances in the CEE starting in the fourth quarter of 2008 was partly addressed by diverting a part of the payments from the second pillar pension funds to the government budget. Details varied across countries, but in some countries governments decided that future pension payouts from the first pillar would be increased to compensate for the reduced accumulation of second-pillar funds. The diversion of funds from the second pillar improved, ceteris paribus, the fiscal stance and reduced public financing needs. This helped avert or reduce public financing problems in countries undertaking the measure and may also have allowed governments to pursue more expansionary fiscal policies.

A variant of measure B applies to 401(k)-pension accounts in the USA. The 401(k) is a defined-contribution pension paid by the employer. As a rule, the accumulated sum cannot be withdrawn until retirement, but the law allows withdrawals in case of "immediate heavy financial need" (IRS, 2011). Such "hardship distribution" can take place if, for instance, the individual must pay for medical expenses or risks loosing his or her residence. The idea is that individuals can use accumulated pension funds to avert short-term economic and social deprivation.

In the wake of the global financial crisis, Denmark implemented a version of measure B in which accumulated pension funds were released. In 1998–2003, a compulsory saving scheme called Special Pension (SP) was in place that obliged working-age Danes to save 1% of their income in individualised accounts. The total sum of accumulated SP savings amounted to 3.1% of GDP in 2007, but only 2.5% of GDP in 2008 as the value of the financial assets in the investment portfolio had fallen (ATP, 2009).

Denmark experienced a deep recession already at the early stages of the global financial crisis. The government therefore decided that account holders could withdraw their SP funds during the second half of 2009 and the withdrawals would be subject to a relatively low (but progressive) taxation. The scheme proved very

[12] This might be possible via, for instance, prudential regulation rules.

popular and very few account holders decided to retain their SP pension. Later this led the government to close down the entire SP scheme.

5.3 Contemplating the Effects

It is outside the scope of this paper to provide a comprehensive assessment of the efficacy of the policy measures proposed in subsection 5.1, as this would entail complex empirical analyses for each country separately. Instead, this subsection provides a discussion of some of the issues that determine the effects of the two policy measures. To simplify the exposition, two concrete examples are considered.

Ceasing of contributions (measure A)
The economy experiences a *cyclical downturn* of substantial magnitude and the second-pillar contributions are temporarily stopped for everybody. Sums that previously were transferred to second-pillar pension funds are instead treated as income that is taxed and subsequently paid out to individuals. The immediate effect is that individuals have access to extra resources representing a (temporary) increase in disposable income. Individuals decide how the extra resources are allocated.

For one part of the population, the initial amount of second-pillar saving was in accordance with their intertemporal preferences, implying that they wanted to postpone their consumption and the "compulsory saving" essentially was voluntary. The ceasing of second-pillar contributions would have a very modest effect on the consumption of these individuals (Romer, 2005, chapter 7).

For another part of the population, the compulsory saving of the second-pillar was involuntary in the sense that they would have liked to save in other ways, for instance by paying down debt or other financial obligations. The ceasing of second-pillar contributions would allow these individuals to service debt or other obligations with the possible effect of avoiding high interest rates, delinquency fines or even personal bankruptcy. In other words, the ceasing of pension contribution may help individuals overcome the maturity mismatch discussed in section 4 and the financial disruptions of cyclical downturns may therefore be reduced.

Finally, for the rest of the population, the compulsory saving of the second pillar and the implied postponement of consumption was involuntary. These individuals would conceivably increase their consumption in response to the reduced pension contributions. The desire of individuals to advance consumption is likely higher if they have experienced an income decline and liquidity constraints make it difficult to borrow.

Combining the effects of the three groups, the net effect of the ceasing of second-pillar contributions would, in all likelihood, be an increase in consumption.

Increased demand would be expansionary if there are unutilised resources in the economy. There might be also fewer loans in delinquency and fewer cases of personal bankruptcies, which may contribute to a less pronounced downturn. Moreover, the government budget balance would be improved, directly because income that previously was transferred to second-pillar funds is now taxed, and indirectly because of the improved cyclical stance.

Allowing withdrawals (measure B)
The economy experiences a *cyclical downturn* of substantial magnitude and individuals are allowed to withdraw accumulated funds from their second and third pillar, subject to taxation. The extreme case is that nobody withdraws funds in which case the measure has no effect. However, to the extent that funds are withdrawn, the same effects as discussed above apply, i.e. consumption will increase, disruptions from delinquency of private financial obligations will decrease and the budget balance will be strengthened.

The discussion above suggested that both measures, A and B, have the potential to help smooth a cyclical downturn. This also applies if the quantitative effects are considered. Transfers to the second pillar in the CEE countries with funded pension constitute 3–9% of the payroll, which translates to around 1.5% to 4.5% of GDP, given that labour income accounts for approximately half of GDP in these countries.[13] If payments are fully stopped, the immediate demand stimulus would amount to 1.5 to 4.5% of GDP, which would entail noticeable macroeconomic effects. Allowing individuals to withdraw their funds could potentially have much larger effects, depending on the amounts withdrawn.

5.4 A Simulation of the Effects of Releasing Pension Funds

This subsection presents a numerical example to illustrate the possible effects on output, unemployment and fiscal variables of the release of accumulated pension funds (measure B). The example is based on simulations undertaken on EMMA, a model developed in Bank of Estonia (Kattai 2011, chapter 3). The simulations should not be interpreted as a realistic prediction but rather as an illustration of possible effects of a given pension policy experiment using a range of assumptions.

EMMA is a traditional quarterly macroeconometric model used for forecasting and policy analysis. The model is structural with typical Keynesian features. The main behavioural equations are based on reduced-form estimations that incorporate error-correction specifications. The explicit modelling of the equilibrium part helps

[13] The size of the accumulated third-pillar savings varies considerably across countries.

ensure long-term stability of the model.[14] The behavioural equations are derived from economic theory, but the model does not *explicitly* incorporate temporal or intertemporal optimisation. The economy is small and open, which implies that external conditions, such as the euro area interest rate and foreign prices, are taken as exogenously given.

The model features four main sectors, i.e. households, firms, banks and the government. The households consume out of disposable income while saving in or borrowing from the banking sector. Estonia has a flat income tax rate of 21% that applies to most sources of household income. (The pension system is not explicitly modelled in the model.) EMMA allows the imposition of different behavioural rules as regards government behaviour. In the simulation it is assumed that government revenue and spending react endogenously to key variables in the economy based on estimations using historical data.

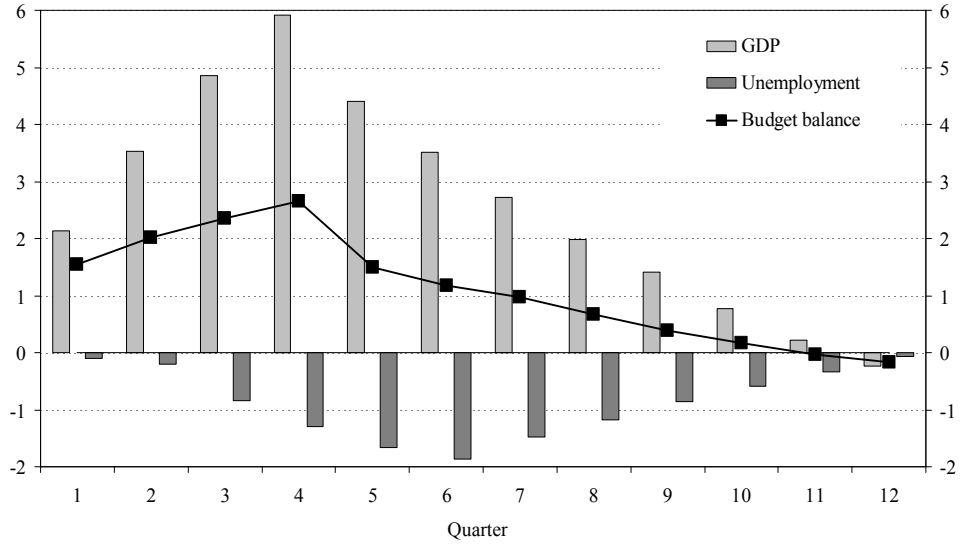
The starting point is a baseline scenario, which is essentially a 12 quarters economic projection. The baseline scenario is structured so that there are vacant resources in the economy, e.g. in the form of unemployment, throughout the simulation horizon, and positive demand shocks can therefore affect output and other real variables.

The simulated experiment is a one-off release, during one year, of accumulated pension saving that amount to 5% of GDP. This is meant to reflect a situation where *foreign-held* pension assets are liquidated and the revenue paid out as advance pension payouts, which is subsequently taxed. The experiment entails that pre-tax household income is increased by 5% of quarterly GDP in each of the first four quarters of the simulation horizon.

Chart 1 shows the simulated effects on GDP, unemployment and the budget balance, all measured as deviations in percentage points from the baseline scenario. The pension payout increases consumption demand and the extra demand in the economy increases income by around 4 percentage points in the first year, by 3 percentage points in the second year and slightly less than by 1 percentage point in the third year. These numbers illustrate the potential of a large pension payout to stimulate demand and output. The instantaneous (first year) multiplier is close to 1; the pension payout amounts to 5 percentage points of GDP and with a flat income tax rate of 21%, the household receives a net of 79% of the released pension savings or approximately 4 percentage points of GDP. The multiplier effect occurs mainly in the second year when income remains substantially higher and unemployment considerably lower than in the baseline scenario.

[14] Some of the behavioural equations are estimated so that their equilibrium conditions take into account that the income level in Estonia has been converging to the average level in the EU-15.

Chart 1: Simulated Effects of Released Pension Funds in Quarters 1–4, percentage points



Source: Author's simulations based on EMMA.

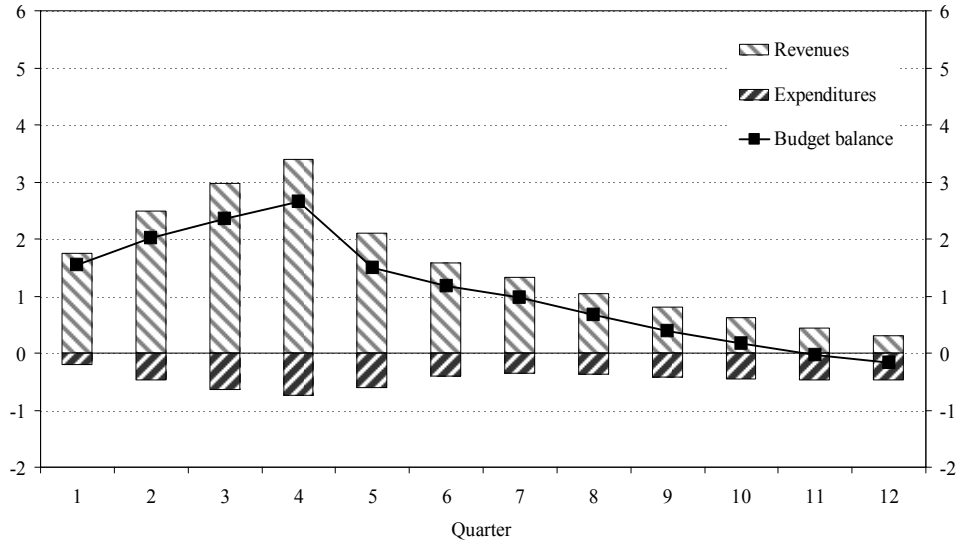
The budget balance improves by approximately 2 percentage points of GDP in the first year and by a bit over 1 percentage point of GDP in the second year, while the effect is unsubstantial in the third year. The significant improvement during the first four quarters is due to two concurrent effects: a direct effect from the taxation of the released pension funds and an indirect effect from improved macroeconomic performance. In the following years only the latter effect is present.

The effects of the release of accumulated pension funds will in large part depend on the derived reactions of individuals to additional resources becoming available in the short term. The simulations assume that the historical saving propensity out of income is maintained, but other outcomes may also transpire. Individuals may increase their savings to compensate for the payout of pension funds, in which case the output multipliers will be smaller than those depicted in chart 1. Alternatively, given that the economy is in recession and individual budgets are likely to be strained, individuals may have an unusually low savings rate, in which case the output multipliers will be larger than those depicted in chart 1. The precise behavioural reaction to the pension payout is virtually impossible to assess ex ante.

Chart 2 details the development of public finances after the release of pension funds. The effect on revenues is sizeable in the first year, almost 3 percentage points of GDP. The direct effect is close to 1 percentage point and the indirect effect to 2 percentage points. Revenues increase by approximately 1.5 percentage

points in the second year and 0.5 percentage point in the third year. The effect on the budget balance is dampened by higher expenditures amounting to roughly 0.5 percentage point of GDP in all three years. The higher expenditures are partly the result of higher GDP growth raising incomes and therefore also public expenditures such as pensions and public wages.

Chart 2: Simulated Effects of Released Pension Funds in Quarters 1–4, percentage points



Source: Author's simulations based on EMMA.

The simulation results suggest that the effects of releasing accumulated pension funds can be substantial and may help restore growth and reduce unemployment in an economy that undergoes a downturn. The exact magnitudes are, of course, the result of the features of the EMMA model, the behavioural assumptions and the way the policy is implemented. This suggests that the results are subject to significant uncertainty that is very difficult to quantify.

6. Final Comments

The countries in Central and Eastern Europe have experienced strong business cycle fluctuations in the last two decades. Periods of rapid economic growth have been followed by deep downturns in the wake of financial crisis, softening export markets or confidence shocks. Counter-cyclical fiscal policies have, at the same time, proven difficult to implement. The conclusion is that there is a need to devise

practical policy measures that can be used to dampen fluctuations in growth and unemployment in the CEE countries.

The focus point of this paper was the funded pension systems, which have been implemented in most CEE countries. It was argued that the linkages between these funded pension systems and the presence of business cycle fluctuations should be analysed in detail. This link has been largely ignored in the academic and policy-oriented literature, in spite of its likely conservable consequences as regards economic welfare.

The paper argued that the introduction of funded pension systems may have aggravated business cycle fluctuations, while weakening the crisis resistance and stabilisation capabilities of public finances in the CEE region.

The paper suggested that a more active use of the funded pension systems in the CEE countries might have the potential to stabilise business cycle fluctuations without straining government budgets. Two different measures were considered. Measure A entails that contributions to the compulsory second pillar are altered, depending on the cyclical stance of the economy or the economic situation of the individual. Measure B entails that individuals are allowed to withdraw pension funds in case of adverse economic developments.

The measures act in a counter-cyclical way by stimulating consumption and reducing financial strain during downturns. Some simulation exercises suggested that the measures have the ability to affect the business cycle and the budget balance in quantitatively meaningful ways. The measures and their effects should, however, be analysed in more detail, taking into account country-specific economic and social characteristics.

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Fiscal Vulnerabilities in the CESEE Countries: the Role of Fiscal Policy Structures and Budgetary Discipline

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1. Introduction

When the global financial and economic crisis set in, its impact on budgetary positions and financial market sentiment differed widely across the Central, Eastern and South Eastern European (CESEE) countries.[2] Against this background, this paper discusses whether the conduct of fiscal policies ahead of the crisis has impacted on these countries' fiscal space during the crisis. Put differently, it analyses whether some features of the *historical fiscal track record* ahead of the crisis rendered the CESEE countries particularly vulnerable when the crisis set in and contributed to the perception by financial markets that the sustainability of these countries' public finances was at risk, thereby giving rise to higher risk premia and interest rates. For the purpose of the following analysis, the *historical fiscal track record* does not only focus on common fiscal vulnerability indicators such as structural budgetary positions. It also captures vulnerabilities arising from fiscal policy structures, i.e. the composition of general government revenue and expenditure. To a lesser extent the analysis accounts for lack of fiscal policy

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[2] The analysis focuses on ten CESEE countries, which are members of the European Union: Bulgaria, the Czech Republic, the Baltic countries, Hungary, Poland, Romania, Slovakia and Slovenia. Three of these countries have adopted the euro (Slovenia in 2007, Slovakia in 2009 and Estonia in 2011), while Latvia and Lithuania participate in ERM II.

discipline as measured by deviations of actual fiscal outcomes from budgetary targets.

The paper argues that the spending behavior of several CESEE countries prior to the crisis, including substantial increases in social payments and compensation of employees in times of strong growth, fuelled the demand boom and rendered fiscal positions vulnerable. Together with the fact that some CESEE countries consistently failed to meet their structural budget targets, this is likely to have weighed on financial markets' confidence in the prudence of fiscal policies when the crisis took hold. Among several others, these may have been crucial factors triggering the observed increases in interest rate spreads when the downturn deepened. The paper concludes that while the consolidation effort in most of these countries in reaction to the crisis was considerable, in a number of them it has not yet brought about the needed improvement in the growth-friendliness of public spending.

The subsequent analysis builds on literature related to fiscal vulnerability and fiscal space in times of financial crisis. In a recent contribution to the literature, Ostry et al. (2010) argue that countries' fiscal space depends on countries' historical fiscal response to rising debt levels as captured by primary balance adjustment. Fiscal space is then defined as the difference between the current debt level and a *debt limit* beyond which the historical fiscal response to rising debt levels becomes insufficient to maintain debt sustainability. In this respect, this paper argues that countries' fiscal space would need to be adjusted for fiscal vulnerabilities arising from fiscal policy structures and budgetary discipline. A different strand of literature stresses the importance of expectations for countries' default on debt, arguing that pessimistic expectations can push up interest rates, which in turn increases the probability of default (see for a seminal contribution to the literature Calvo (1988) and also Hemming et al. (2003) for a survey).

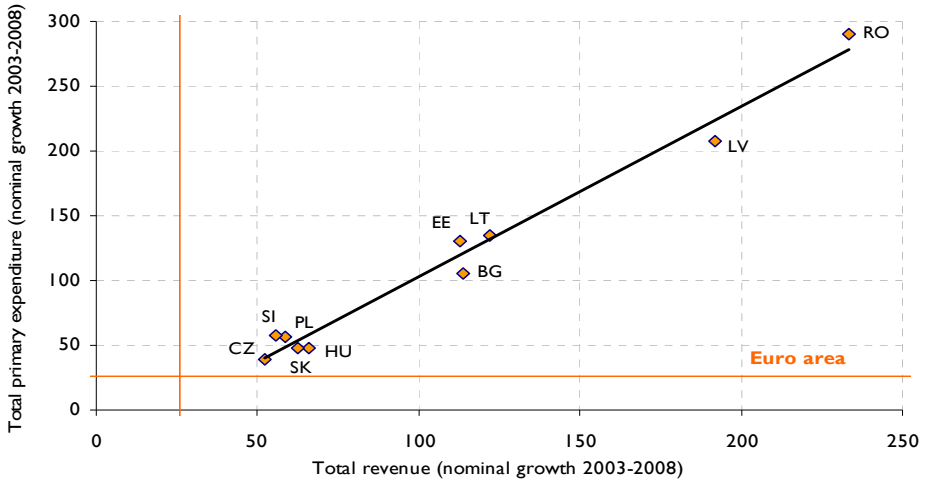
The article is structured as follows. Section 2 briefly reviews public finances ahead of the crisis, surveys the spending behavior in the CESEE countries and assesses fiscal policy discipline. Section 3 outlines major challenges for prudent fiscal policies in the aftermath of the crisis. It discusses the impact of the fiscal responses to the crisis on the growth-friendliness of public spending so far and highlights the need for stricter fiscal frameworks. Section 4 concludes.

2. Public Finances before the Crisis

The economic boom that was observed in many CESEE countries in the years prior to the crisis was associated with very strong general government revenue growth. Direct tax revenues more than doubled in the Baltic countries, Bulgaria and Romania over the period 2003–2007, with nominal growth of more than 200% in Romania and Latvia, which compares with growth of 29% in the euro area (see Chart A1 in the Annex for details). This strong rise in direct tax revenues hides in

part structural reforms aimed at reducing distortionary labor taxation, which further fuelled the demand boom in these countries ahead of the crisis. In Bulgaria, Romania, Estonia and Latvia, also indirect tax revenue more than doubled over 2003–2007, with growth of more than 150% in Romania and Latvia, compared with nominal growth of 27% in the euro area.[3] In some CESEE countries this strong revenue growth triggered significant increases in primary public expenditure (see also Bakker and Gulde, 2010). As chart 1 shows, when looking at the period 2003-08, this pattern was particularly prevalent in Romania and Latvia, followed by Lithuania, Estonia and Bulgaria.

Chart 1: Nominal Revenue and Primary Expenditure Growth, 2003–2008



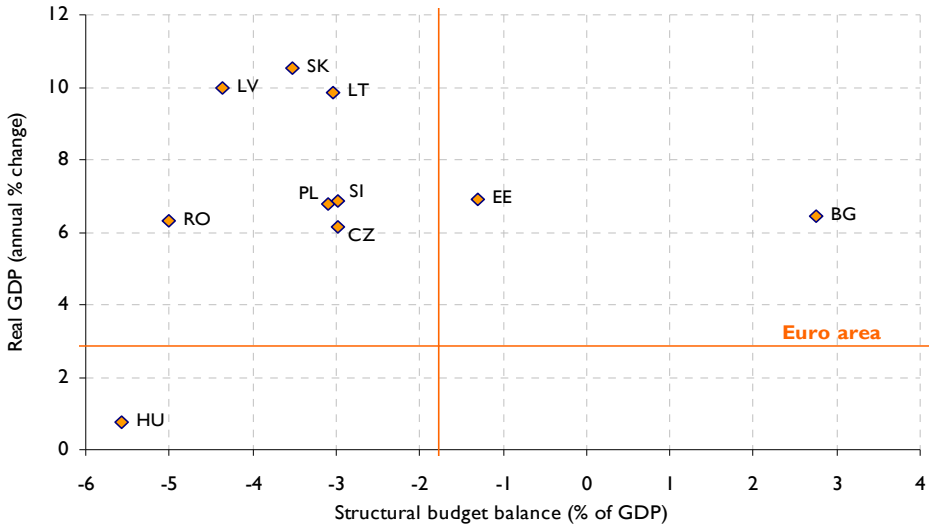
Source: Eurostat and European Commission (AMECO database).

This strong expenditure growth, which implied that the good economic times in the years ahead of the crisis were generally not used to build up fiscal buffers, rendered structural budgetary positions weak. As chart 2 shows, apart from Bulgaria, based on ex-post data, all countries recorded structural deficits in 2007 despite a still very favorable macroeconomic environment. The three CESEE countries that had to call on, *inter alia*, the IMF and the EU for international financial support entered the crisis with the largest structural deficits: Hungary recorded a structural deficit of

[3] As shown in chart A2 in the Annex, the CESEE countries tend to rely stronger on indirect tax revenue and to a lesser extent on direct tax revenue when compared with the euro area average, as indicated by their shares in total general government revenues.

about 5.5% of GDP, followed by Romania (5.0% of GDP) and Latvia (4.4% of GDP).

Chart 2: Structural Budget Balances and Real GDP Growth in 2007



Source: Eurostat and European Commission (AMECO database).

2.1 Fiscal Policy Structures: the Composition of Public Expenditures

As shown in chart 3, the rise in primary public expenditure in the years ahead of the crisis related to a considerable extent to spending on less productive items such as social payments and compensation of employees. Social payments include most importantly old age pensions and unemployment benefits, while compensation of employees comprises in particular wages and salaries as well as employers' social security contributions. As the chart shows, social payments account for a smaller share of total public expenditure in all CESEE countries except Slovakia when compared with the euro area average. However, starting from these lower shares, nominal growth of social payments prior to the crisis was considerably stronger in all CESEE countries when compared with the euro area. The boost in social payments over 2003–2007 was particularly significant in the strongly growing

Baltic countries and Romania (+180%), reflecting also sizeable increases in pension benefits. At the same time, the share of public spending on compensation of employees in total public spending was in 2007 larger in all CESEE countries except the Czech Republic and Slovakia when compared with the euro area average. In most countries public spending on compensation of employees rose markedly in the years prior to the crisis, reflecting mostly strong increases in public sector wages. As the chart shows, compensation of employees grew stronger in all CESEE countries considered here when compared with the euro area. Nominal growth was particularly strong in Romania and Latvia, where it reached more than 100%, followed by Estonia with about 90% over 2003–2007. Overall, this public spending behavior clearly fuelled the domestic demand booms in these countries further. And it may have weighed on financial markets' confidence in the prudence of fiscal policies, raising the prices at which they were willing to provide financing means when the crisis took hold.

Chart 3: Social Payments and Compensation of Employees, 2003–2007

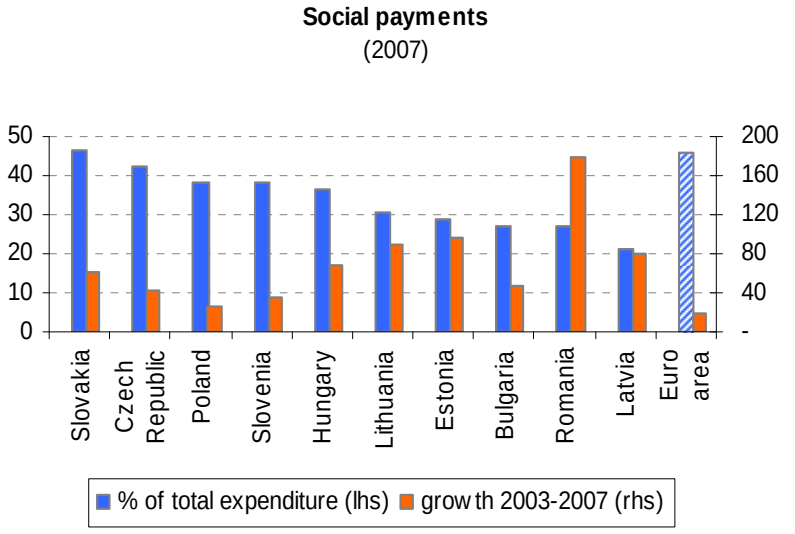
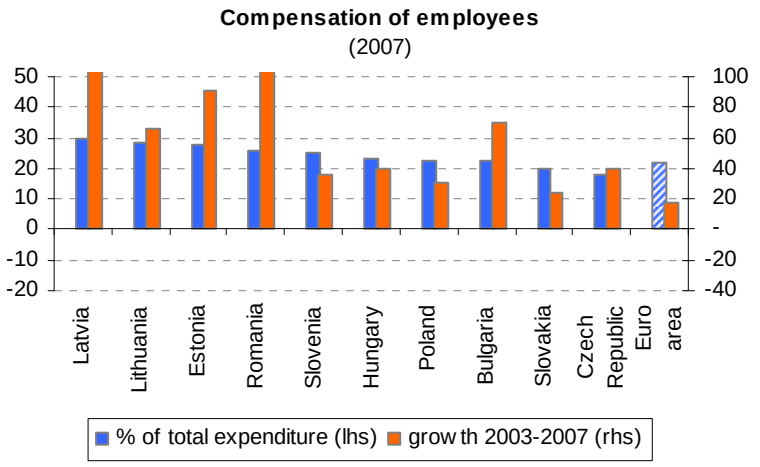


Chart 3 continued: Social Payments and Compensation of Employees, 2003–2007



Source: Eurostat and European Commission (AMECO database).

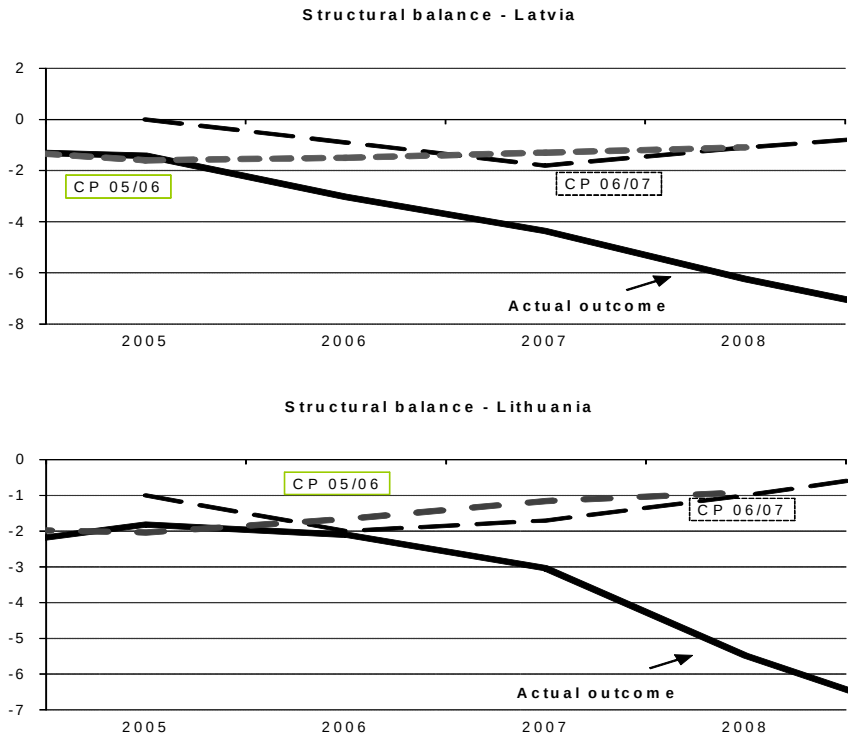
2.2 Fiscal Policy Discipline: Fiscal Plans versus Actual Outcomes

The public spending behavior prior to the crisis just described can be taken as an indication that the budgetary frameworks in these countries did not provide for the necessary spending constraints when economic growth accelerated. As a consequence, most countries did not use the economic good times prior to the crisis to build up fiscal buffers and to ensure trust in fiscal discipline. Such fiscal discipline may be captured by compliance of fiscal policies with targets as outlined in countries' convergence programs.[4] One may conjecture that a country which ensures compliance with its (prudent) fiscal targets receives more credit by financial markets in the form of trust in their policies than countries that fail to achieve such targets. In the years of strong growth prior to the crisis, nominal budget balance targets as outlined by governments in their convergence programs were usually met, with some countries out-performing them by a sizeable margin. By contrast, as shown in chart 4 for the examples of Latvia and Estonia, structural

[4] Darvas and Kostyleva (2011) construct a budgetary discipline index for 26 CESEE countries in 2007/08, based on information related to fiscal institutions governing budget preparation, legislation and implementation. According to this index, all ten CESEE countries considered here have a lower budgetary discipline than the OECD average. Among these countries, budgetary discipline is highest in Slovakia and Slovenia and lowest in Romania.

budget balance targets were often and consistently not met. As the chart indicates, structural positions repeatedly turned out worse than planned. Such fiscal slippages may be conjectured to have negatively affected financial market sentiment as the crisis deepened, at a time when the competition for financing means intensified and financial markets increasingly discriminated against markets that they perceived as riskier.

Chart 4: Fiscal Plans versus Fiscal Outcomes, 2007

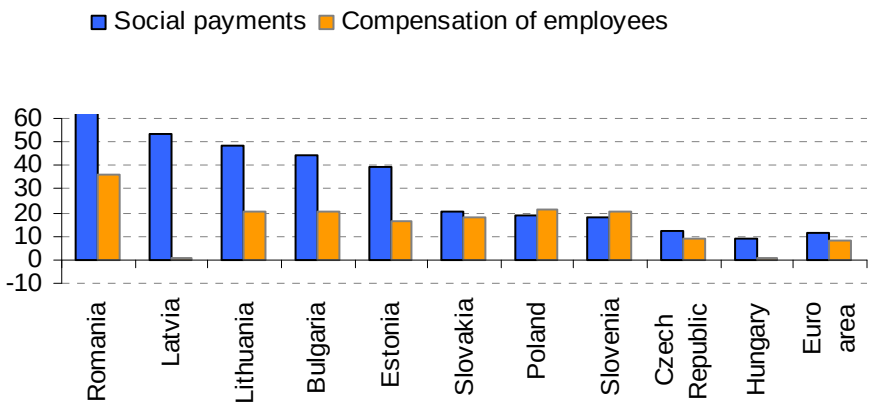


Source: Eurostat and European Commission (AMECO database), convergence programs.

When the global financial and economic crisis took hold, all countries experienced deteriorating budgetary positions, with Latvia and Lithuania facing the strongest rises in their budget deficits, amounting to about 10 and 8 percentage points of GDP over 2007–2009, respectively. This budgetary deterioration reflected, *inter alia*, the sharp correction of GDP growth, revenue windfalls turning into revenue shortfalls as well as delayed adjustment in public expenditure. The latter was associated particularly with nominal increases in social payments and compensation of employees during the years 2007–2009. These increases reflected

to a sizeable extent rises in pension benefits and public wages that derived from fiscal plans enacted ahead of the crisis, which only became effective as the downturn deepened (see chart 5). Particularly in the Baltic countries, this continued spending conflicted with the comprehensive consolidation effort required to increase confidence in the sustainability of public finances in order to reassure financial markets. It can be taken as another indication that the fiscal frameworks in a number of these countries were insufficiently effective in ensuring fiscal discipline.

Chart 5: Nominal Increases in Social Payments and Compensation of Employees, 2007–2009



Source: European Commission and ECB calculations.

3. The Response of Fiscal Policies to the Crisis

With budget deficits soaring and financial market concerns related to long-term fiscal sustainability rising, most CESEE countries responded to the global financial and economic crisis by consolidating their public finances.[5] In Latvia, Hungary and Romania, the international financial support programs called for strict consolidation. Also Bulgaria, Estonia, Lithuania and to a lesser extent the Czech

[5] See for an overview of fiscal adjustment strategies Bornhorst et al. (2010). For an assessment of adjustment strategies in the Baltic countries see Purfield and Rosenberg (2010). See for a discussion of previous consolidation episodes in the Central and Eastern European countries Afonso et al. (2006).

Republic implemented comprehensive fiscal consolidation measures aimed at containing the rapid budgetary deterioration. By contrast, in Poland automatic stabilizers were allowed to operate, while the reduction of labor taxes legislated ahead of the crisis acted as fiscal stimulus when the crisis took hold.

Apart from Estonia, all countries considered here are currently subject to an EU Council decision on the existence of an excessive deficit. The deadlines to correct the excessive deficit situation by reducing the deficit-to-GDP ratio to below the 3% of GDP reference value range from 2011 for Bulgaria and Hungary, to 2012 for Latvia, Lithuania, Poland and Romania to 2013 for the Czech Republic, Slovenia and Slovakia. The respective Council recommendations provide guidance on the required average annual structural fiscal effort to reduce the deficit-to-GDP ratios, generally recommending improved national fiscal frameworks (see table 1 for details).

Table 1: Council Recommendations under Excessive Deficit Procedures

Country	Council decision	Deadline for correction	Recommended annual average structural	Other recommendations
Bulgaria	13.07.2010	2011	3/4	strengthen fiscal governance
Czech Republic	07.10.2009	2013	1	structural refoms, strengthen quality of public finances
Latvia	18.02.2009	2012	2 3/4	strengthen fiscal governance, financial market regulation
Lithuania	13.05.2009	2012	2 1/4	strenthen fiscal governance
Hungary	12.05.2004	2011	cumulative 0.5 over 2010-11	improved budgetary planning, monitoring of budgetary execution
Poland	13.05.2009	2012	1 1/4	strengthen medium-term budgetary framework, legal ceilings on primary expenditure
Romania	13.05.2009	2012	1 3/4	implement pension reform, fiscal council, more cautious revenue forecasts
Slovenia	07.10.2009	2013	3/4	reform pension system
Slovakia	07.10.2009	2013	1	strengthen enforceability of medium-term budgetary framework, avoid expenditure overruns

Source: http://ec.europa.eu/economy_finance/sgp/deficit/countries/index_en.htm.

3.1 Changes in Public Expenditure Structures

Empirical evidence indicates that the long-term benefits of consolidation are largest, if fiscal adjustment focuses on the expenditure side of the budget.[6] A number of studies find that expenditure-based fiscal adjustment tends to be less contractionary than tax-based fiscal adjustment (see e.g. IMF, 2010), with some analyses suggesting that declines in expenditure are even accompanied by an expansion of economic activity (see e.g. Alesina and Perotti, 1995 and Alesina and Ardagna, 2010). As shown in chart A3 in the Annex, fiscal consolidation as captured by the decline in deficit-to-GDP ratios over 2009–2012 is projected to rely largely on expenditure restraint in most of the countries considered here. As chart 6 indicates, the reduction in public expenditure-to-GDP ratios is broad-based, relating, *inter alia*, to lower spending on social payments, compensation of employees, public investment and intermediate consumption (as a percentage of GDP).

Nonetheless, there are some indications that in a number of countries this consolidation will not bring about an improvement in the growth-friendliness of public spending.[7] For example, as shown in chart 5, public spending on social payments as a percentage of GDP is projected to decline in all countries except Slovenia, with the strongest declines envisaged in Estonia, Lithuania and Hungary of about 1.5% of GDP and more. This notwithstanding, the share of public spending on social payments in total public expenditure is expected to be higher in 2012 when compared with 2007 in all countries except Poland. At the same time, the chart shows that public spending on government investment is projected to decline in all countries except the Czech Republic, Hungary and Poland over 2009–2012 as a percentage of GDP. In the majority of countries considered here, the share of public spending on government investment will, however, be lower in 2012 when compared with prior to the crisis, with this difference being largest in the Baltic countries and Romania.[8] In addition, it should be noted that in all of these countries, public spending on government investment is projected to account for less than 15% of total expenditure in 2012. Generally, higher shares of public spending on social payments and lower shares of public spending on government

[6] See Rother et al. (2010) for a discussion of the benefits of fiscal consolidation.

[7] In this respect, growth-friendliness of public expenditure relates to the share of "productive" expenditures in total expenditures. "Productive" expenditures are assumed to include those expenditures that have a positive impact on the marginal productivity of capital and labor. In turn, "unproductive" expenditures are assumed to include those directly increasing households utility (Aschauer, 1989, Devarajan et al., 1996; for a discussion of the literature see Ferreiro et al., 2009).

[8] In order to improve public spending efficiency in times of fiscal consolidation needs, Daianu (2010) calls for higher disbursements of EU structural and cohesion funds. See Kamps et al. (2009) for a survey of the impact of EU funds on economic growth.

investment would point to less growth-friendly expenditure structures. The picture is less clear for public compensation of employees. All countries considered here are projected to reduce public spending on compensation of employees as a percentage of GDP, which for at least half of the countries is projected to be associated with declining shares in total spending. This would indicate a step towards more growth-friendly public expenditure structures. As regards intermediate consumption, the respective declines tend to be associated with lower shares in total public expenditure in most countries, possibly pointing to an increase in the growth-friendliness of public spending. Overall, while a country-by-country approach would be required for a full picture, there are some indications that the comprehensive consolidation effort in response to the crisis was in some countries not used as an opportunity to increase the growth-friendliness of public spending. In some countries weaknesses are remaining and in order to increase competitiveness, more needs to be done to shift expenditure structures towards productivity enhancing outlays.

Chart 6: Public Expenditure Structures, 2007–2012

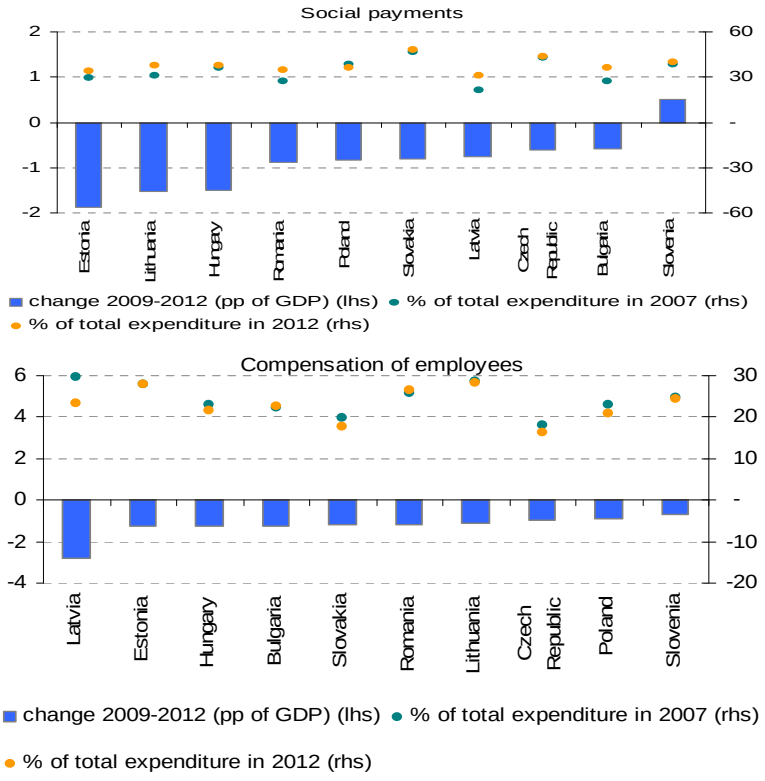
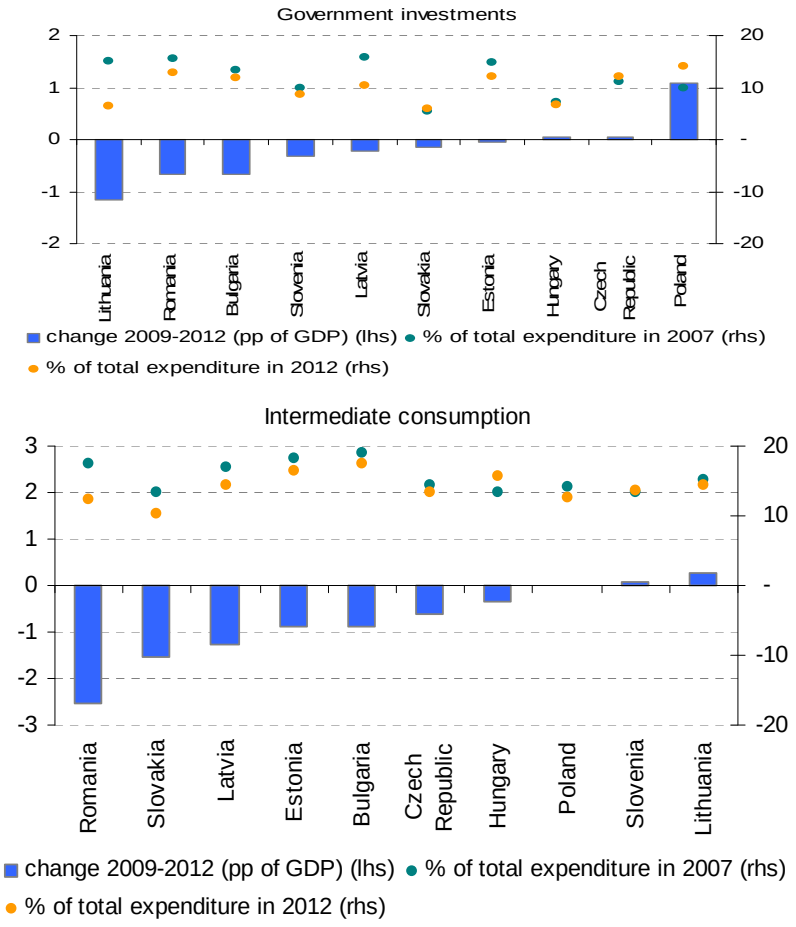


Chart 6 continued: Public Expenditure Structures, 2007–2012



Source: Eurostat and European Commission (AMECO database).

3.2 "Preventive Fiscal Surveillance": Efforts for Stricter Fiscal Rules at the National and the EU Level

The role of insufficiently strict fiscal frameworks at the national and international level as factors contributing to the weak budgetary positions of many EU countries prior to the crisis is widely acknowledged (ECB, 2011).[9] Against this background, the European Council is expected to agree on a strengthened fiscal surveillance framework in June 2011. Major elements will relate to the strengthening of fiscal governance under the Stability and Growth Pact at the EU level as well as recommendations for reinforced national budgetary rules. Under the preventive arm of the Stability and Growth Pact, an expenditure rule is being put forward, according to which general government expenditure growth must not exceed the potential medium-term GDP growth rate as long as countries have not reached their Medium-Term Budgetary Objectives (MTOs). As shown in Holm-Hadulla et al. (2011), numerical expenditure rules can contribute to reducing pro-cyclical spending biases, thereby increasing fiscal discipline. To fully capture the benefits of such a rule, it should be enshrined in national budgetary frameworks, preferably not just as general agreements but as part of countries' constitutions. Moreover, strengthened fiscal rules should be accompanied by independent macroeconomic forecasts as well as independent Fiscal Councils.

Overall, the importance of stricter national fiscal frameworks is being acknowledged in most CESEE countries[10], although there are exceptions: Hungary in early 2011 abandoned its independent Fiscal Council. More efforts are needed at the country level to enshrine public expenditure rules that avoid pro-cyclical fiscal slippages and thus increase budgetary discipline. Bold steps in this direction would clearly enhance financial market confidence in the prudence of fiscal policies in these countries.

4. Conclusion

This paper argues that the spending behavior of several CESEE countries prior to the crisis, including substantial increases in social payments and compensation of employees in times of strong growth, fuelled the demand boom and rendered fiscal positions vulnerable. Together with the fact that some CESEE countries

[9] See Van Riet et al. (2010) for an early assessment of crisis-related challenges for the EU fiscal framework.

[10] An expenditure rule is in place e.g. in Poland. According to this rule, the increase in discretionary and newly legislated public expenditure is limited to the increase in the Consumer Price Index plus 1 p.p. It should be noted, however, that by limiting expenditure growth, such a rule would not contribute to consolidating public finances.

consistently failed to meet their structural budget targets, this weighed on financial market sentiment as the crisis took hold, at a time when the competition for financing means intensified and financial markets increasingly discriminated against markets that they perceived as riskier. Among several others, these may have been crucial factors triggering the observed increases in interest rate spreads when the crisis took hold. The paper concludes that while the consolidation effort in most of these countries in reaction to the crisis was considerable, in a number of the CESEE countries it has not yet brought about the needed improvement in the growth-friendliness of public spending. In particular, higher shares of public spending on social payments and lower shares of public spending on government investment when compared to prior to the crisis point to less growth-friendly expenditure structures.

Overall, to increase these countries' budgetary resilience to economic shocks, it is important that the weaknesses associated with expansionary fiscal policies in strongly growing economies are remedied. This requires notably improved national fiscal frameworks with stricter fiscal rules on the expenditure side. Such reforms would increase financial market confidence and could contribute to larger fiscal space in future economic downturns.

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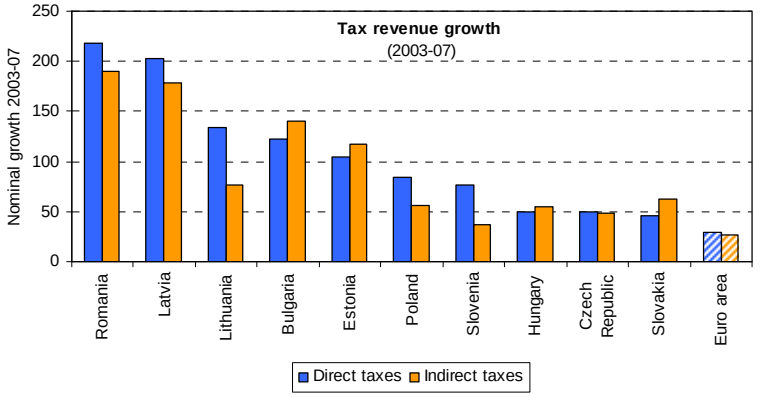
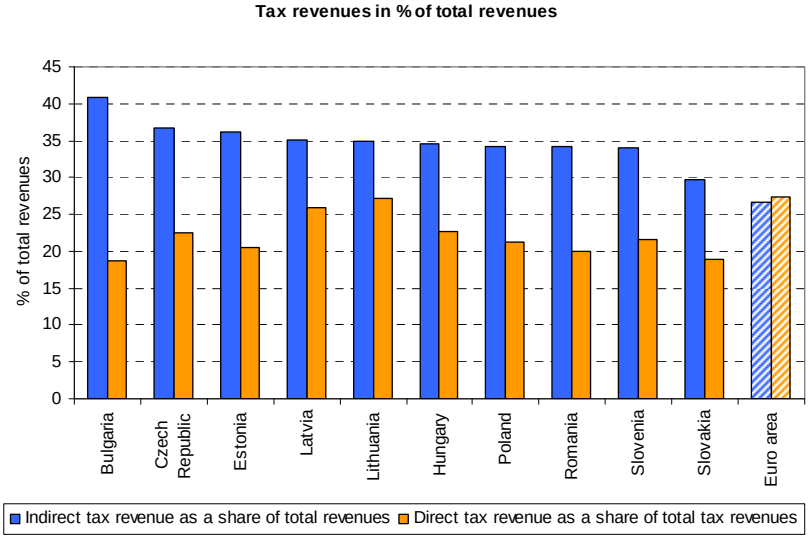
Annex

Chart A1: Tax Revenue Growth over 2003–2007



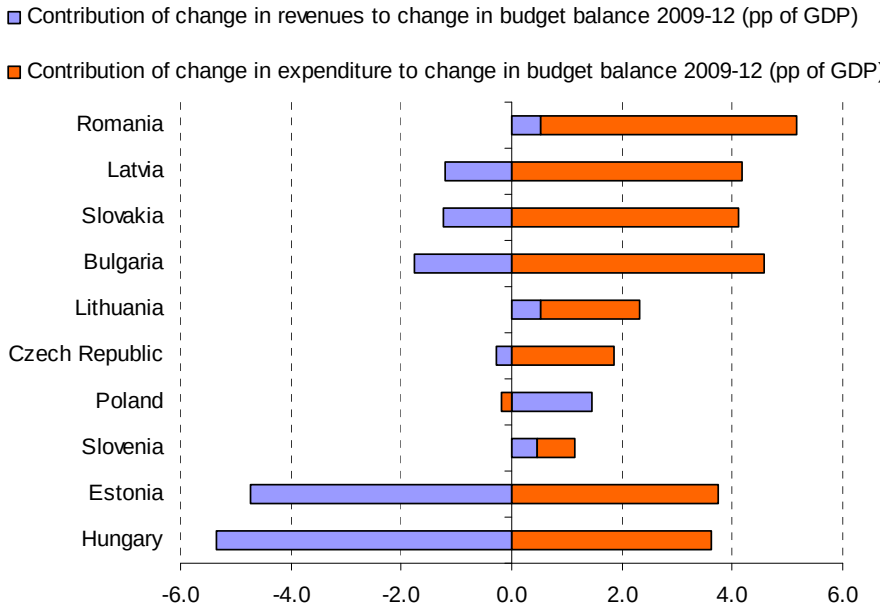
Source: Eurostat and European Commission (AMECO database).

Chart A2: Indirect and Direct Tax Revenue, 2007



Source: Eurostat and European Commission (AMECO database).

Chart A3: Composition of Fiscal Consolidation, 2009–2012



Source: Eurostat and European Commission (AMECO database).

Fiscal Space in CESEE Countries: Lessons from the Crisis with a Special Focus on Poland

Tomasz Jędrzejowicz

Narodowy Bank Polski

1. Introduction

The global economic crisis has brought about a profound worsening of fiscal positions around the world and throughout the European Union (EU). The EU Member States from Central, Eastern and South-Eastern Europe (CESEE) were no exception. A majority of them have experienced an increase in fiscal deficits to levels more than double the 3% of GDP limit of the Stability and Growth Pact, while debt ratios have on average increased by 14.4 percentage points of GDP between 2007 and 2010.

In general, the worsening of fiscal positions related to the economic crisis may be attributed to four factors:

- impact of automatic fiscal stabilizers
- reversal of extraordinary tax revenue windfalls related inter alia to asset price bubbles
- undertaking of discretionary fiscal stimulus measures by governments
- cost of government support to troubled financial institutions

The distinguishing feature of CESEE countries vis-à-vis EU-15 Member States, is that the former two factors appear to have played a greater role, while the latter two were less prevalent[1]. In this sense, the fiscal deterioration in the region was largely automatic and not a consequence of discretionary government decisions. At the same time, however, it should be emphasized that fiscal problems experienced in recent years may be traced back to a procyclical loosening of fiscal policies before the onset of the crisis. The first set of conclusions to be drawn from the experience

[1] According to European Commission estimates, (EC, 2010) only two countries from the CESEE region recorded increases in public debt related to assistance to the financial sector and only one increased its contingent liabilities as a result of such assistance. The magnitude of support in these cases was considerably lower than in the most affected euro area Member States.

of recent years therefore needs to refer to ensuring sound fiscal positions in 'good times'. Secondly, some lessons for fiscal policymakers during the crisis may also be drawn. The third key aspect concerns the path towards attaining these sound fiscal positions.

2. Fiscal Policies in Poland and the CESEE Region before the Onset of the Crisis

The CESEE region had enjoyed very strong growth in the pre-crisis period of 2005–2007, far exceeding that of EU-15, both in terms of growth rates, as well as in terms of positive output gaps. In a number of cases, this was accompanied by credit booms, asset price bubbles and a build-up of external imbalances.

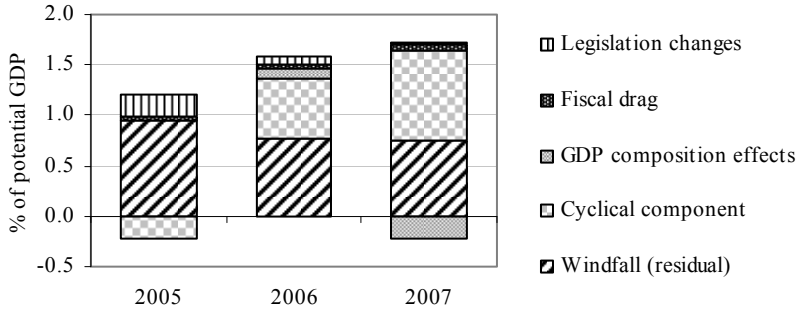
These developments appear to have had a marked impact on fiscal positions of CESEE countries. Larger positive output gaps had a direct impact on the estimated levels and change of cyclical components of the budget balance. According to estimates of the European Commission[2], between 2004 and 2007 the cyclical component of budget balances in this group of countries on average improved by more than 2 percentage points of GDP, whereas the average change in the EU-15 was half of this size. Moreover, estimates of the European Commission[3] indicate that CESEE countries have also experienced higher revenue "windfalls," i.e. extraordinary gains in tax revenue not captured by traditional cyclical adjustment methodology. These windfalls are generally considered to be related inter alia to asset prices, but, particularly in the case of emerging market countries, they may be associated with improvements in tax collection (World Bank, 2008). If such improvements had materialized, subsequent developments have shown them to be of a temporary nature.

The phenomenon of revenue windfalls may be illustrated using the example of Poland. Between 2005 and 2007 there have been no substantial increases in tax rates, other than a relatively minor carryover effect of indirect tax increases, which took place upon Poland's EU accession on May 1, 2004. In spite of this, the ratio of revenues from taxes and social contributions to potential GDP increased by more than 4 percentage points in that period, of which the majority may be attributed to revenue windfalls (chart 1).

The increase of tax revenue took place against the background of booms in asset prices. The Warsaw Stock Exchange WIG20 index rose from levels below 1900 points at the beginning of 2005 to a peak of 3918 points in October 2007. In the same period, prices of residential real estate in the largest cities more than doubled (NBP, 2010).

[2] AMECO database.
[3] Public Finances in EMU, 2009.

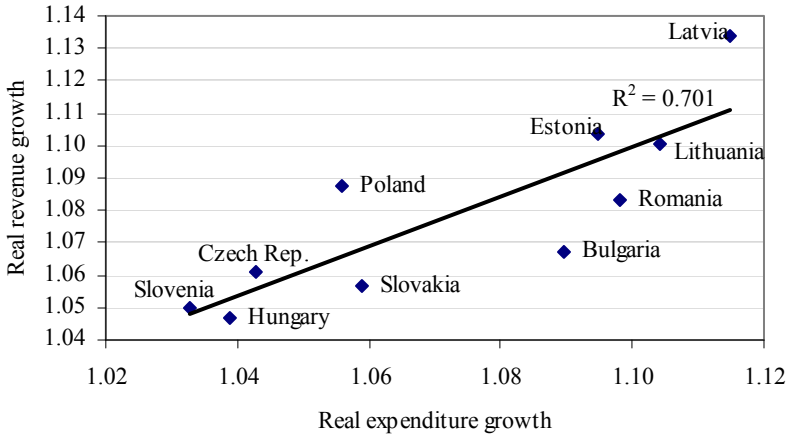
Chart 1: Decomposition of Increase in Ratio of Taxes to Potential GDP in Poland (2005–2007)



Source: Author's calculations, following the approach described in Kremer et al. (2006).

CESEE countries have generally used the buoyant tax revenue to improve their fiscal positions during the 2005–2007 upturn (the timing of the upturn varied slightly in some cases). However, the majority of them have not done so to a sufficient degree, instead choosing to increase expenditure, as shown in chart 2.

Chart 2: Average Real Growth of General Government Tax Revenue and Primary Expenditure in the Period 2005–2007



Source: AMECO database.

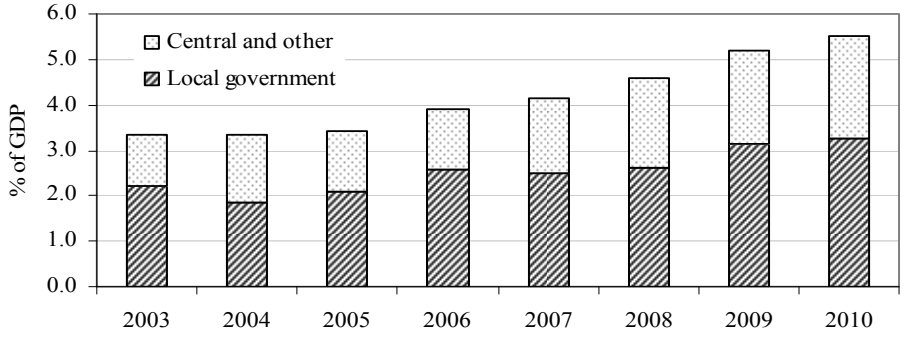
Throughout the upturn, only Bulgaria and Estonia have shown signs of consistently disciplined fiscal policies, managing to achieve their medium-term objectives (MTO) under the Stability and Growth Pact (SGP) for more than one year. Meanwhile, Latvia and Slovenia only attained this target in the single, peak year of 2007, in the case of Latvia clearly with the help of large revenue windfalls of a transitory nature, while the remaining countries failed to reach their MTOs altogether.

The tendency towards pro-cyclical loosening of fiscal policies in the most recent upturn was clearly visible in Poland. In 2006 and 2007, the Parliament approved a number of new laws, with substantial negative impact on public finances. These were in particular focused on reduction of the tax wedge, but also included spending increases. The measures included:

- a reduction in social contribution rates in the part allotted to financing disability benefits by 5 percentage points of the salary on the employee side and an additional 2 points on the employer side, costing around 1.5% of GDP;
- an introduction of a new child-raising tax deduction in personal income tax, costing 0.5% of GDP
- a reduction of personal income taxes in the form of a move from a three-bracket schedule with 19%, 30% and 40% rates to a two-bracket (18% and 32%) one, costing around 0.6% of GDP
- special legislation securing extraordinary salary increases for a number of professional groups in the public sector, including doctors, police and border guard, as well as teachers, altogether costing more than 0.4% of GDP,
- change in the pension indexation formula, from inflation-only to inflation plus 20% of real salary growth, which may be estimated to cost around 0.2%–0.3% of GDP in the medium term

In addition, it should be noted that these measures were introduced against the background of strongly increasing public investment, associated with absorption of EU structural funds, additionally contributing to spending growth.

Chart 3: Public Investment in Poland, by Government Subsectors



Source: Eurostat.

3. Fiscal Policies during the Economic Crisis

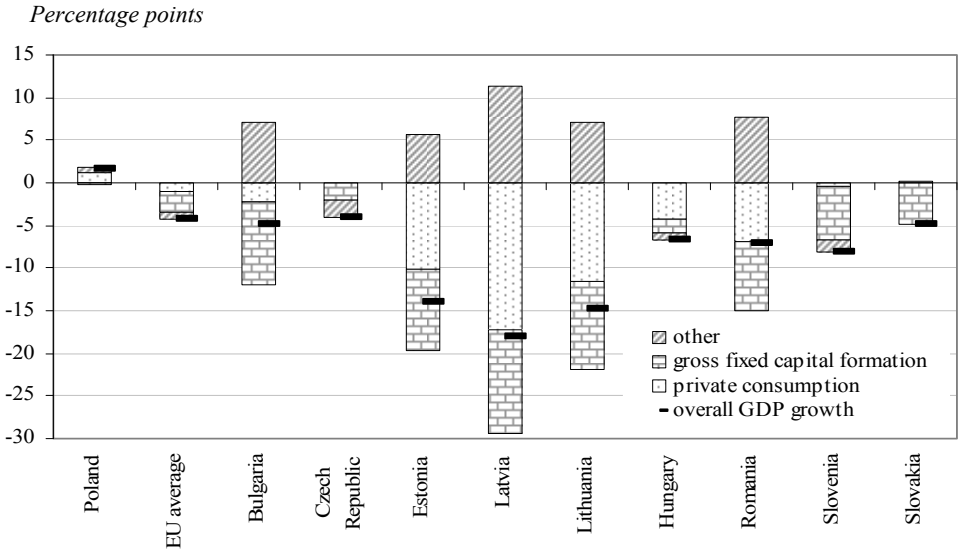
Facing a severe economic slowdown, leading advanced economies implemented sizeable fiscal stimulus programmes. While the recession in some of the CESEE countries were just as acute, if not worse, they were generally not in a position to undertake such stimulus measures. Increased risk aversion in the face of the crisis has severely limited the borrowing potential of emerging market governments. Two countries of the region, Hungary and Latvia, were forced to resort to financing from the IMF and EU as early as in 2008. Despite ongoing fiscal consolidation efforts, the perception of Hungary as a high risk country due to liabilities accumulated in the first half of the decade, has led to capital outflows and a sharp rise in CDS (Credit Default Swaps) and government bond yields (World Bank, 2009). Meanwhile, in the case of Latvia, external assistance was necessary in view of a deep recession coupled with a banking crisis. Later on, Romania also entered an IMF programme in April 2009.

In spite of the precarious financing conditions, prevalent in particular in the second half of 2008 and in 2009, some countries of the region have managed to allow their automatic fiscal stabilisers to operate and in some cases, to relax the fiscal policy stance. Poland is a particularly notable example of such fiscal support to the economy for two reasons. The first was the magnitude of fiscal loosening, which was among the largest in the region. Secondly, Poland managed to maintain a positive growth rate throughout the crisis, which was unique not only in the region, but also in the whole EU. There were a number of reasons behind this remarkable growth performance. These included the currency depreciation of around 30% between the beginning of 2008 and early 2009, the highest of all floating rate countries of the region. However, aside from the positive contribution of net

exports to growth, domestic demand components also grew more strongly (or contracted less) than in other countries. In this context, it appears that fiscal policy played a vital role, as it contributed to supporting all components of domestic demand (see chart 4):

- Private consumption – Poland recorded the strongest growth of private consumption in the EU in 2009. Compared to other CESEE countries, a lower degree of openness of the economy is likely to have played a role, limiting the negative external impact of the global crisis on household incomes. But the large-scale cuts in the tax wedge implemented in 2007–2009, which totaled 2.6% of GDP were also crucial. At the same time, expenditure on compensation of public employees was also growing robustly, rising by 8.1% in nominal terms.
- Public consumption – Poland was one of the few EU Member States with a positive contribution of public consumption to growth, as current expenditure grew strongly throughout the crisis, particularly at the local government level.
- Gross fixed capital formation – while Poland did not manage to avoid a sharp decline in corporate investment, this decline was partly offset by public investment which increased in nominal terms by 17% in 2009. As a result, the magnitude of the negative contribution of gross fixed capital formation to growth was the lowest in the EU.

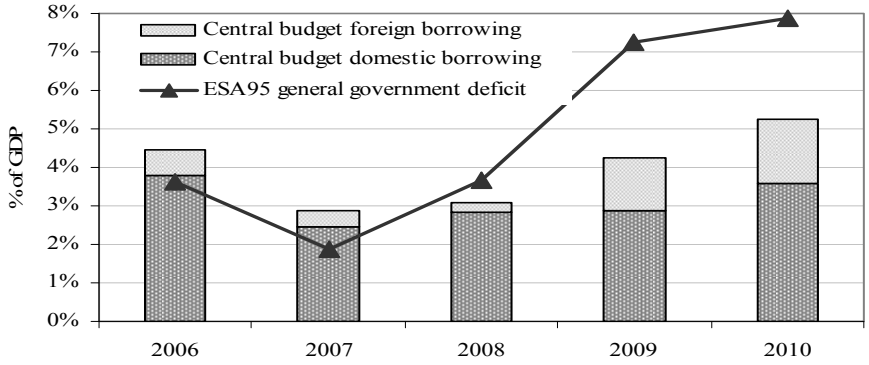
Chart 4: Contribution to Real GDP Growth in 2009



Source: European Commission, AMECO database.

In this context, it is worth devoting some attention to Poland's fiscal stimulus which was not only among the highest in the region, but also exceeded that introduced in a number of EU-15 Member States. In view of significant financial market tensions, particularly in the early months of 2009, a crucial aspect of that stimulus was its financing. While the general government deficit increased by 3.6 percentage points of GDP, the level of net issuance of Treasury securities on the domestic market had actually remained almost unchanged relative to 2008. The explanation behind these developments lies in the massive worsening of fiscal positions of other units of general government[4]. This was partly due to the economic slowdown (decline in tax and social contribution receipts of these units), partly related to independent decisions of these units (increase in investment spending at the local government level) and partly a deliberate decision of the government to shift a part of the deficit out of the central budget. One example of this was the shifting of expenditure on road construction in the amount of around 0.7% of GDP from the central budget to the National Road Fund.

Chart 5: ESA95 General Government Deficit versus Central Budget Borrowing Requirement – Poland



Source: Eurostat; Ministry of Finance, Republic of Poland.

While such practices had a negative impact on the transparency of public finances, they also allowed the government to signal to financial markets its commitment to contain its borrowing requirements. Market participants often focus on the level of Treasury bond issuance, which they can monitor in real time, rather than on the overall general government balance, as this information only becomes available with a considerable lag.

[4] According to Eurostat figures, the combined deficit of the local government and social security funds subsector deteriorated from +0.2% of GDP in 2008 to –2.0% of GDP in 2009.

4. Fiscal Challenges in the Aftermath of the Crisis

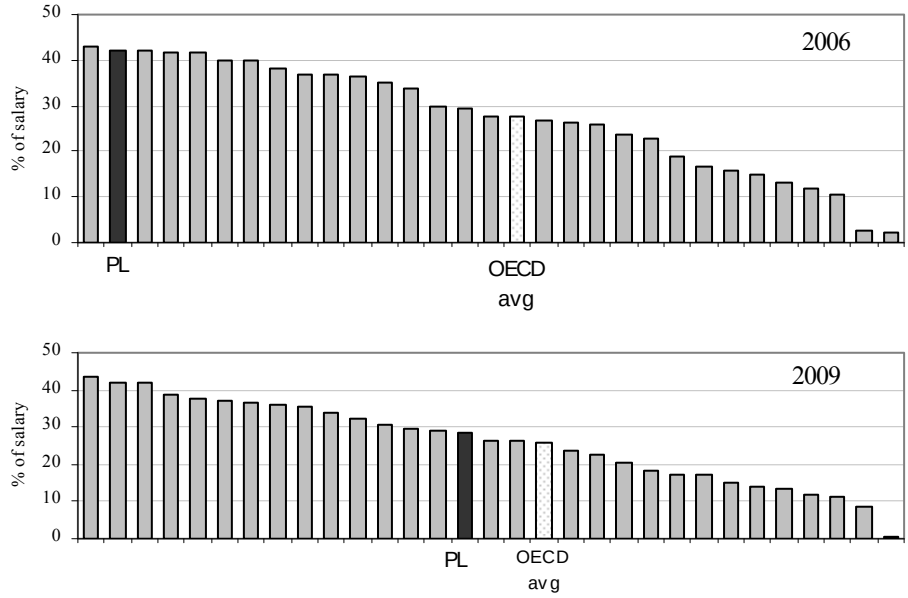
In the aftermath of the global economic crisis, CESEE countries were facing large fiscal deficits and public debt levels 10–30 percentage points of GDP higher than before. Given that in case of emerging economies, debt ratios that can be sustained are generally considered to be lower than those for advanced economies (Ali Abbas et al., 2010), this implied an urgent need for fiscal adjustment. The majority of countries in the region began consolidating public finances in 2009–2010, while some were forced to introduce adjustment measures as early as 2008. Poland was an exception in this regard, as it was the only country in the region, where the general government deficit noticeably increased in 2010. This was largely related to continued weakness of direct taxes, rather than a discretionary loosening, nonetheless the decision to postpone consolidation to 2011 and afterwards was quite unique in the region.

Empirical literature indicates that expenditure-based fiscal consolidations are generally likely to be more durable and less harmful for economic growth. In addition, during the crisis government expenditures in CESEE countries increased to around 41% to 50% of GDP, the highest level since the early years of transition. Nonetheless, the actual composition of fiscal adjustment in the region is quite mixed, with countries relying both on spending cuts, as well as tax increases, particularly in the area of indirect taxes.

As noted earlier, in the case of Poland, the fiscal loosening which took place during the economic slowdown and in the period immediately preceding it, largely consisted of significant reductions in the tax wedge.

A full or at least partial reversal of these tax cuts would go some way towards solving the fiscal problems at present. At the same time, however, it would imply a reversal of the labour market incentive effects arising from the lower tax wedge (see chart 6). It is worth noting in this context, that at the beginning of the previous upturn in 2005, Poland's overall employment rate stood at just 52.8% and was the lowest in the EU. The tax wedge was among the highest in the OECD, particularly for families with children.

Chart 6: Average Tax Wedge on Families in OECD Countries – 2006 and 2009

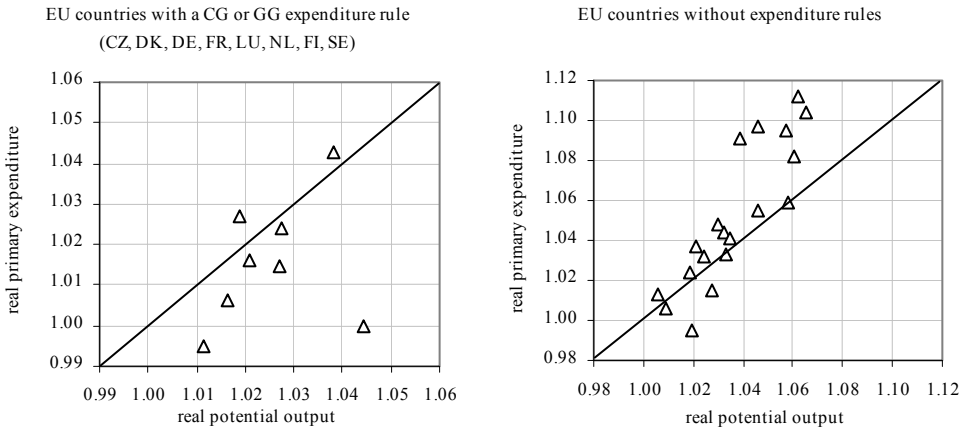


Source: OECD Taxing Wages.

Once the necessary adjustment is implemented, the key challenge will be to secure it, when the next economic upturn takes hold. Previous errors of using the positive cyclical component of the budget balance and extraordinary revenue windfalls stemming inter alia from asset price bubbles to finance procyclical spending increases, must be avoided.

As recent literature indicates, one of the ways to preserve fiscal discipline is by strengthening the framework of fiscal policy, in particular by introducing fiscal rules, which have been shown to positively affect fiscal performance (Debrun et al., 2008). As reflected in the information on fiscal rules collected by the European Commission, the number and coverage of rules in European countries has increased substantially over the past two decades. Nonetheless, it is important to note that rules differ in strength, coverage and the incentives they provide. Notably, not all rules enforce fiscal discipline in "good times" – e.g. rules focusing on the budget balance and public debt are easier to comply during an upturn and may not prevent the spending of revenue windfalls. Meanwhile, expenditure rules focusing on containing spending growth in the medium-term, may help preserve unexpected revenues and assign them to deficit reduction.

Chart 7: Real Growth of Potential Output and Primary Expenditure in the EU (2005–2007 Average)



Source: AMECO database, EC fiscal rules database.

As shown in chart 7, during the 2005–2007 upturn, EU Member States with such rules at the central or general government level have generally been more successful in containing the growth of primary expenditure below that of their potential output, while for the majority of remaining countries, the opposite has been the case. This may be a valuable lesson for CESEE countries, given that according to the EC database, only one of them (Czech Republic) had an expenditure rule in place during the most recent upturn.

5. Concluding Remarks

The fiscal problems in which CESEE countries found themselves in the aftermath of the economic crisis can be largely traced back to the preceding upturn. Despite favourable cyclical conditions and the appearance of significant revenue windfalls, a majority of these countries have failed to reach sound budgetary positions. Instead, the buoyant tax revenues fuelled expenditure increases. These developments point to the need for a better assessment of the underlying fiscal position in real time, including a very careful evaluation of revenue windfalls, which may later prove to be of a transitory nature.

Once the crisis began, fiscal positions worsened dramatically, although in the CESEE region this was to a large extent an automatic effect of the reversal of the previously positive cyclical component of budget balance and revenue windfalls. Few countries were in a position to apply discretionary fiscal policy to stimulate the economy. Poland was perhaps a notable example in this regard, as fiscal policy played a key role in sustaining all major components of domestic demand.

From the current perspective, two main challenges remain. On the one hand, fiscal consolidation is a priority in the short-run, as all countries of the region, with the exception of Estonia, are in an excessive deficit procedure (EDP). In the medium-term, the main challenge will be to safeguard sound fiscal positions over the economic cycle. In this context, fiscal rules, particularly those limiting public expenditure growth in economic upturns, may play a useful role.

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Crisis Resistance and Macroeconomic Stabilization Capacity of Czech Public Finance

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1. Fiscal Space of Czech Public Finance

The first observation one can make when looking at Czech public finance is that persistent government deficits are characteristic of it and that they have predominantly structural character. The cyclical position of the economy and the cyclical parts of revenues and expenditures have played only a minor role in explaining the level and volatility of the deficit-to-GDP ratio of the Czech Republic so far.

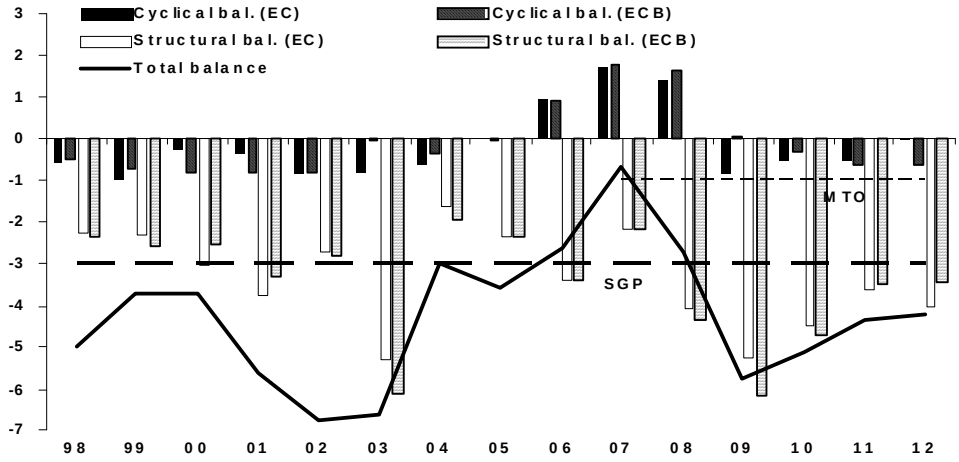
The second distinctive feature is that the Czech fiscal policy has been in most of the time pro-cyclical, which has been especially the case in the years of economic boom, when extra revenues were typically spent.

To offer this structured view, chart 1 shows developments of Czech public finance disentangling the headline government deficit into two parts – cyclical and structural (cyclically adjusted net of one-off and temporary measures) balance – using two alternative methods (the European Commission approach and the European System of Central Banks approach). One can see in the chart that – prior to the crisis – structural deficits were notoriously high as a result of a loose fiscal policy conducted in those years of prosperity (2003–2007). This disadvantageous starting fiscal situation was subsequently aggravated after the economic crisis hit the Czech Republic, when the cyclical position of the economy sharply turned

[1] I would like to thank my colleagues from the CNB, especially Dana Hájková (Head of our Fiscal Analyses Unit), for providing me with a kind assistance in preparation of my contribution to the workshop. However, any errors and omissions remain entirely my own. The views expressed herein are the views of the author and do not necessarily represent the views of the affiliated institution.

negative and automatic stabilizers started to play a role.[2] On top of that, the government approved an anti-crisis package of fiscal measures aimed at cushioning negative impacts of the crisis on Czech households and entrepreneurs. These measures led to further deteriorating of the public finance deficit.

Chart 1: General Government Balance (% of GDP)



Source: CNB.

As a result, the deficit-to-GDP ratio increased by approximately 5 percentage points between 2007 and 2009. The Excessive Deficit Procedure (EDP) was opened with the Czech Republic in late 2009 (for the second time during its EU membership) with the deadline for correction of the deficit below 3% of GDP being set by 2013.[3] This situation called for an instant and radical action of the Czech authorities that would bring deficits back under control. Such an action came relatively soon; in late 2009 the government approved its "austerity fiscal package" (see chapter 4).

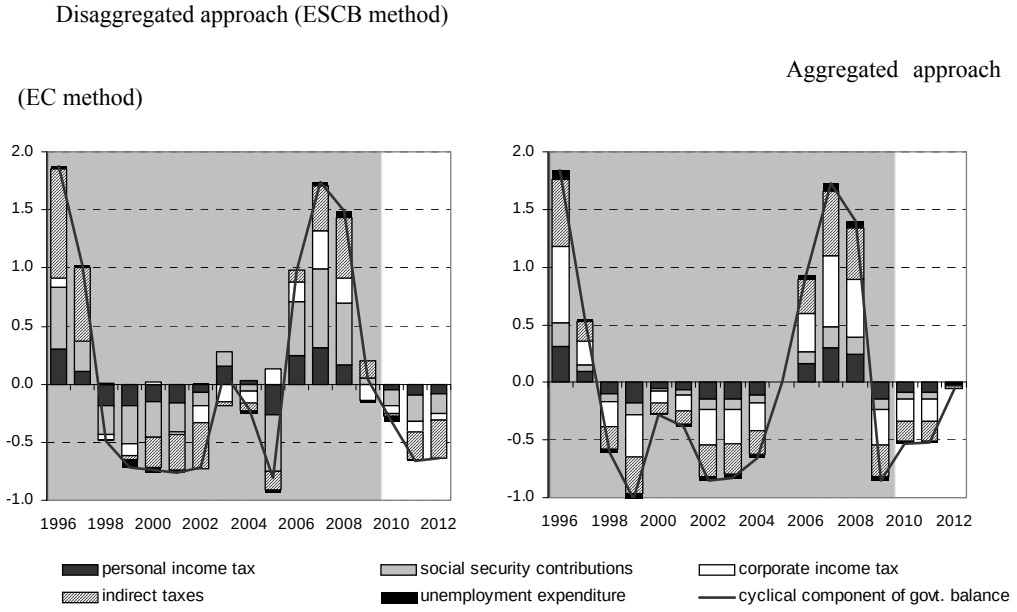
[2] It is worth mentioning that the economic crisis got to the Czech Republic solely via the foreign demand channel, very negatively affecting export and production performance of the Czech manufacturing sector. Having said that, the financial impacts of the crisis on the Czech economy were very negligible thanks to a very good shape of the Czech banking sector with virtually no exposure to foreign toxic assets.

[3] For the first time, the EDP with the Czech Republic was open just after the country became a member of the EU in 2004, and the EDP was then abrogated in 2008. It is also worth noting that the Czech Republic has as yet never reached its Medium Term Objective (MTO) being set at 1 % of GDP for the structural deficit of public budgets.

2. Cyclically Adjusted Balance

Chart 2 depicts developments of the cyclical parts of budget balance expressed by means of the two above-mentioned analytical methods (EC, ESCB). In the ESCB approach, the cycles are derived separately for each revenue item, which usually has a direct link to a relevant macro-economic assessment (tax base) variable and its cycle, respectively. That is why individual cyclical parts of revenues may go in both positive and negative direction within one time period (year). On the contrary, in the case of the EC method all the bars go always in the same direction (positive or negative). This is because, in this method, the output gap derived from a production function is a single measure of the position of the economy within the business cycle, and hence the only driver of the cyclical part of the revenues.

Chart 2: Components of Cyclical Balance (% of GDP)



Source: CNB.

Despite different methodologies, both approaches offer roughly the same picture indicating that corporate income tax (CIT) and social security contributions are the most cyclically sensitive items among tax revenues. During the crisis, a kind of "sudden and surprising" shortfall of budgeted revenues occurred especially in 2009 but also in 2010 concentrating in CIT revenues as shown in table 1.

Table 1: Fulfillment of Budgeted Revenues (%)

	tax revenues	VAT	CIT	PIT
2008	99	93	108	105
2009	82	91	64	80
2010	95	100	86	99

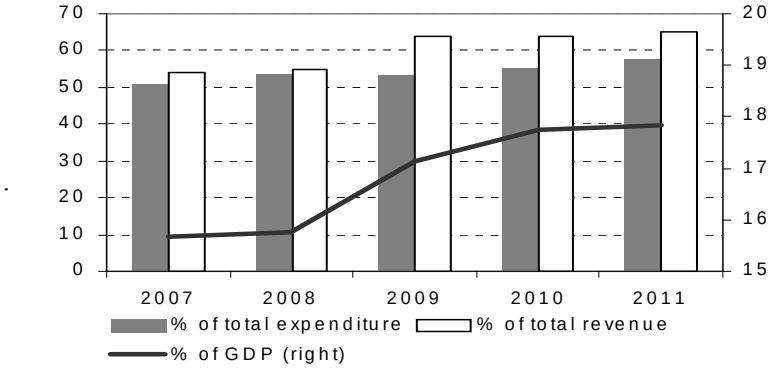
Note: Cash data, central-government budget.

Source: Ministry of Finance, press releases.

3. Mandatory Expenditures

The Czech public finance can be characterized by a high share of mandatory expenditures[4] in GDP, total expenditures and total revenues (chart 3).

Chart 3: Mandatory Expenditures



Source: CNB.

The high share of mandatory expenditures determines (and limits) the fiscal space of the government, but not in a trivial way. There is a trade-off in this respect. On

[4] A definition of the mandatory expenditures in not internationally fully harmonised as a statistical concept (variable), as far as I am concerned. In our case, the mandatory expenditures, as an analytical concept (approximation), include in particular: pension, social and health insurance benefits, government payments for health insurance, debt service expenditure, state support of building savings schemes and private pension schemes, payments to the EU budget, etc.

one hand, high mandatory expenditures may limit the fiscal room for maneuver, especially in the short run. On the other hand, mandatory expenditures represent a source of stability for the economy over the business cycle and thus work counter-cyclically. A problem arises for public finances, however, if:
(i) cyclical elasticities of revenues and mandatory expenditures are substantially different, all the more in particular if the share of mandatory expenditures is high and/or tax revenues are very sensitive to changes in GDP;
(ii) a cyclically or structurally driven increase in mandatory expenditures is not compensated by adequate cuts in other expenditures or by an increase in revenues.
Unfortunately, the Czech Republic fulfils both (i) and (ii), and therefore we consider the high share of mandatory expenditures meaning a problem for our country.

4. Fiscal Consolidation in 2010 and 2011

The above-mentioned development in 2009 led to the implementation of "austerity package", the budgetary measures of which came into effect in 2010. The new coalition government stemming from the general election held in June 2010 then continued in fiscal adjustment and prepared its "fiscal consolidation package" in relation to state budget preparation for 2011.

Table 2: Packages of Budgetary Measures Taken in the Recent Past

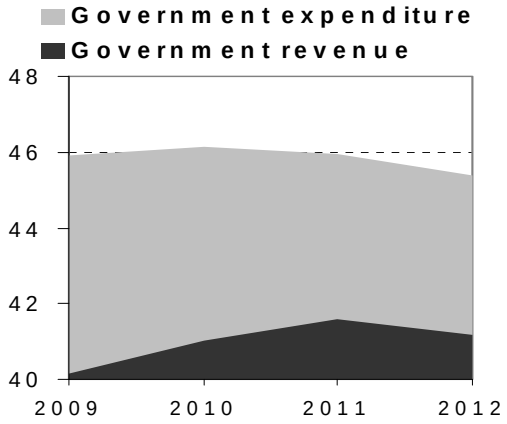
discretionary packages	impact on deficit (% GDP)			impact on GDP growth (p.p.)		
	2009	2010	2011	2009	2010	2011
of 2008	1.1	1.2		0.3	0.5	
of 2009		-2.4	-2.1		-0.8	
of 2010 (2011 state budget)			-2.2			-0.8

Source: CNB.

Both consolidation packages have had, and will have, a sizable effect on both the fiscal stance and the economic activity in the Czech Republic (see table 2 and chart 4). In total, fiscal consolidation will lead to a noticeable reduction of the general government deficit in 2010 and 2011, bringing it from 5.8 % of GDP in 2009 to 4.3 % of GDP in 2011 according to the latest available CNB's Inflation Report I/2011.

Chart 4: Forecast for General Government Expenditure and Revenue

% of GDP



Source: Ministry of Finance of the Czech Republic (2010).

Approximately two thirds of the measures in the second fiscal consolidation package were aimed at curbing growth on the expenditure side of public budgets, and included cuts in mandatory and "quasi-mandatory" outlays. The remaining one third of measures addressed tax revenues. This fiscal restriction curbed economic recovery in both 2010 and 2011 via strong deceleration of government and household consumption. Its total effect on GDP growth is estimated by the CNB to be approximately –0.8 percentage points in 2011. The government has also announced (without much details) its intention to prepare and approve some further consolidation measures to comply with the EDP deadline to correct the excessive deficit by 2013, and to reach balanced public budgets by 2016. The government plans include a launch of pension reform (see chapter 5).

5. Sustainability of Czech Public Finance in the Long Term

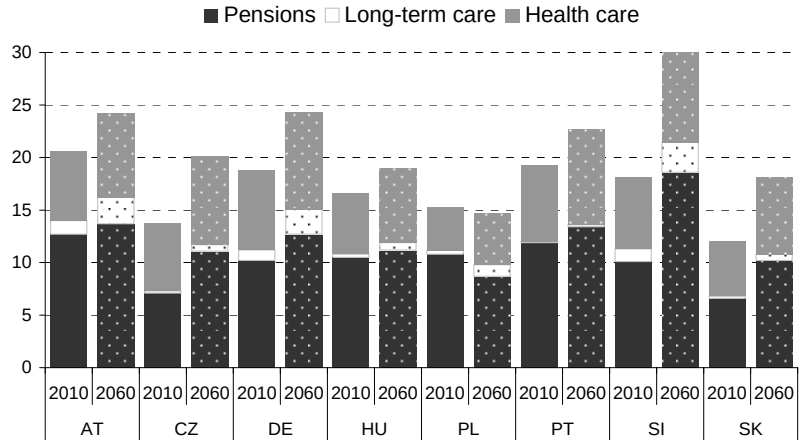
5.1 Long-term Sustainability Issues

Although the medium-term oriented fiscal consolidation in the Czech Republic has successfully started in the recent past; there is still an urgent need to tackle long-term public finance sustainability issues. These arise mainly from demographic trends that lead to population ageing. Due to this factor, the Czech Republic will in the coming 50 years experience an important increase in the long-term age-related

government expenditures (costs of ageing) and will reach one of the highest levels of those costs in 2060 when compared to other EU Member States (see chart 5).

Chart 5: Long-term Costs of Ageing

% of GDP



Source: European Commission (2010).

The government has recently outlined some basic elements of the pension reform, but the political discussions continue on this issue. The discussed proposal should ideally solve the two basic problems of the Czech old-age pension system, which has so far been predominantly operated within a state-owned pay-as-you-go (PAYG) framework. Those problems are its long-term unsustainability due to ageing, and its extremely high intra-generational redistribution of pensions.[5] As the ruling coalition plans it, a second fully-funded defined-benefit pillar should be introduced as from 2013. The capital of this new pillar should stem from re-directing a certain percentage (currently envisaged 3 percentage points) of social security contributions from the PAYG system to that new second pillar, with additional 2 percentage points compulsorily contributed by the individual saver (future beneficiary of an old-age pension). To finance a resulting shortfall of funds

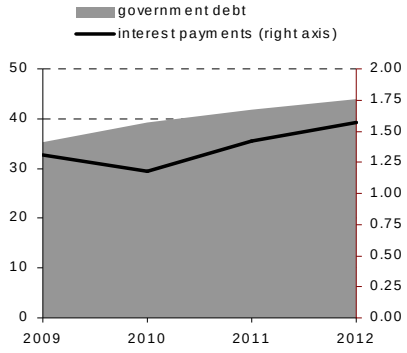
[5] Weak relation between contributions paid to the current PAYG and the level of pensions obtained from that negatively affecting especially high income brackets (low replacement rate) was a subject of a Constitutional Court resolution taken in late 2010. The government was given a deadline to correct this negative feature of the current system by the autumn of this year. A so-called "small pension reform" being currently in the pipeline should address this relatively minor issue by a couple of measures. For instance, the maximum assessment-base (ceiling) for social security contribution is to be decreased after being temporarily increased as part of the 2009 and 2010 consolidation packages.

to the PAYG, the government plans to increase the lowered VAT rate from 10% to 14% in 2012 and to unify the lowered and the basic rate at 17.5 % as from 2013.
At the time being, it is difficult to take a final position to the outlined pension reform since a lot of details have not yet been disclosed. Needless to say that health care and long-term care reform is urgently needed to cope with growing age-related costs to come in the next decades.

5.2 Short-term Sustainability Implications

If not addressed properly, the public finance sustainability issues have the potential to worsen dramatically the deficit and debt situation of the country. In the Czech Republic, the actual public-debt-to-GDP-ratio is still at quite favorable levels compared to other countries (and far below the 60% benchmark). Its recent trend, however, has been steadily and quite steeply increasing, due mainly to sizeable government deficits in the past. The fiscal consolidation undertaken so far has only lowered the pace of further increases in the indebtedness of the public sector. As a result, interest payments (debt service) have been growing over time and could potentially become a sizeable and unpleasant burden for the Czech public finance in the future. The temporary decline in the debt service in 2010 was caused by extraordinarily favorable financing conditions of that time, which will probably not repeat in the years to come. On the contrary, one can expect that, in line with the continuous increases of public debt and rising interest rates, the debt service will probably get back on an increasing path too (see chart 6). The public debt crisis in some euro area countries is in this respect a deterrent example of how unsolved fiscal issues can undermine the country's reliability and ability to finance its basic needs.

Chart 6: Gross General Government Debt and Debt Service (% of GDP)



Source: CNB.

6. Concluding Remarks

The lessons from the economic crisis emphasize the need for sound and enforceable fiscal rules, which are complied with. In this respect, the EU-level budgetary surveillance framework (Stability and Growth Pact, SGP) may be essential for some countries in particular. That is why I welcome, the European Commission's proposal on strengthening the SGP procedures and I broadly agree with the main features as proposed so far (I would be inclined to introduce even more automaticity, including earlier and more severe punishments). Simultaneously, I am convinced that the envisaged tightening of budgetary surveillance will reinforce the political efforts at national levels (political commitment and ownership concerning needed reforms and consolidation). It is true, however, that country specificities are definitely best known (and therefore possibly treated) at the national level.

For the future, it is necessary for both the Czech Republic and other EU Member States to take advantage of the times of solid economic growth, which provide a convenient environment, for responsible fiscal governance[6] and structural adjustments (unlike to what we used to see in the past in many cases). More stringent fiscal frameworks at both the national and the EU level could help in this respect. After having done medium-term fiscal consolidation, it is of the utmost importance to proceed with reasonable and timely treatment of long-term fiscal issues.

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[6] To move in this way, the Czech Ministry of Finance has recently outlined some basic features of the tax reform that should come into effect as from 2013. The goal is to simplify the tax system in order to lower the administrative costs of both, the tax payers and the state. The main elements of this reform include a unification of tax bases, a reduction in the number of tax exceptions, a compensation for the income tax on dividends, and a simplification of administrative procedures.

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How to Make CESEE's Public Finance Systems More Crisis-Resilient and Improve Their Macroeconomic Stabilization Capacity?

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1. Introduction

Crises are not only sources of economic disruptions, but they offer opportunities to learn. This is valid also for the last global crisis, which has provided more valuable insights into the issues of capacity to implement stabilization policies than any debt-sustainability, stress-testing or other similar theoretical exercise. What are the main lessons from the last crisis?

When focusing on fiscal policy, the debate about stabilization capacity is usually set in a framework of fiscal space, which is seen as a capability to implement discretionary fiscal relaxation in a moment of recession. We would argue however for a broader concept of the fiscal space that would also cover the policies of letting automatic stabilizers operate. After all, the presence of financing constraints might prevent governments to allow automatic stabilizers to operate even partially, not only to implement a discretionary fiscal stimulus.

The broader concept of fiscal space is particularly relevant for the CESEE region. As these economies are all small and open in the usual sense, the old arguments against discretionary fiscal stimulus for all of them remain valid. In particular, the fiscal multipliers in such countries are for sure lower than 0.5, and perhaps as low as 0.3, with Poland possibly being the only exception. We also know that multipliers might turn to be negative if a country lacks fiscal credibility: The additional budget spending in such cases might further erode the confidence of households and investors.

Moreover, it should not be taken for granted that the policy of letting the automatic stabilizers *to operate fully* is necessarily optimal even if the country was

[1] This presentation reflects the author's views and not necessarily the views of the Croatian central bank and management.

in a reasonable fiscal shape before the crisis had hit. This is because one of the lessons of the recent events is that crises cannot only temporarily reduce the level of output below an otherwise unchanged potential growth path, but that they can also lead to a permanent downward correction in both the level and growth of the potential output. In such an environment, sticking to automatic stabilizers, i.e. leaving expenditure on a pre-crisis path, could lead to a fast and unsustainable accumulation of government debt. We may say that in such circumstances automatic stabilizers can easily turn into automatic destabilizers.

This point has been clearly demonstrated by the fact that for many countries the estimates of potential output have been ex-post sharply revised down compared to the previous real-time estimates. As a result, what looked as a sustainable structural balance before the crisis might ex-post turn out to be unsustainable. And if the structural fiscal balances ex-post is much weaker than the one estimated ex-ante, one can see why letting the automatic stabilizers operate fully might quickly erode fiscal credibility.

Furthermore, regardless of the ex-post revisions of potential output in the past, even more important are revisions of the estimated prospective growth. Once potential growth rate and level have been revised down, defining optimal policy in such circumstances would require that the transitory effect of the crisis that can be accommodated by the stabilizer mechanism is disentangled from the permanent effect that can only be addressed by expenditure cuts or tax increases. In fact, unless you want to end up going out of crisis with a permanently increased tax burden, the only solution is to start cutting expenditures relative to their pre-crisis path. This means that in such a situation letting the automatic stabilizers operate fully might not be an optimal policy.

Mentioning all these qualifications, let us turn to the issue of how much fiscal space did CESEE countries have during the crisis, which factors had determined their fiscal space, and how did they use it.

2. How Did the Crisis Hit the CESEE Countries and How Did They React?

The crisis hit the CESEE countries through both the trade channel and the financial channel. However, in addition to the immediate effects of these external shocks, the crisis has also triggered long-overdue adjustment in current account imbalances in the majority of the European post-transition countries. The trade channel shock is by now over, but the process of adjustment to a new growth model, which will require lower external account imbalances, is still ahead. This is the reason that not only the growth shock in CESEE region was larger than in other emerging market economies during the peak of the crisis, but weaker growth performance is expected in the future as well (table 1 and chart 1).

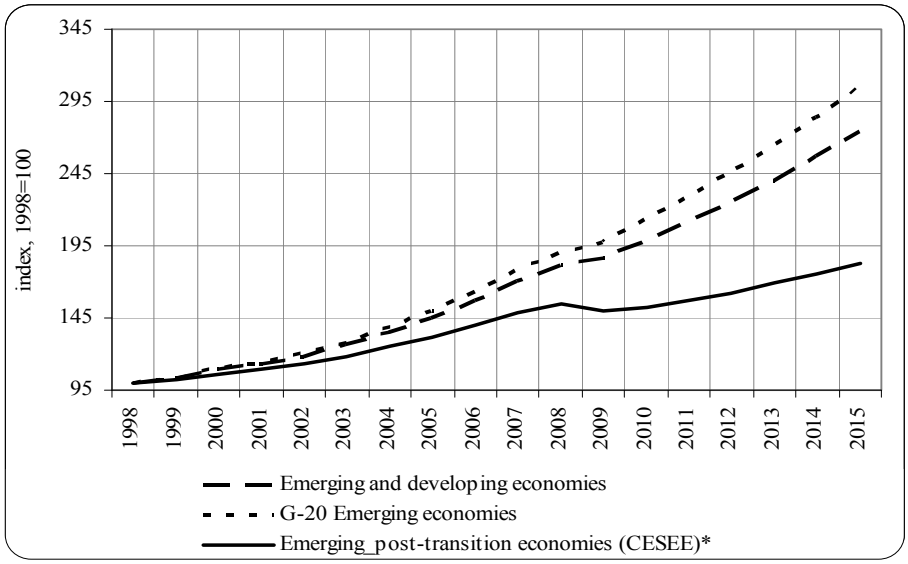
Table 1: Change in GDP Growth Rate 2007–2009

in percent	**2007**	**2009**	**change 2007–2009**
G-20 advanced	2.3	-3.2	5.6
G-20 emerging	9.7	3.5	6.2
CEE	6.4	-2.7	9.0
SEE	6.2	-5.9	12.1
Czech Republic	6.1	-4.1	10.3
Slovakia	10.6	-4.7	15.2
Slovenia	6.8	-7.8	14.6
Poland	6.8	1.7	5.1
Estonia	6.9	-13.9	20.8
Latvia	10.0	-18.0	27.9
Lithuania	9.8	-14.8	24.6
Hungary	1.0	-6.3	7.3
Bulgaria	6.2	-5.0	11.2
Croatia	5.5	-5.8	11.3
Romania	6.3	-7.1	13.5
Serbia	6.9	-3.0	9.9

Source: IMF, World Economic Outlook Database, October 2010.

Note: The change in GDP growth rates between 2007 and 2009 was the largest in the post-transition European countries.

Chart 1: Growth in the Post-Transition and Emerging Market Economies



** Includes also the Czech Republic, Slovakia and Slovenia.*

Note: In post-transition countries growth will decelerate relative to the pre-crisis times.

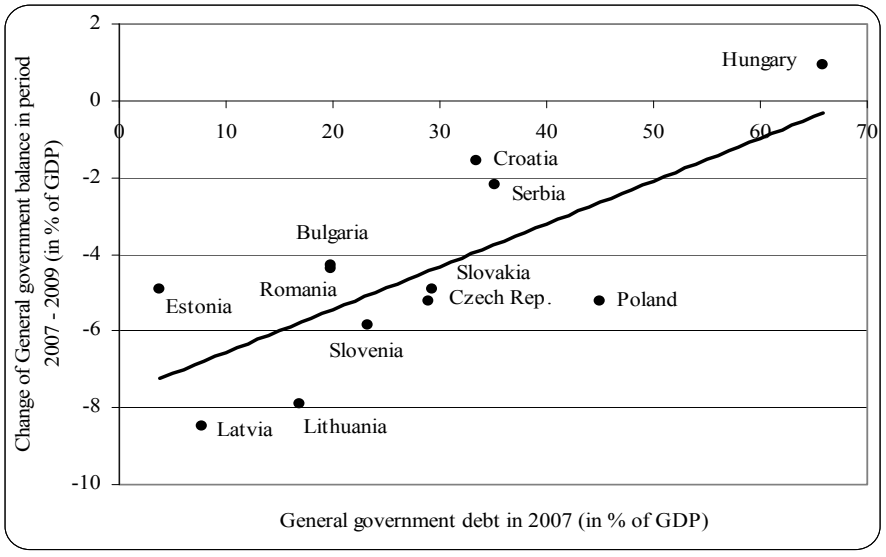
Source: The IMF WEO database, October 2010 vintage.

Facing large output shocks, all countries in the CESEE region let their fiscal balances expand, except for Hungary. The degree of fiscal expansion in 2007–2009 shows a surprisingly strong correlation with the starting fiscal position (charts 2 and 3). The public debt ratio was lower in 2007 when more expansion in the headline fiscal balance had the countries allowed over the next two years. Somewhat weaker is the correlation between the budget balance in 2007 and the relaxation, with the outliers being two currency-board countries Estonia and Bulgaria.

The figures would suggest that fiscal space of individual countries was determined by their fiscal position at the onset of the crisis.

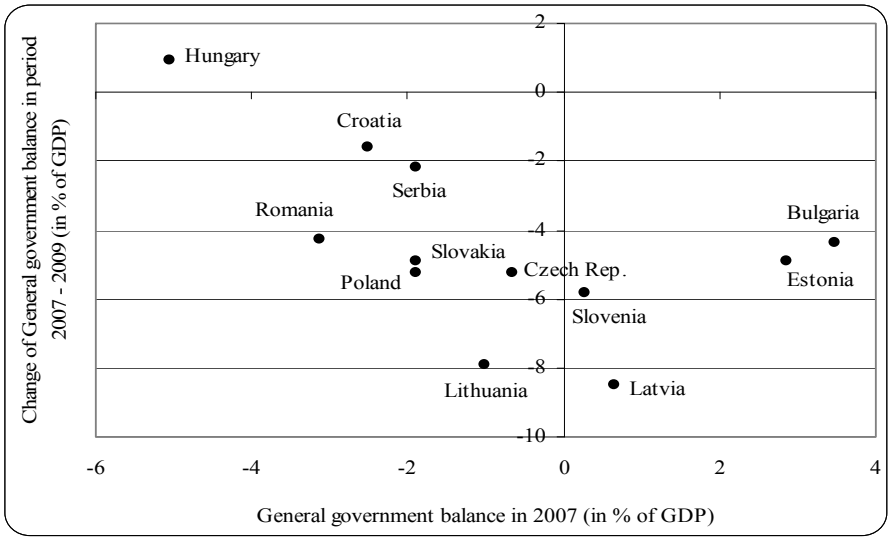
However, this is just a part of the story. To get the whole picture, one needs to look which countries managed to allow the fiscal expansion without adversely affecting their access to financial markets. This can best be seen by looking at the Credit Default Swap (CDS) sovereign spreads for the region.

Chart 2: Public Debt Ratio in 2007 and the Worsening in Fiscal Balance 2007–2009



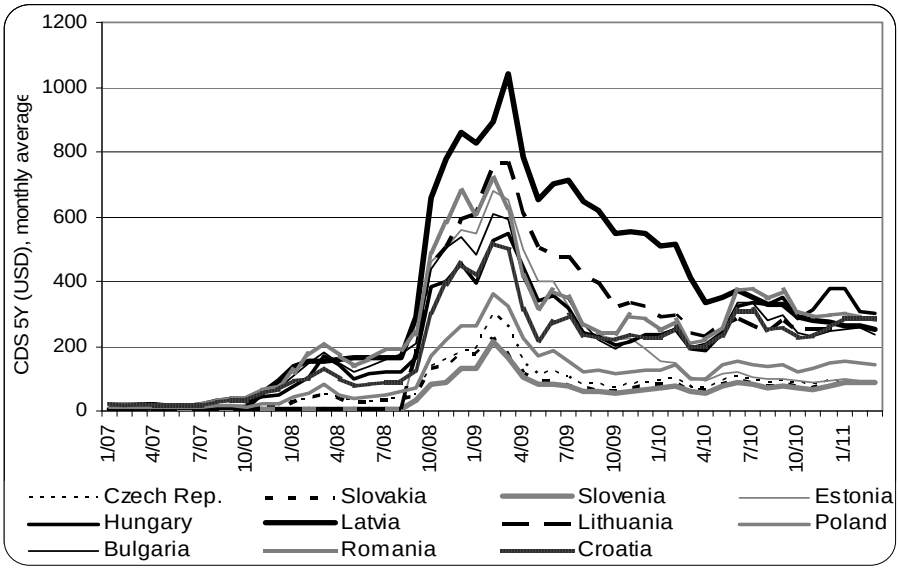
Source: IMF WEO database, October 2010 vintage.

Chart 3: General Government Balance in 2007 and Subsequent Relaxation 2007–2009



Source: IMF WEO database, October 2010 vintage.

Chart 4: Sovereign CDS in the CESEE Region



Source: IMF WEO database, October 2010 vintage.

While there was obviously a strong common component driving the CDS spreads, it is also clear that since the Lehman Brothers bankruptcy markets have started to differentiate between the individual countries. For three countries, spreads remained quite low during the whole period, indicating that they had fully preserved access to private capital markets. These were the Czech Republic, Slovakia and Slovenia. Poland has been close to these three countries, but still not quite in the same league. And while Estonia's spread has recently approached those of the best performers, this occurred only after markets became convinced that the country would start enjoying the euro area safety net.

All other countries in the region saw their spreads substantially deteriorating, indicating that their access to private financing has limited their fiscal space.

Which variables best discriminate among countries that were affected by the deteriorating spreads from those that were not?

Table 2: Factors Limiting Access to International Markets

in percent of GDP, unless otherwise indicated	**CDS 5Y (USD)**	**General government balance**			**Current account balance**	**General government debt**
	Q3/2010	**2007**	**Change 2009-2007**	**2010p**	**2007**	**2007**
Czech Republic	93.1	-0.7	-5.2	-5.4	-3.3	29.0
Slovakia	83.1	-1.9	-4.9	-8.0	-5.3	29.3
Slovenia	76.6	0.3	-5.8	-5.7	-4.8	23.3
Poland	140.1	-1.9	-5.2	-7.4	-4.8	45.0
Estonia	100.8	2.9	-4.9	-1.1	-17.2	3.7
Latvia	337.1	0.6	-8.5	-11.9	-22.3	7.8
Lithuania	262.7	-1.0	-7.9	-7.7	-14.6	16.9
Hungary	335.9	-5.0	0.9	-4.2	-6.5	65.8
Bulgaria	302.4	3.5	-4.4	-4.9	-26.9	19.8
Croatia	272.0	-2.5	-1.6	-6.2	-7.6	33.4
Romania	364.9	-3.1	-4.3	-6.8	-13.4	19.8
Serbia	347.5	-1.9	-2.2	-4.8	-16.0	35.2

Sources: Bloomberg; International Monetary Fund, World Economic Outlook Database, October 2010.

If we look at the best performers, i.e. those that did not see their spreads substantially deteriorating, we see that they had the following in common: A public debt ratio at the onset of the crisis lower than 30% of GDP, a budget deficit lower than 3% of GDP, and a current account deficit lower than 6% of GDP. These indicators seem to qualify a country for the club of the least affected. Poland which had a somewhat higher public debt ratio and had aggressively relaxed its fiscal policy, did not do so well and saw its spreads elevating.

It is important to note that the current account deficit, a non-fiscal indicator, has proved to be important for fiscal space. This has reflected the fact that markets in such a situation became concerned about the implications of the external imbalances on both the prospective budget performance and GDP growth prospects.[2]

[2] It is of course the underlying current account balance that matters, i.e. the one from which the effect of both domestic and partner country cycles are eliminated. However, with cycles being synchronised, the headline balance provides good approximation of external vulnerability.

We can therefore summarize this section by saying that the crisis has split the CESEE countries in 3 groups:

1. Countries that entered the crisis in a good fiscal position and without external imbalances. These countries were able to afford expansionary fiscal policy, including discretionary relaxation without seeing their sovereign spreads substantially deteriorating. These countries were the Czech Republic, the Slovak Republic and Slovenia. Poland was a border case as it started with a higher level of public debt, aggressively expanded the deficit and had to seek IMF credit-line to make investors less nervous.

2. Countries with low public debt and favorable budget balance, but large external imbalances. They saw their spreads shooting up and the access to private capital becoming constrained. While countries in this group still let their headline fiscal deficits expand (but abstained from discretionary stimulus), they had to finance them either from their budgetary reserves, or the IMF and the EU. The EU in fact helped not only via formal emergency lending arrangements, but also by accelerating regular regional assistance programs. However, while they managed to finance the expanded fiscal deficits, these countries did not preserve satisfactory market access, as reflected in their spreads. Countries in this group were Baltics and Bulgaria.

3. The remaining countries in the region saw their spreads deteriorating and the access to private financing becoming constrained. Some of them turned to the IMF who was willing to approve soft programs in 2009, while others limited the deterioration in the headline deficits. Had they tried to borrow more aggressively in international markets, they would have most likely hit the wall. The outlier in the group is Hungary, which even achieved an improvement in the headline balance during the crisis, which translates in almost 5 percentage points of GDP improvement in the structural balance between 2007 and 2009.

3. Looking Forward: Do the Current Fiscal Positions of the CESEE Countries Ensure that They Would Have Fiscal Space in a Possible New Crisis?

The lesson from the last crisis appears to be simple: If you want to have fiscal space when a crisis hits, make sure you have a low public debt ratio, possibly below 30% of GDP, that your structural deficit is close to zero, and that the economy does not have a large external imbalance. The exact "safe" threshold for the public debt ratio might of course be debated. Until the last crisis, it was generally considered that the ceiling for emerging market economies was 40% of GDP. If anything, the current crisis would suggest that it is lower.

Where are the countries of the CESEE region relative to such indicators today?

Table 3: Selected Indicators for CESEE Countries

in percent of GDP, unless otherwise indicated	**General government balance** (headline)			**General government cyclically adjusted balance** (in % of potential GDP)			**General government cyclically adjusted primary balance** (in % of potential GDP)	**General government gross debt**		
	2009	**2010**	**2011**	**2009**	**2010**	**2011**	**2011**	**2007**	**2015**	**change 2007-2015**
Czech Republic	-5.9	-5.4	-5.6	-4.6	-4.4	-4.7	-3.0	29.0	56.9	28.0
Slovakia	-6.8	-8.0	-4.7	-5.8	-6.9	-4.1	-2.4	29.3	43.9	14.5
Slovenia	-5.6	-5.7	-4.3	-4.3	-3.9	-2.7	-1.4	23.3	35.6	12.2
Estonia	-2.1	-1.1	-1.7	n/a	n/a	n/a	n/a	3.7	18.7	14.9
Hungary	-4.1	-4.2	-4.5	-0.9	-1.1	-1.7	1.9	65.8	82.5	16.6
Latvia	-7.8	-11.9	-7.6	n/a	n/a	n/a	n/a	7.8	35.5	27.7
Lithuania	-8.9	-7.7	-7.7	-5.7	-5.8	-6.5	-4.2	16.9	57.3	40.3
Poland	-7.1	-7.4	-6.7	-6.8	-7.1	-6.6	-3.5	45.0	60.9	15.9
CEE	**-6.4**	**-6.6**	**-5.9**	**-5.3**	**-5.6**	**-5.2**	**-2.5**	**39.6**	**59.1**	**19.5**
Bulgaria	-0.9	-4.9	-4.2	0.0	-2.7	-2.0	-1.4	19.8	27.7	8.0
Romania	-7.4	-6.8	-4.4	-6.6	-4.1	-1.8	-0.1	19.8	33.2	13.4
Croatia	-4.1	-5.2	-5.6	-3.5	-4.5	-5.4	-3.2	33.4	46.1	12.6
Serbia	-4.1	-4.8	n/a	n/a	n/a	n/a	n/a	35.2	34.3	-1.0
SEE	**-5.2**	**-5.9**	**-4.6**	**-4.6**	**-3.9**	**-2.5**	**-1.0**	**24.3**	**34.3**	**9.9**
CESEE	**-6.1**	**-6.4**	**-5.6**	**-5.2**	**-5.2**	**-4.6**	**-2.2**	**35.6**	**52.7**	**17.1**

Source: IMF WEO database, October 2010 vintage.

In the CESEE region, between 2007 and 2015, the public debt ratio is set to deteriorate by about 20 percentage points of GDP, reaching on average about 60% of GDP. The structural or cyclically adjusted deficit in 2010 is estimated for these countries at 5.6 percent of GDP, quite far from "close to balance over the cycle". The cyclically adjusted primary balance is heavily negative at some –2.5% of GDP, on average. All these indicators are far from safe levels, although admittedly, the deterioration is smaller than in the advanced economies.

In the SEE region, the deterioration in the public debt ratios will be only 10 percentage points, but countries in that group still have a problem with the

underlying current account balance, which will or has already triggered market concerns. (While the headline external account deficits have declined across the region, at this point it is difficult to estimate to which extent their structural balances have improved).

Only three countries, Slovakia, Romania and Latvia are on the path to adjust the structural balance by more than 2 percentage points in 2011, with Slovenia trailing with a smaller but still sizable adjustment higher than 1 percentage point. No major consolidation measures are envisaged in other countries.

Furthermore, recent simulations performed by the IMF staff on the necessary adjustment that would need to be accomplished by 2020 so as to achieve a safe level of public debt by 2030 indicate that some of the countries in the region indeed face big challenges (table 4).

Table 4: Primary Balance in 2010 and the Necessary Adjustment

in percent of GDP	**Cyclically adjusted primary balance in 2010**	**Adjustment to achieve prudent debt limit in 2030**
Czech Republic	-3.1	4.3
Slovakia	-5.9	6.8
Slovenia	-2.8	3.4
Poland	-4.3	6.8
Estonia	2.4	-1.7
Latvia	-6.4	6.6
Lithuania	-4.5	6.6
Hungary	2.5	0.8
Bulgaria	-2.5	3.4
Croatia	-0.8	n/a
Romania	-2.7	3.0
Serbia	-4.6	n/a

Source: IMF Fiscal Monitor, November 2010.

We can conclude therefore that the crisis has led to a large deterioration in the fiscal balances in the CESEE countries. While the debt ratio will deteriorate less than in the advanced economies, it will nevertheless increase much above the safe level. As a result, unless they start quickly to implement fiscal consolidation, the majority of the countries will have much less fiscal space in a possible future crisis than they had in 2008/09.

4. How to Create Fiscal Space and What to Avoid?

Markets will continue to perceive an increased risk of sovereign defaults in the years ahead. This suggests need for a prompt action. At this point, the CESEE region benefits from uncertainties about sovereign risks in Western Europe in two ways. First, investors who want exposure to Europe perceive at this stage the CESEE region as safer. Second, the fact that the public debt ratio in the advanced economies will grow by some 35 percentage points between 2007 and 2015 has distracted attention from the deterioration in the CESEE region. However, this might change. The CESEE countries should therefore signal soon that they are serious about fiscal consolidation.

Approving credible medium-term fiscal frameworks should be crucial in this context. Such frameworks should explicitly aim at reducing debt ratios to the pre-crisis level over some reasonable time-horizon and be based on conservative estimates about potential output growth. Moreover, using absorption gaps might be more appropriate than using output gaps for estimating the structural balances. The former would correct revenue not only for the output boom but also for excessive current account deficits.

Strengthening transparency should certainly be part of such credible frameworks. After all, markets reacted vehemently to Greece's fiscal prolificacy, once it became known how misleading its fiscal statistics were. Against this background, various questionable methods that started to be used by several countries in the region with a view to meeting fiscal targets are not encouraging. For example, re-directing second pillar pension contributions to the budget obviously does not reduce the actual public debt, unless these resources are definitely expropriated from the private sector. And even if the government does not intend to compensate the contributors in the future, it will not be able to avoid taking over pension obligations, which in fact might effectively result in an even larger public debt.

The composition of fiscal measures should also preferably be focused on the expenditure side so as to avoid weakening in competitiveness. Based on the measures implemented so far, many countries in the region will exit the crisis with a higher tax burden than they entered the crisis.

Regarding the argument that fiscal space in some countries was adversely affected by the excessive reliance on indirect taxes, which fell more than income during the crisis, and that post-crisis reforms should address this issue, I would argue that this would be wrong medicine based on a wrong diagnosis. Structural fiscal balances indeed get overestimated if underlying revenue is overestimated. But this does not require that consumption be taxed less, only that the transitory revenue is appropriately accounted for.

Regarding the point that new multilateral financing mechanisms should be established so as to increase fiscal space for the countries, I would say that there is

no evidence that more expansionary fiscal policy was desirable for any country in the region. Hungary might be an exception, but here the weak fiscal performance in the past played probably a crucial role in preventing a softer approach during the crisis. Moreover, no country in the region has faced a balance of payment crisis because of the absence of external financing. Instead, several countries took advantage of the soft IMF programs in 2009 that facilitated not only the balance of payments assistance but also directly provided budget support.

How to Remove Bad Incentives?[1]

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1. Introduction

Deficit persistence has been a well-known phenomenon in Central Europe (Czech Republic, Hungary, Poland and Slovakia) even before the outbreak of the Great Recession. National fiscal frameworks and the Stability and Growth Pact failed to eliminate excessive deficits and pro-cyclical policy. Good times were used to reduce deficits only occasionally. Despite the fact, that no Central European country had to bail out its banking sector, the financial crisis has brought new challenges for fiscal policy makers.

The decline in potential output and its growth rate together with the attempts to adopt stimulus measures resulted in substantial widening of general government deficits. At the same time, financial markets started to penalize unsustainable government policies very heavily. All this brought into the forefront the need to adopt credible exit strategies. This contribution illustrates how reforms in fiscal frameworks (based on region-specific circumstances) can help to put budgetary positions on sustainable footing in Central Europe (CE).

2. Deficit Bias in the Region

Excessive deficits in the past 30 years have lead to an increase in gross public debt in the OECD to 100.7 percentage points of GDP in 2011 from 68.7% in 1993. Gross debt in CE is approaching 60% of GDP (simple average) compared to 45%t ten years ago. It is a well accepted fact that sustained deficits and increasing debt levels are to some extent due to the so called deficit bias. Politicians have many incentives to operate with high deficits. Based on the extensive literature I can mention at least six possible reasons for this bias: informational problems, impatience, myopia, common-pool theory, time inconsistency and electoral competition. As I argue below, in my view informational problems, myopia and the common-pool theory are the most relevant explanatory factors of the deficit bias in

[1] This contribution to the panel discussion draws heavily on Ódor (2011).

CE. One should keep in mind the source of the bias when designing fiscal policy frameworks.

Despite the prevalence of big deficits in CE, according to opinion polls, voters and companies usually care about future generations and increasing public debt. Around 90% of citizens consider public debt as a major threat in Hungary and the Czech Republic. In Poland less than 50% of voters were in favor of increasing the constitutional debt limit. In Slovakia, rising public debt was one of the main topics before the 2010 parliamentary elections.

At the same time, the transparency of budgets in CE is still – despite many improvements in recent years – below Western European standards. The public awareness of government debt and the low transparency of budgets in CE suggest that informational asymmetry has been an important source of the deficit bias. Therefore, decreasing this asymmetry between the public and the government could have substantial benefits in the form of additional costs imposed on policy makers departing from sustainable policies.

The second major source of the deficit bias in CE is myopia. Structural deficits in election years were on average 1 percentage point higher than one year prior to elections. Moreover, there were significant upward revisions to the deficit because of reclassification of public private partnership (PPP) projects (Hungary) and financial transactions into capital transfers (Slovakia). It clearly shows that governments often care only about the short-term consequences of their action. Their interest for the future is lessened due to the uncertainty over next elections.

The third significant cause of the deficit bias in CE is the common-pool theory. Decision makers under the pressure of various interest groups are unable to internalize the overall costs of higher debt. This incentive is stronger in good times and leads to substantial pro-cyclicality of policy. The years from 2006 to 2008 were especially good for CE countries. According to the estimates of the European Commission, the output gap showed significantly positive values in all four countries. Despite buoyant economic environment, structural primary balances net of one-off effects showed no substantial improvement during this period.

3. How to Eliminate the Deficit Bias?

The deficit bias in principle should not be a long-term problem if financial markets would react to inadequate fiscal policy early enough. However as the recent sovereign crisis shows markets seems to penalize unsustainable fiscal policies in a non-linear fashion and only at a later stage. In monetary unions with some degree of political integration such as the euro area, the problem is worse, since the delays can be much longer due to the little credibility of no bail-out clauses.

Another line of defense against the deficit bias would be if voters put more pressure on fiscally non-responsible governments. As the experience from the last 30 years shows, to rely solely on this assumption would be problematic. One

explanation is that voters themselves discount the future heavily. The other, more important cause is informational asymmetry; it is often hard for voters to distinguish between bad policies and bad luck.

The third possibility to fight against sustained deficits is designing better fiscal frameworks as commitment devices. The current crisis with countries close to default created at least ex-ante political will to consolidate public finances. To profit from this relatively widespread agreement between politicians across the political spectrum, national fiscal institutions should be strengthened. Of course there is no one-size-fits-all fiscal framework. One should take into account country-specific circumstances.

4. Requirements for Good Fiscal Frameworks in CE

Policy makers in CE face a slightly different environment for fiscal policy than their counterparts in more developed countries. I do not want to state that the features identified are not present in developed countries; however in my view their importance is higher for catching-up economies.

One can identify at least seven interrelated characteristics for policy consideration: (1) higher macroeconomic volatility, (2) frequent "regime switches" and stop-and-go policies, (3) FDI dependence, and high current account deficits, (4) lower tax potential, (5) expenditure pressures, (6) higher corruption and lower law enforcement, (7) relatively low public debt and higher growth potential. It is important to bear in mind that many of these problems are not exogenous to the setting of fiscal policies.

4.1 Higher Macroeconomic Volatility

It is a well documented fact in the literature that emerging market business cycles are more volatile than their counterparts in developed economies. The reason is mainly the presence of frequent supply shocks and financial underdevelopment. Fiscal frameworks in CE thus should take into account that it is almost impossible to assess in real time the cyclical position of the economy and the structural deficit.

4.2 Frequent Regime Changes

Regime switches are endogenous factors contributing to higher macroeconomic volatility. Frequent changes in political cycles are not unknown for developed countries; however political and economic cycles are more intertwined in CE and in developing countries in general. Dramatic reversals of fiscal and monetary policy or substantial changes in structural reform appetite are frequent in catching-up countries.

In CE especially large structural changes are visible mainly in Slovakia and Poland. In Slovakia there were at least four important structural breaks in the past 15 years, from which three are closely related to domestic stop-and-go policies.

Any fiscal framework which limits the ability of the government to reverse policies or has a built-in bias against structural reforms is probably not politically sustainable. Frameworks should be flexible enough to accommodate government policies, which rest on very different value judgments. Therefore, normative elements are not recommended for fiscal frameworks in CE.

4.3 FDI Dependence and High Current Account Deficits

Recently much attention has been focused on the appropriateness of the FDI-led catching-up growth model for new Member States. Question marks arose mainly after the huge output drop in the Baltic States. The majority of the post communist countries is undercapitalized. Without foreign direct investment the catching-up process would be much longer. On the other hand, business cycles would be probably less volatile. In my view, the roots of the recent problems are not in the basic set up of this growth model, but in the choice of the exchange rate regime before the euro area entry and underestimating the signals from the widening current account deficits, which can lead to substantial problems if international capital flows stop. Although it is important in all the four countries, especially Slovakia should pay a lot more attention to counter-cyclical fiscal policy to mitigate the possible negative side-effects of the FDI-led catching-up strategy.

Therefore, fiscal frameworks should allow automatic stabilizers to fully operate as a minimum requirement. Since automatic stabilizers in CE are not as strong as in countries with more progressive tax systems and higher share of public expenditures on GDP, fiscal frameworks should send a warning signal if more adjustment is needed beyond the work of stabilizers. This leads to requirement for sufficient flexibility via incorporation of judgments into the fiscal framework.

4.4 Lower Tax Potential

The tax burden in CE is much lower than in the western part of Europe. Lower GDP per capita and high openness are obviously among the reasons. Since catching-up economies are FDI-dependent, capital taxation is understandably lower than in more mature economies. Therefore, the majority of the tax burden falls on consumption and labor, mainly in the form of social security contributions. Moreover, the relatively high taxation of labor creates incentives to move certain activities to the shadow economy. Underreporting of earnings and higher share of self-employment (with minimum reported income) are common in the region. That is one of the reasons why the macroeconomic effectiveness of the labor taxation is so low.

In the long run these tax systems will at least partially converge to western standards, however the immediate challenge is to put in place simple and well functioning tax systems to contain tax avoidance. To achieve these goals, fiscal frameworks should not discriminate tax reforms. This requirement is important also from the political economy point of view. Fiscal frameworks to be sustainable should be compatible with both a small and a big role of the state in the economy.

4.5 Expenditure Pressures

Expenditure pressures are also present in CE mainly as a heritage from the past. After the regime change a lot of physical and human capital became obsolete. Moreover, the basic infrastructure (roads, communications, railways, etc.) is also underdeveloped compared to western countries. The latter creates a lot of needs for investments in physical capital and infrastructure, while the lack of adequate skills represents a challenge for employment policies. In many cases the policies to put these people back to the job market failed and the "lost generation" ended in social safety nets as early retirees or disabled. The employment rate in CE is therefore far lower than for example in Germany.

State companies represent a special case for expenditure pressures. Many countries failed to privatize or restructure state companies. Many of them create losses, which have to be covered by the general government from time to time.

Aging of the population is another potential source for pressure. While it is not an immediate problem for new Member States as for Western Europe, its impact will be substantial in the long run. Central European countries are expected to stay below the EU average as far as the old-age dependency ratio is concerned at least until 2040. However, the cumulative growth of this indicator between 2010 and 2060 will be enormous in Slovakia and Poland (around 50 percentage points). In this context it is not surprising that the European Commission has classified the Czech Republic and Slovakia as "high risk" countries in terms of fiscal sustainability.

The implication is that good fiscal frameworks should not discriminate structural reforms with long-term positive impacts in CE and should focus on the entire public sector including state enterprises.

4.6 Corruption and Law Enforcement

Central European countries rank high as far as corruption is concerned and low in terms of budget transparency. The room for creative accounting and off-budgetary operations is significant. One of the major sources of the deficit bias is non-transparency of public accounts. Law enforcement is also very low in the region, which in many cases creates bad incentives. For example state organizations and companies do not pay their dues in time, because they know that it will take a lot of

time for the courts to decide. Therefore, reporting cash outlays is in many cases not sufficient to monitor fiscal performance.

Any fiscal framework, which improves the transparency of public accounts, can cause substantial efficiency gains in CE. Much more attention should be devoted to activities outside the general government and to quasi-fiscal operations. Focusing on the whole public sector is a must.

4.7 Low Debt Levels[2] and Higher Growth Potential

Compared to Western Europe, gross debt levels in CE are lower and potential output estimates higher. This means that CE can in principle face fiscal challenges more easily. The reality is however more complex. Limited tax potential and higher expenditure pressures together with low initial debt levels created an environment for increased deficit bias. Postponing the solution between the lower taxes and higher expenditures through deficit financing is possible if a country starts with a low level of debt. However, this "strategy" can be successful only up to a certain debt level, since – as the recent crisis illustrated – financial markets do not accept as high debt levels in emerging markets as in the case of developed economies.

Good fiscal frameworks might consider limiting government debt explicitly or implicitly at much lower level than the harmful limit – 90% of GDP – suggested by the empirical work of Rogoff and Bertelsmann (2010).

Table 1: Requirements for Good Fiscal Framework in CE

CE characteristics	Implications for fiscal frameworks
macroeconomic volatility	operational target not for structural deficit
regime changes, policy reversals	allow for different value judgments, no normative elements
FDI-dependence, current accounts	counter-cyclicality, flexibility, judgments
low tax potential	no built-in bias against tax reforms
expenditure pressures	no built-in bias against structural reforms
high corruption, low law enforcement	maximum transparency possible, focus on the whole public sector
low debt, high growth potential	implicit or explicit debt limit

Source: Author's compilation.

[2] With the exception of Hungary.

5. Designing a Fiscal Framework in CE

Requirements for fiscal frameworks in CE presented in table 1 are sometimes in conflict; therefore it is not straightforward to design appropriate frameworks. However if we consider the key sources of the deficit bias in CE, some basic characteristics emerge. One of the most important problems is the still big room for creative accounting practices and off-budgetary operations. Therefore, rules for transparency and reporting requirement for off-budgetary items can be very useful.

Many of the current bad incentives come from the fact, that policymakers and the public focus their attention more on flows rather than stocks, on general government rather than the public sector and on explicit liabilities ignoring implicit and contingent liabilities. In principle, there are two ways to fix this problem. The first is to identify these shortcomings and to build adjusted general government indicators. The second option is to broaden the focus of the debate on public finances systematically by calculating indicative intertemporal public balance sheets. In my view the concept of net worth (public sector assets minus public sector liabilities) could play an important role in this regard.

The proposal to base fiscal frameworks in CE on the concept of net worth does not mean, that I advocate for an operational target for net worth. Due to valuation and data problems it would be highly problematic. However, it can serve as a good benchmark for transparency. Moreover, if reliable numbers for the *changes* in net worth are available, these can serve as a starting point for the operational framework.

The more complicated issue is the question of fiscal rules versus independent fiscal institutions[3]. In my opinion, important synergies exist between the two. Rules without councils have to be simple to be understood by the public. Then there is no problem to go around them, especially in a less transparent environment. Councils without rules could end as purely academic debates. So the best way is to combine both: we can have more complicated (and therefore effective) procedures, because the council can serve as an interface between the government and the public. One can combine this way the strictness of rules with the flexibility of councils.

The next issue is the selection of appropriate fiscal rules. Since it is almost impossible to calculate structural deficits in real time – frequent supply shocks, regime changes, etc. – an operational target for the structural budget balance would be highly problematic. Focusing on headline budget balances would be equally wrong: due to high business cycle volatility, it would create significantly pro-cyclical fiscal policy. An operational target for the debt level is very transparent, but it also incorporates a pro-cyclicality bias. So the most appropriate operational framework in our view is employing medium-term expenditure ceilings. If these

[3] By independent fiscal institutions, I mean in this contribution fiscal councils with no normative roles.

ceilings are defined in nominal terms, the evaluation is straightforward and if cyclical expenditure items are excluded from the ceiling, it allows automatic stabilizers to operate freely. In addition, if tax expenditures (such as basic allowances and exemptions in the tax system) are also included, it reduces the possibilities to go around the rules by creating more loopholes in the tax system. It is also important to have a very broad definition of ceilings, since lot of operations are taking place outside the state budget.

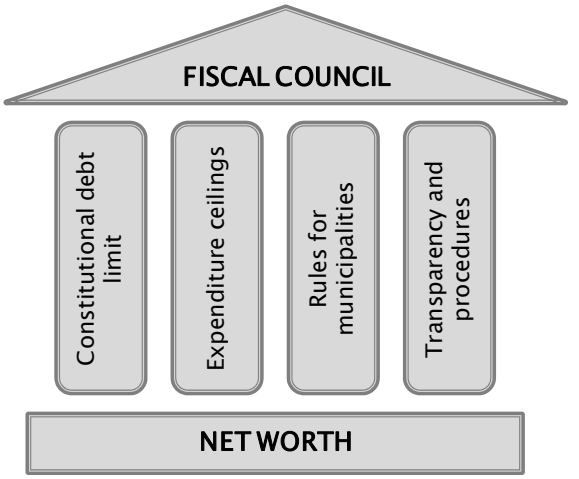
How to derive expenditure ceilings? The basic requirement is to set up these ceilings for at least three years in advance and to derive them from some measure of sustainability. All these calculations should be based on cautious macroeconomic assumptions.

Another important question is the neutrality against structural reforms and tax reforms. How to reward good policies and punish bad ones? Here the concept of net worth can help us. We see an alternative for deriving the expenditure ceilings using the change in net worth. Since net worth in a broad sense incorporates also implicit and contingent liabilities, reforms improving the long-term sustainability of public finances can increase the expenditure ceiling. Fortunately there is a benchmark available for this exercise – the projections of the Economic Policy Committee's (EPC) Working Group on Ageing Populations and Sustainability. On the other hand, deriving expenditure ceilings from the changes in net worth (or adjusted CABs) grossly complicates the understanding of such rules. This is the case where independent fiscal institutions can help once again.

How to set up such independent fiscal councils? Frequent policy reversals in CE are more often than not the result of the very different view of political parties on the role of the state in the economy. Therefore the council should have no normative role.

The current reform proposal in Slovakia includes all these elements as illustrated in chart 1.

Chart 1: Reform Proposal in Slovakia



6. Conclusions

There is no one-size-fits-all fiscal framework. However, based on the characteristics of Central European countries, one can have some recommendation regarding the choice of basic building blocks. The paper argues that for catching-up countries it is very important to decrease the informational asymmetry between the public and policy makers and to broaden the scope of the debate to the whole public sector. The concept of net worth can serve as a useful informational benchmark in this regard.

In countries where the room for creative accounting is relatively large, there are important synergies between fiscal rules and independent fiscal institutions. Among fiscal rules we favor expenditure ceilings and implicit or explicit debt ceilings as a second line of defense. Of course, one cannot forget about appropriate rules for municipalities, whose influence in the region is not negligible. We advocate including all these key ingredients in one Fiscal Responsibility Act together with basic requirements for transparency and procedural rules.

It is however important to bear in mind that the reform of the fiscal framework is not a magic solution. Without an ex-ante backing from the major political parties it is probably not viable. The good news is that the current financial crises and the need for exit strategy have created broad political consensus to carry out revisions to the existing frameworks in many countries.

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The Role of International Transfers in Public Investment in CESEE: The European Commission's Experience with Structural Funds

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1. Introduction

Since its inception the financial resources allocated to the EU Cohesion Policy have steadily increased. From 16% in 1988, its share in the community budget increased to about one third for the current multi-annual financial framework, corresponding to 0.38% of the total GDP of the EU. It is now the second policy in importance after the common agricultural policy.

The role of Cohesion Policy has even been enhanced with the outburst of the financial and economic crisis. Soon after the outbreak of the financial turmoil, the Commission launched the European Economic Recovery Plan aimed at driving Europe's recovery from the economic crisis. Within the Recovery Plan, the Structural and Cohesion funds were mobilised and up to EUR 6.3 billion of payments were brought forward in 2009. The idea was not to increase social and cohesion funding per se, but help to accelerate programme implementation. More money was made available at a time when the need was the greatest because of the downturn.

The financial contribution of Cohesion Policy to the Recovery Plan was substantial, corresponding to 3% of the total and to more than 40% of the Community's contribution. But more than that, Cohesion Policy was supposed to play a very specific role. It indeed mainly supports public investments that are intended to improve the structure of our economies and foster their endogenous development capacities.

By mobilising Cohesion Policy, the Plan responds to the danger that, with national budgets currently under severe pressure, Member States and regions may delay planned investments. With more Community funding available up front in the form of additional advances, they can more easily pre-finance projects or even

pre-finance their national contributions, so allowing planned investments to go ahead, in areas such as infrastructure, education, innovation or energy efficiency which are key for maintaining development opportunities in the future.

All over Europe, governments are struggling to maintain acceptable levels of public spending and some heavily rely on the EU budget to do so. For some Member States, the financial resources channelled by Structural and Cohesion Funds in their economies indeed represent more 4% of their GDP, up to 8.5% of national public expenditure.

On the other hand, the current economic situation and the general deterioration of public finance put the EU budget under strong pressure. The UK asked that several of the largest nations in the alliance support a real-term freeze of the budget and has received support from France and Germany. This means that the EU budget would rise by no more than the rate of inflation.

However, knowing that Cohesion Policy mostly finances public investments which are necessary for securing future growth and fiscal consolidation, and the fact that without it, a number of Member States will simply not be capable of fully playing their role in reaching the objectives of Europe 2020, voices also plead for maintaining a strong Cohesion Policy and give it the financial means it needs to fulfil its tasks

It is therefore not surprising that more than ever Cohesion Policy and its effectiveness are discussed, either in academic debates or within policy makers circa. In particular, the question of whether it played (or is expected to play) a significant role in the development of Central, Eastern and Southeastern European Economies (CESEE), its main beneficiaries, is therefore highly relevant.

However, providing a convincing answer is far from trivial. This paper will first review and discuss the main methods which are used for estimating the macro-economic impact of Cohesion Policy. It will then focus on the results recently obtained with economic models. Finally, it will present some reflections on how to improve the effectiveness of the policy.

2. Measuring the Impact of Cohesion Policy

Cohesion Policy aims at fostering the economic and social development of the EU and its regions. It affects a wide range of macroeconomic variables, such as GDP, employment, productivity but also consumption, investment, the fiscal balance or the trade balance. Some of its impact is direct (e.g. increasing demand for training services), others are indirect (e.g. raising training leads to higher labour productivity and hence increases competitiveness). Some are short-term others only materialise in the long-term. Finally, economic performance is also affected by a wide range of internal policy actions and external developments in the economy.

The complexity of its effects and of the context on which Cohesion Policy is applied explains why it is much easier to evaluate the output or the outcome of the

policy than its macro economic impact. For instance, for the programming period 2000–2006, Cohesion policy funded 4,700 km of motorways and 1,200 km of high speed rail, implying that 77% of motorways in the Cohesion Countries and some 56% of high speed rail were co-financed by cohesion policy. As a result, average motorway density in Spain, Greece, Ireland and Portugal went from 90% of the EU-15 average in 2000 to 111% in 2006. Around 230,000 SMEs received financial support (mainly grants but also loans and venture capital) and a further 1.1 million received advice and support for networking, leading to an estimated 1,000,000 jobs created at the EU level (European Commission, 2010).

However, estimating the impact of these interventions on variables such as GDP growth or the level of regional disparities among EU regions is more complicated. Three main approaches have been adopted in the literature to do so: convergence analysis, econometrics and macroeconomic models.

2.1 Convergence Analysis

The objective of European cohesion policy is defined in Articles 2 and 4, and Title XVII of the Treaty establishing the European Community. According to Article 2, cohesion should contribute to "promote economic and social progress as well as a high level of employment, and to achieve balanced and sustainable development." Article 175 adds "in particular, the Community aims to reduce the disparities between the levels of development of the different regions and the backwardness of the least favoured regions or islands, including rural areas."

Since the inception of the policy, this objective has often been translated as the promotion of convergence between EU regions and in spite of the fact that cohesion policy aims at more than purely economic convergence, the reduction of regional disparities in the level of development has usually been measured in terms of GDP per head (relative to the EU average).

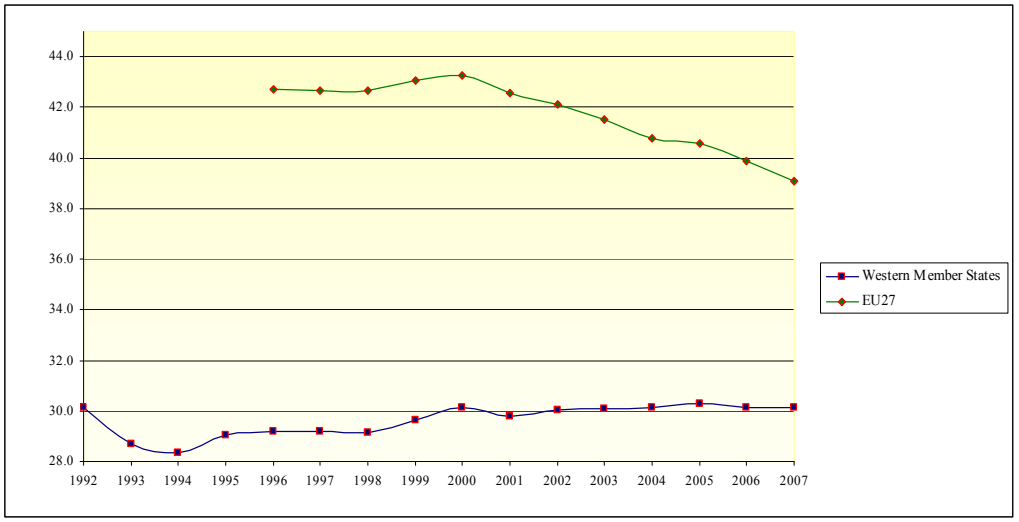
This type of convergence has even become a major aspect in assessing the effectiveness of European cohesion policy. Many contributions have inferred conclusions concerning the extent to which the cohesion policy delivers results from the examination of the convergence process among EU regions, some with positive and others with negative findings.

Regional disparities in the levels of GDP per head have indeed substantially declined, although not at the same pace among different groups of regions. Convergence between regions of the Western Member States was strong up to the mid-1990s, but the process since then has lost momentum. From 1980 to 1996, the evolution of disparities among Western Member States regions indeed shows a clear downward trend, the coefficient of variation decreasing from 33 to 29. On the contrary, since 1996 it remained quite stable. The results are in line with the findings regularly reported in the literature (see for instance Neven and Gouyette 1995, Magrini 2004 or Ertur et al. 2006). This is the type of observation which

based on which Boldrin and Canova (2001) concluded that Cohesion Policy is ineffective.

On the other hand, disparities continue to decrease rapidly among EU-27 regions, the coefficient of variation falling from 42.7 in 1996 to 39.1 in 2007. This implies that if convergence is still at work within the EU-27, it is due to the fact that the poorest regions in the new Member States are catching up on the Union's richest ones, while among Western Member States regions convergence is no longer taking place.

Chart 1: Coefficient of Variation, GDP per Head, Western Member States and EU-27 NUTS 2 Regions, 1992–2007



Source: Cambridge Econometrics and EUROSTAT database, DG REGIO's calculations.

The fact that regional disparities decline when considering the EU as a whole does not prevent disparities to increase within a number of Member States, in particular those who recently joined the Union. For instance, in Romania the coefficient of variation rose from 15 in 1995 to 44 in 2007. To a large extent, such evolution reflects that in each country the process of growth features important local differences, being very strong in a limited number of regions which generally includes the capital city region.

However, the fact that growth is very strong in some regions does not prevent the others to continue their catching-up on EU-27 levels. In fact, from 2000 to 2007, only eight regions in the new Member States recorded a lower average growth rates than the EU-27 average.

Dispersion index have the interest of greatly synthesising information. Their drawback is that they do not allow describing the trajectory of observational units

(in our case regions) within the distribution. Such movements can add considerable insights to the analysis of regional disparities by providing more details about the mechanisms at work in the convergence process.

Several methods and instruments can be used to analyse the characteristics and the dynamics of the distribution. One of the most convenient one is Markov chain analysis based on transition probability matrices (see for instance Quah, 1996; Fingleton, 1997 or Overman and Puga, 2002).

Table 1: GDP/Head (EU-27=100): Transition Probability Matrix, EU-27 NUTS 2 Regions, 1995–2007[1]

Transition probability matrix							
			2007				
	GDP/head	Percentage of regions	0–50	50–75	75–100	100–150	150–
1995	0–50	13%	69.2%	28.2%	2.6%	0.0%	0.0%
	50–75	12%	3.2%	71.0%	25.8%	0.0%	0.0%
	75–100	25%	0.0%	7.7%	78.5%	13.8%	0.0%
	100–150	43%	0.0%	0.0%	20.7%	72.4%	6.9%
	150	7%	0.0%	0.0%	0.0%	44.4%	55.6%

Distribution					
	0–50	50–75	75–100	100–150	150–
1995	14%	12%	24%	43%	7%
2007	10%	14%	31%	38%	7%
Long run	1%	14%	48%	32%	5%

Source: EUROSTAT database; DG REGIO's calculations.

The transition probability matrix measures movements within the distribution. For instance, the transition probability matrix above indicates that 28.2% of the regions which were in the class [0, 50] in 1995 moved to the class]50, 75] in 2007. The other 69.2% of the regions remained in the same category.

The transition probability matrix indicates a relative persistence of the distribution. The values on the diagonal are quite high, suggesting a high probability to remain in the same class of GDP per head. However, persistence is

[1] Quah (1993) or Legallo (2004) rely on a different method for computing the transition probability matrix where cell *ij* is the number of occurrence of passages from class *i* to class *j* during the whole period of observation. This has the advantage of exploiting the panel dimension of the data and of giving a more precise estimation of the true transition probabilities. Adopting this approach did not led to substantial differences in the results presented here and we therefore chose to measure transition between the two end dates of the period of observation as it makes it easier to interpret the transition probability matrix.

less pronounced at the end classes of the distribution. In general, for regions with GDP per head lower than 100% of the EU average, movements towards upper categories are much more frequent than movements down, the reverse being true for regions with GDP per head above this threshold.

Interestingly, the same analysis conducted on the Western Member States regions lead to similar conclusions as summarised in the following table.

Table 2: GDP/Head (EU-15=100): Transition Probability Matrix, Western Member States NUTS 2 Regions, 1995–2007

Transition probability matrix							
			2007				
	GDP/head	Percentage of regions	0–60	60–75	75–100	100–150	150–
1995	0–60	5%	45.5%	45.5%	9.1%	0.0%	0.0%
	60–75	17%	16.7%	52.8%	30.6%	0.0%	0.0%
	75–100	42%	0.0%	9.2%	75.9%	14.9%	0.0%
	100–150	32%	0.0%	0.0%	26.4%	73.6%	0.0%
	150–	3%	0.0%	0.0%	0.0%	28.6%	71.4%

Distribution	0–60	60–75	75–100	100–150	150–
1995	5%	17%	41%	34%	3%
2007	5%	15%	46%	32%	2%
Long run	4%	14%	52%	29%	0%

Source: EUROSTAT database; DG REGIOs calculations.

The analysis indicates that convergence is still taking place among Western Member States regions for the period considered. Indeed, 45.5% (respectively 30.6%) of the regions in the class]0, 60] (respectively]60, 75]) moved to the next class between 1995 and 2007. The long run distribution shows that if most of the convergence has already taken place for the classes of GDP per head above 75% of the EU average, the process remains vivid for the lower classes and is expected to continue in the future.

This tendency is however not captured by dispersion indexes such as the coefficient of variation. The explanation is that the number of regions in the lower categories is relatively small and even if within the Western Member States, poor regions are rapidly catching-up, their weigh is too small for this movement to be reflected in summary measures which fail to capture movements that may be relatively small in statistical terms but are nevertheless of importance from a policy point of view.

However, as stressed by Puga (2001) when discussing the conclusion of Boldrin and Canova that the low pace of convergence in the EU-15 demonstrates the

ineffectiveness of Cohesion Policy, this type of analysis does in fact convey no information concerning the impact of the policy. Indeed, such analysis does not provide any counterfactual, i.e. there is no means to know what would have happened in the absence of policy interventions. Even if convergence is slow, it could be that it would have been even slower without the policy.

2.2 Econometrics

Econometric analyses mostly focus on the impact of cohesion policy on macroeconomic variables like GDP per head, employment or productivity. In a majority of cases, the approach amounts to estimate a model (in a reduced or structured form) which borrows from growth theory so that the analysis also provides information on the extent and pace of beta-convergence.

For instance, using data for 95 regions of the EU-9 between 1980 and 1997, Cappelen et al. (2003) gauge the effectiveness of cohesion policy in generating growth in poorer regions and promoting convergence in Europe. They point to the need to accompany the support provided by cohesion policy with policies that facilitate structural change and increase R&D capabilities in poorer regions.

Rodriguez-Pose and Fratesi (2004) examine how Structural funds support is allocated among different development axes in Objective 1 regions for the period 1989 to 1999. The categories of expenditure they consider are infrastructure, education-human capital, business support and support to agriculture. They find no significant impact of funds devoted to infrastructure or to business support. Only investment in education and human capital has medium-term positive effects, while support for agriculture has short-term positive effects on growth.

Ederveen et al. (2006) attempt to assess the effectiveness of Structural Funds and whether this is conditioned by the quality of regional "institutions" proxied by quantitative measures of corruption, inflation or openness to trade. Their approach is in fact following the one Burnside and Dollar (2000) applied to assess the effectiveness of aid on growth in developing countries, i.e. the estimation of a beta-convergence specification where measures of institutional quality and the amount of Structural Funds are introduced as additional regressors. Their findings point to the absence of a global significant impact of Structural Funds on regional growth but that support allocated to regions with high quality of institutions are effective, leading to the conclusion that EU Structural Funds are conditionally effective.

Fagerberg and Verspagen (1996) analyse regional growth in the EU in the postwar period and examine the levels and growth of per capita GDP for a sample of 70 regions, covering six of the EU Member States. They find that during most of the post-war period, regional disparities have steadily declined but that since the early 1990s, there is a reversal in this trend. Moreover, differences in levels of productivity and income across European regions have remained substantial. According to their findings this would mainly be due to variables, notably R&D

effort, investment support from the EU, the structure of GDP and differences in unemployment that have a diverging impact on regional economic performance. They also find some support for the idea of different "growth clubs" characterized by different dynamics, productivity and unemployment levels.

Other contributions develop arguments borrowed from the Economic Geography. Martin (1999) discusses the role of public infrastructures in a two-region endogenous growth model and analyses the contribution of different types of public policies on growth, economic geography and spatial income distribution. Its main conclusion is that public policies that reduce the cost of innovation can attain the objectives of higher growth and more even spatial distribution of both income and economic activities. On the contrary, public policies targeting transport infrastructure face a trade-off between growth and the reduction regional disparities.

Puga (2002) discusses the role of regional policies, especially transport infrastructure improvements, in the EU context where Member States have developed different production structures and have witnessed an increase in the polarisation of regional unemployment rates. In particular, the paper stresses that the impact the reduction of transport costs between regions may not foster convergence and can in fact harm the industrialisation prospects of less developed areas. Moreover, the framework also shows how the impact of lower transport costs on less developed regions depends on certain aspects of the economic environment (such as mobility and wage rigidities) and on characteristics of the projects. In particular, while TransEuropean Transport Network give better access to the main activity centres, it is also likely to increase the gap in relative accessibility between core and peripheral areas, therefore reinforcing the position of core regions as transport hubs.

Relying on spatial econometrics to include spatial effects in the estimation of a conditional Beta-convergence model, Dall'Erba and Le Gallo (2007) assess the impact of structural funds on convergence among 145 European regions over the period 1989 to 1999. They analyse separately each of the five objectives of regional support. The results indicate either insignificant impact or very small and even negative in some cases. However, some of the figures obtained should be considered with caution. In particular, support under Objective 1 is found to have a positive impact in the core regions but an insignificant one in the periphery regions which shed some doubts on the capacity of such specification to capture and measure the determinants of the regional growth process.

In fact, this family of approaches suffers from a fundamental drawback in the particular case of Cohesion Policy. Indeed, the allocation of Cohesion funds is such that the magnitude of the policy injection is inversely related to GDP/head. Consequently, (at least) two explanatory variables are not independent which introduces bias in the estimation results.

For example, the following data set was generated using the following model:

$$GDP\ growth = \alpha + \beta * GDP/head\ at\ starting\ date + \gamma * Z + \delta * CF + \varepsilon_1 (1)$$

$$CF = 1/\ GDP\ at\ starting\ date\ (2)$$

where Z is an uniformly distributed random variable representing the idiosyncrasies of regional economies; CF is cohesion funding and ε_1 is a normally distributed random term. The parameters values were set at $\alpha = 1$; $\beta = -0.02$; $\gamma = 1$; and $\delta = 0.1$. Finally, GDP/head at starting date ranges from 1 to 125. Equation (2) is in fact a quite good representation of how Cohesion funds relate to regional GDP/head in reality.

The estimation of (1) using OLS yielded the following results:

	α	β	γ	δ
Estimated value	1.18	–0.02	0.88	–0.10
T-Stat	4.55	–8.14	3.10	–011

$R^2 = 0.44$; DW = 1.96.

These results are in fact very close to those obtained by a number of the authors cited above on real data, like for instance Ederveen et al. (2006). The use of other estimation techniques where the system of equations (1) and (2) was simultaneously estimated produced similar results (2SLS, 3SLS, FIML). This example shows how biased the results of such analysis can be and the severe limitation of such approaches for assessing the impact of Cohesion Policy.

2.3 Economic Models

Several analyses in the literature use of macroeconomic models or computable general equilibrium models for analysing the impact of Cohesion Policy

De la Fuente (2002) assesses the impact of EU Cohesion policy on growth and convergence in the Spanish regions using a supply oriented model estimated with regional panel data covering a period of 30 years. He finds that the contribution of the 1994–2000 Community Support Framework (CSF) to the growth of output and employment in the poorer Spanish regions is substantial. The model also shows that the growth effects of the CSF vary significantly across territories, reflecting differences in both the volume of investment and in its rate of return, which in turn positively depends on whether or not regions have reached a saturation point in terms of infrastructure.

Bradley et al. (2007) bases their analysis on a review of Structural funds impact assessment carried out using the HERMIN model. The model highlights the central role played by supply side effect of Structural funds in order to generate long-

lasting impact of the policy. The magnitude of such effects is likely to be affected by the design and/or implementation of the programs and the model suggests a sensitivity of the impact to the quality of the programs. In addition, the analysis emphasises that the real, long-term benefits of the Structural funds are more likely to be associated with the way in which each of the lagging economies responds to opportunities arising in the rest of the EU and the world rather than with the Structural funds in isolation. They also stress that structural effects are typically smaller than the demand-side effects of the Structural funds, albeit of different magnitudes from one Member State to another.

Honohan et al. (1997) conducted a model-based analysis of the impact of Cohesion funds on the Irish economy. They find that, depending on the assumptions embodied in the model, on average one percentage point of the Irish economy growth rate in the 1990s could be attributed to support provided under Cohesion funds. Using the HERMIN framework, Sosvilla-Rivero et al. (2006) find that support provided under the Structural funds raised the growth rate of Castilla la Mancha by 0.64 percentage points during the period 1988 to 1999.

Finally, Arcalean et al. (2007) develop a two-regions endogenous growth model with public investment in infrastructure and education. They calibrate the model to Portugal and find that the Structural funds can enhance growth in the lagging regions and reduce regional disparities without necessarily producing convergence, the impact being not always sufficient to counterbalance agglomeration economies benefiting the advanced urban regions.

This approach has also its own limitations. In particular, as the policy in fact aims at changing the behaviour of agents (e.g. in terms of education or research and development), the Lucas' critique applies. More specifically, its implementation should lead to a break in the parameters capturing such behaviour, therefore invalidating the counterfactual at the moment the policy is introduced. Second, cohesion policy principally targets key engines of growth such as the stocks of physical and human capital and of knowledge, variables whose level and effect on growth are extremely difficult to measure. Results then depend on a series of assumptions and parameters estimation or calibration. Models therefore provide a convenient instrument for simulating various policy options but their results should not be interpreted as estimations of the policy impact. They indicate what is the possible nature of the impact (e.g. positive or negative, growing and decreasing in time, bigger or smaller under alternative scenarios) under the assumptions included in the model.

3. Impact Assessment with Macro and CGE Models[2]

Currently, the Directorate General for Regional Policy (DG REGIO) uses the HERMIN model[3] for evaluating the impact of Cohesion Policy and simulating various policy scenarios at country level. DG REGIO also regularly relies on other models, in particular QUEST, the dynamic stochastic general equilibrium (DSGE) model developed by DG ECFIN of the European Commission (Varga and In 't Veld, 2009)[4], to cross-checked and strengthen the robustness of the results.

Any assessment of macro-economic impact starts with the actual spending. For countries that joined the European Union in 2004, most of the benefits from Cohesion Policy occurred afterwards, i.e. in the second half of the 2000–2006 programming period[5]. For this period Spain, Portugal, Greece, Ireland and the regions in East Germany and Southern Italy (Mezzogiorno) were the key recipients.

In the 2007–2013 programming period, the situation looks very different. The Member States that joined in 2004 and 2007 are now fully integrated into the framework of Cohesion Policy. The EU-12 now account for just over half of Cohesion Policy expenditure, with much of the rest going to Portugal, Spain, Greece and the macro-regions of Eastern Germany and the Mezzogiorno.

When simulating the impact of Cohesion Policy, one needs to differentiate between the short-term where demand-side effects are likely to dominate and the long-term where supply-side effects will dominate. The demand-side arises during the implementation period while the operational programmes are being implemented. Projects (e.g. road construction, training schemes) boost output and employment (e.g. construction workers, trainers), which creates additional demand through a Keynesian multiplier mechanism.

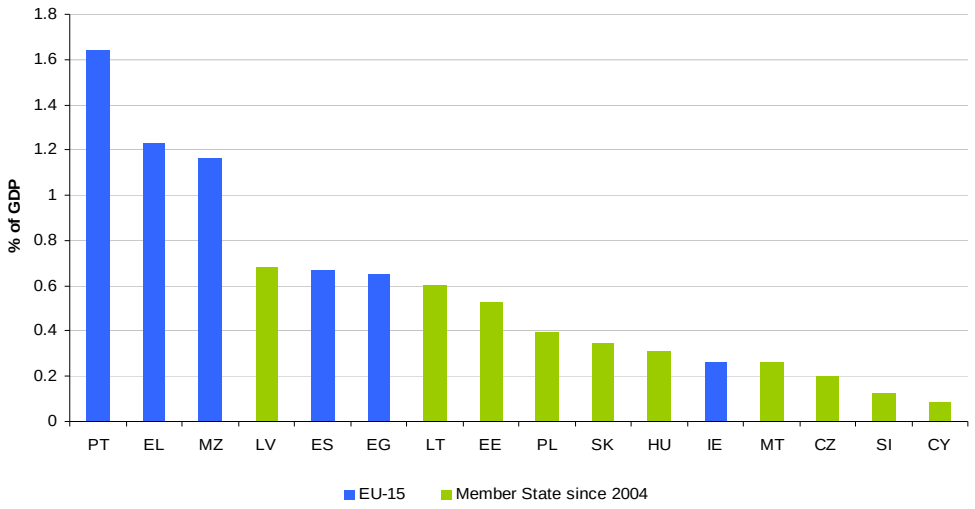
[2] Most of the results presented in this section are borrowed from the 5th Cohesion Report (European Commission, 2010).

[3] The HERMIN model has a long history, going back to the late 1980s in Ireland, when it was first applied to Cohesion Policy analysis. It was developed under the auspices of John Bradley and Gerhard Untiedt. See Bradley and Untiedt (2007) for details about the model.

[4] Details about the model and results of the simulations can be found in Varga and In 't Veld (2010, 2011).

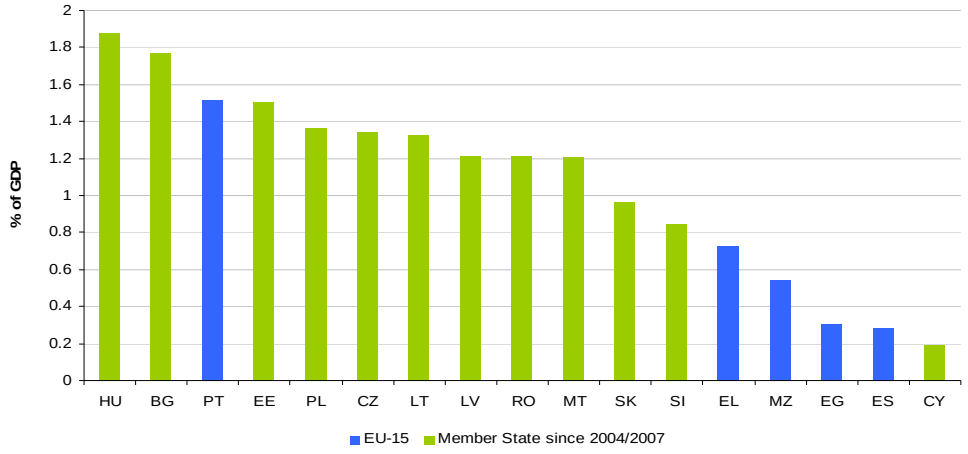
[5] Note that regulations allow Member States to use Cohesion funding up to three years after the end of the programming period. This is the so-called n+3 rule. For the programming period 2000–2006, the implementation of programmes thus extends to 2009.

Chart 2: Average Share of Cohesion Policy Expenditure as % of GDP, 2000–2006



Source: European Commission.

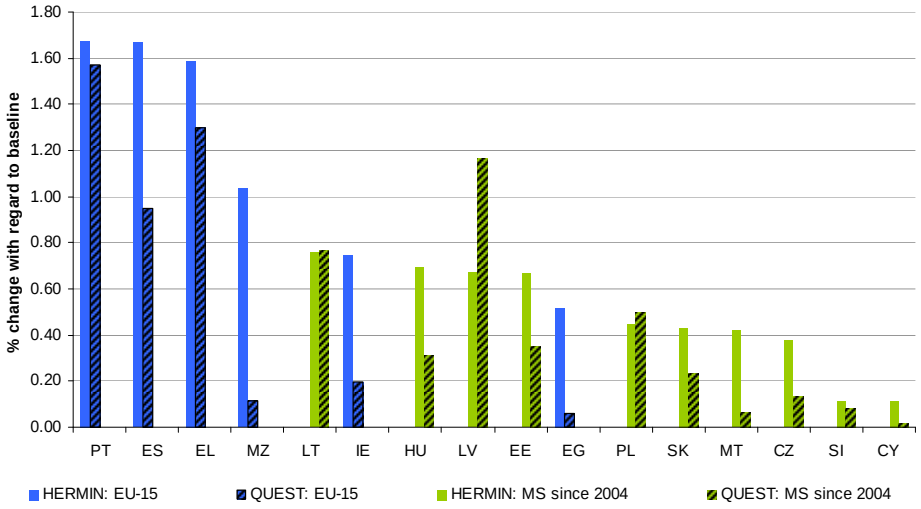
Chart 3: Average Share of Cohesion Policy Expenditure as % of GDP, 2007–2013



Source: European Commission.

The demand-side effects can mostly be seen during the implementation period, especially in the HERMIN model which has a strong focus on demand and multiplier effects. According to HERMIN, Cohesion Policy increased the level of GDP by 0.74% per annum on average in the main beneficiary Member States[6] over the course of the spending period. Simulations with QUEST, which has a stronger crowding out mechanisms, suggest more modest impact in the short term with an average of 0.49% per annum.

Chart 4: Average Annual Impact on GDP, 2000–2009

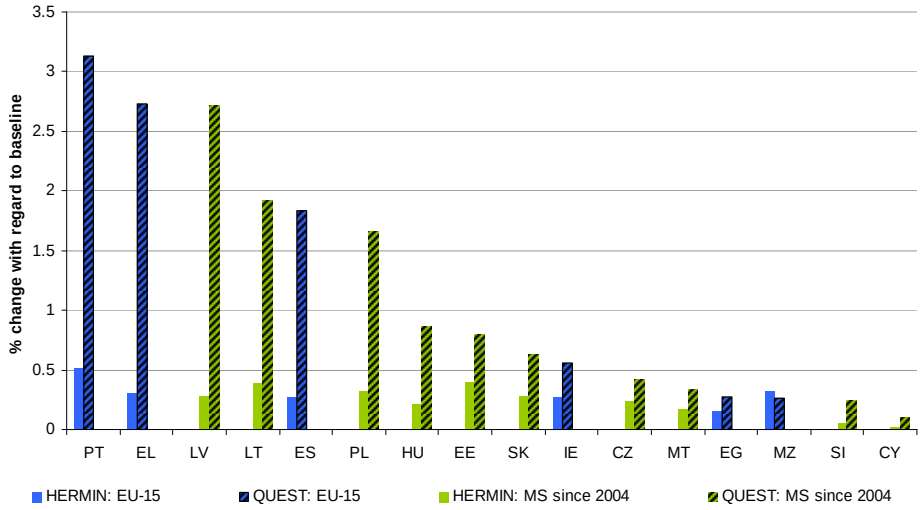


Source: European Commission.

In the long term, the impact of Cohesion Policy builds with the materialisation of the supply-sides effects of the policy. In general, both models highlight the fact that the gains from Cohesion spending continue years after cohesion programmes are terminated. This process is illustrated by the following figure which shows the impact in 2014, being systematically higher than the yearly average impact during the implementation period. Note that this time, QUEST, with its stronger emphasis on endogenous growth fuelled by investments in human capital and R&D, estimates a higher long-term impact than HERMIN.

[6] Main beneficiaries are Greece, Ireland, Spain and Portugal, Mezzogiorno, East German Landers and EU-12, except Bulgaria and Romania for which lack of data prevented to develop a model.

Chart 5: Impact on GDP, 2014



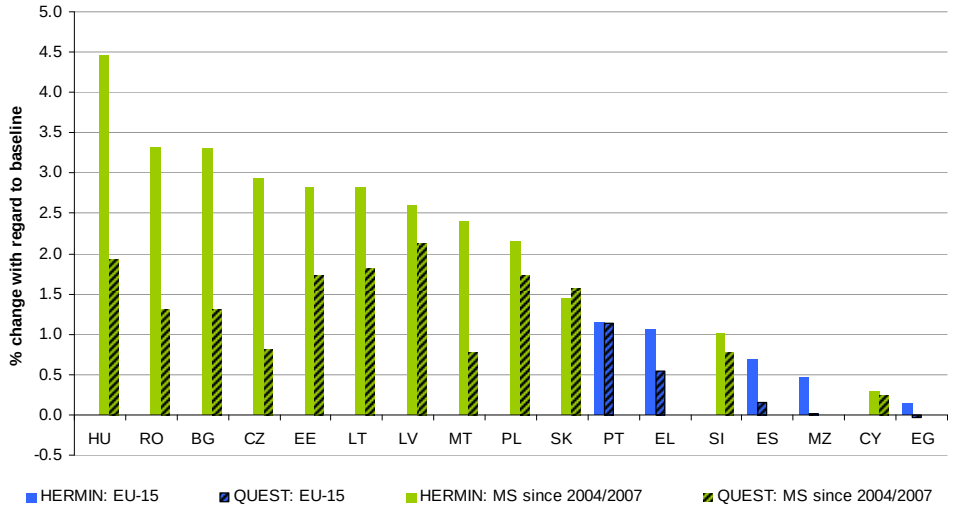
Source: European Commission.

The main conclusion is that the policy leads to significant benefits in the regions supported. However, part of these benefits takes time to materialise. In particular, the supply-side effects remain after programmes have been terminated and the impact can continue growing many years after, reflecting the fact that a large share of the spending deeply affects the structure of the economies and fosters endogenous growth mechanisms.

Similar types of results are obtained when simulating the impact of Cohesion Policy for the 2007–2013 programming period. Again, there is a significant and persistent long run impact extending far beyond the implementation period.

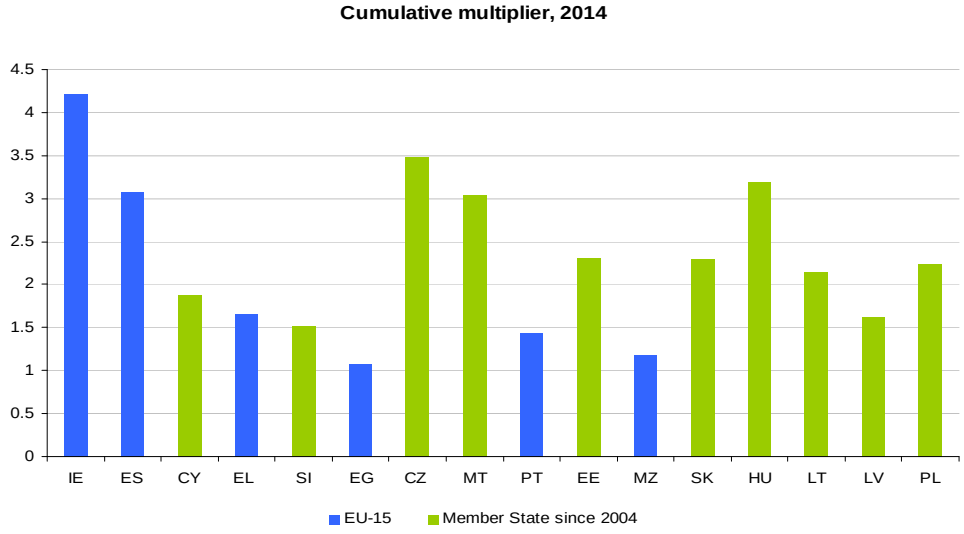
Note that, as a result of higher funding in the new Member States, the expected impact is much higher for the 2007–2013 than for the 2000–2006 period. Indeed, as one would expect, the impact in one country is closely related to the scale of funding. In order to make comparisons across countries, we compute a so-called cumulative multiplier by dividing the cumulative increase in the level of GDP by the cumulative funding injection. The following figure shows the cumulative multipliers computed with HERMIN for the 2000-2006 programming period taking into account the yearly impact up to 2014.

Chart 6: Average Annual Impact on GDP, 2007–2016



Source: European Commission.

Chart 7: Cumulative Multiplier (2000–2014)



Source: European Commission.

According to the HERMIN model, Ireland and Spain are expected to achieve the highest return on the Cohesion Policy investment by 2014. In Ireland, 1 euro of Cohesion Policy investment is expected to create more than 4 euros in the Irish GDP. In Spain, spending 1 euro is estimated to yield a return of more than 3 euros. In the group of the countries that are Member States since 2004, the returns are the highest in the Czech Republic, Hungary and Malta are expected to make the best use of the Cohesion Policy assistance with more than a threefold return on 1 euro of Cohesion Policy investment. Overall, in the main beneficiary Member States, each euro of Cohesion Policy will generate an estimated return of 2.1 euros in the countries' GDP.[7]

4. Improving the Effectiveness of Cohesion Policy

Even if Cohesion Policy seems to generate positive impact on the recipient economies, there is certainly room for improving its effectiveness. However, in a time when the governments of the Member States are struggling to keep their public finance under control, the question of the added value and the quality of public spending is more than ever of uppermost importance.

One key area where improvements could lead to substantial gains in effectiveness is the governance system of Cohesion Policy. It indeed requires a fundamental reform with a view to make it more performance-based and results-oriented. As pointed by the Barca report, there is a series of areas[8] where such reform should focus on: a concentration of the policy on fewer priorities; a stronger evaluation system; a reinforced role for the Commission; a clearer focus on performance; and a high-level strategic debate. These directions for change can be largely shared with the addition of a more decisive move toward a simpler, more transparent management system. The proposals currently discussed for the future of Cohesion Policy attempt to tackle some of them.

4.1 A More Strategic Approach

Lack of strategic approach has often led to a dispersion of resources into incoherent and unconnected interventions. The evidence collected from programmes

[7] One should not interpret a high value of the cumulative multiplier as a sign of good usage of structural and cohesion funds. Differences in the cumulative multipliers are not only explained by the choices of Member States concerning categories of investment to be financed by Cohesion funding but also by the inherent "structural" differences between the economies of the recipients.

[8] "An agenda for a reformed Cohesion policy, Independent Report" (the Barca report), April 2009, pp. *viii-ix*.

evaluation shows that s success is often observed where Cohesion Policy is included into a coherent national development policy package.

At the same time, Cohesion Policy is supposed to become a key delivery mechanism of the Europe 2020 strategy. From that point of view, Cohesion Policy has a key comparative advantage over other delivery channels as it mobilizes sub-national actors, economic and social partners, and civil society. In that, it responds to one of the key lessons we learnt from the Lisbon strategy: that policies designed far away from firms and people face problems of implementation.

The transition to a green and digital economy, the reorientation of manufacturing into high-tech sectors, the development of a knowledge economy skills and greater intra-EU labour mobility will also trigger fundamental changes. As a result, all regions will experience a mix of opportunities and adjustment needs. Cohesion Policy can support this process giving all regions the opportunity to exploit the benefits of the single market.

Europe 2020 should therefore be seen as an opportunity to reinforce the strategic content of the policy while ensuring a strong EU value added. The proposed reform therefore proposes foresee that Member States and regions should be required to formulate regional development strategies and targets which concentrate EU and national resources on a small number of themes, closely linked to the Europe 2020 priorities. Such a system would decisively orient Cohesion Policy towards results. It would oblige Member States to prioritise investment toward growth-enhancing areas; and it would ultimately improve accountability and responsibility of Member States and regions.

This system of governance could possibly be accompanied by a set of incentives and conditionality meant to encourage progress in areas directly linked to the operation of the policy, for example in the area of environment protection, support to small and medium sized firms, or innovation.

4.2 Reinforcing Territorial Cooperation

There is an increasing demand to move beyond pure cooperation and explore stronger commitments. This would imply a considerable reinforcement of the scale and a shift in the nature of territorial cooperation. Aspects to be considered in this regard include, an overall EU strategy to frame cooperation activities, providing transnational and cross-border programmes with their own budget (instead of dividing it by Member State) and increasing the exchange of experience and the support for institution building beyond the external borders of the EU.

4.3 Reducing the Administrative Burden while Maintaining Accountability

Total administrative costs (including overheads) are estimated at 3% to 4% of total eligible expenditure which is, compared to other development policies in the world, not a bad result. However, there is room for improvement. In particular, the financial management and control system emerges as a major subject of criticism.

A better balance must be found between, on the one hand, the rules and procedures required for ensuring effective and proper use of the EU budget, and on the other, reducing the administrative burden for implementing bodies and beneficiaries. The new Lisbon Treaty redefines the respective roles of the Commission and the Member States in article 317 and may provide scope to further clarify their respective responsibilities in the execution of the budget.

The reform proposes to strengthen accountability and transparency as well as introducing simpler rules and lighter procedures to address the complexity of delivery. Yet, it often observed that the problems the policy faces are not inherent to the policy itself, but to national situations and sometime to the correct application of other Community policies in national contexts. It is therefore projected to pursue the support to administrative capacity building and even reinforce it where necessary.

5. Conclusion

Today, Cohesion Policy represents more than one third of the community budget, being the second spending post after the common agricultural policy. For some Member States, the financial resources channelled by Structural and Cohesion Funds in their economies represent up to 4% of their GDP, for some the equivalent of more than 8% of public expenditure.

However, the financial and economic crisis which outburst in 2008 led to a dramatic deterioration of public finance all over Europe. In such context, the EU budget and in turn Cohesion Policy have moved in the forefront of a wide debate on the management of public expenditure. Even more than before, it is necessary to ensure that public money (i) is wisely spent; (ii) on thoroughly selected priorities supporting relevant strategies and (iii) delivers the expected results.

This paper tried to feed this debate stressing first how difficult it is to measure the impact of a policy like Cohesion Policy. Recognising the limitations inherent to all measurement approaches, it reviewed the most important results we currently have to estimate the macroeconomic impact of the policy. In particular, it focused on the simulations carried out with macroeconomic models which highlight the mechanisms through which Cohesion Policy is supposed to affect the economies of the recipient countries. These analyses converge in that they suggest a positive and

significant impact of Cohesion Policy, especially in the CESEE countries which are its main beneficiaries.

This obviously does not mean that there is no room for improving the effectiveness of the policy and the paper has presented some of the main elements included in the proposals for reforming Cohesion Policy.

The aspects on which the sections of this paper focused are of key importance for the future of the policy. First, the need to ensure acceptable value for money implies that we must be capable of gauging the impact of the policy. The first important step of recalling the weaknesses of current methods to do so must therefore be followed by another one consisting in improving existing methods or developing new ones.

Second, even if Cohesion Policy mostly finances public investments which are necessary for securing future growth and fiscal consolidation, even if without it a number of Member States would have difficulties in playing their role in reaching the objectives of Europe 2020, the current pressure on public finance in the EU request that important reforms are undertaken in attempt to improve the effectiveness of the policy.

Cohesion Policy must be credible in delivering its expected results. It is only under this condition that a consensus may emerge among the EU Member States for maintaining a strong Cohesion Policy in the future and give it the financial means it needs to fulfil its tasks.

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Funding of Public Private Partnership Projects in CESEE Markets

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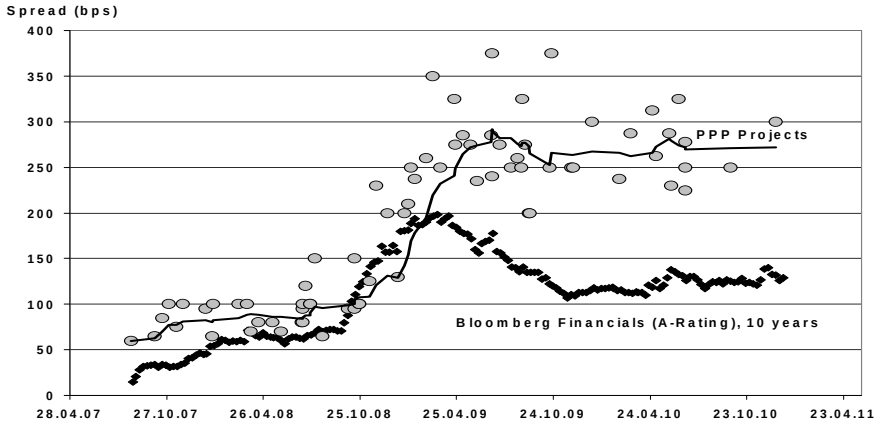
1. Financial Crisis and Funding of PPP Projects

As Public Private Partnership Projects (PPPs) require long term funding in order to match cash flow and depreciation profiles of the respective transactions, financing of large projects became very challenging when the financial crisis hit the market. Many banks faced difficulties in obtaining long term funding which banks need in order to match long-term loans for PPP projects.

Consequently a number of banks withdrew from the PPP lending altogether or focused on their home markets and reduced lending activities. Syndication markets collapsed and large PPP projects had to be funded by huge clubs of banks as opposed to a few arrangers who syndicated the transactions subsequently.

Chart 1: Spreads and Funding Costs for PPP Projects in Europe



Source: Bloomberg, Project Finance International, Infra-News.

Since the beginning of the crisis, the number of banks active in this market decreased, underwriting capacity for individual transactions dropped and loan maturities came down.

As banks were not able to obtain funding at swap rates, funding costs increased significantly and margins were adjusted upwards in line with funding costs. Chart 1 compares average funding costs for A-rated Financials based on a 10-year-maturity with margins of PPP projects closed since the start of the financial crisis in Europe.

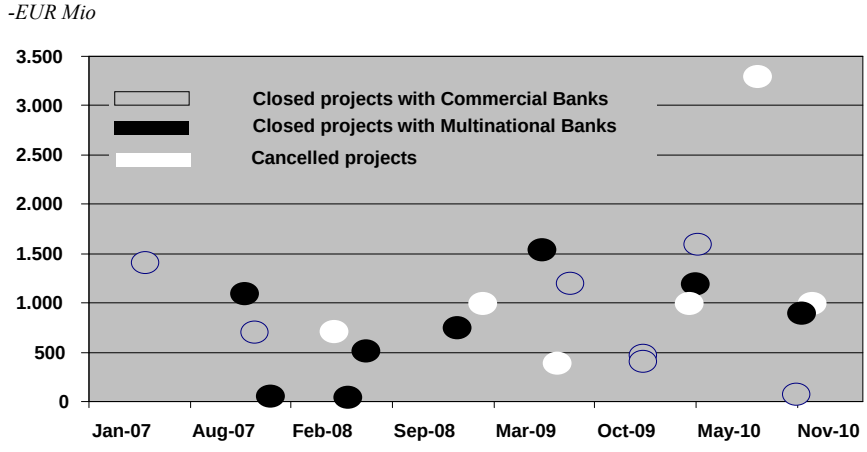
2. PPP Projects in CESEE Markets

Public Indebtedness went up in most European countries, many states reduced infrastructure investments and some planned PPP projects were put on hold.
While a number of transactions in the CESEE markets reached financial close during the financial crisis, some sizable projects were cancelled due to funding shortfall, public sector concerns or environmental challenges.

Multinational banks such as EIB and EBRD have played an important role in the financing of PPP projects in Eastern Europe during the financial crisis, as they are able to replace shortfall in commercial debt in sizable projects and provide credibility to individual transactions. Also their capability to raise local currency funding in the markets and utilize these funds for infrastructure debt makes them a valuable project partner.

With the benefit of hindsight, a few of the transactions in tender were probably to big in order to attract sufficient funding during the financial crisis and should rather be split into digestible project volumes.

Chart 2: PPP Projects in CESEE Markets 2007–2010



Source: Project Finance International, Infra-News.

3. Perspectives

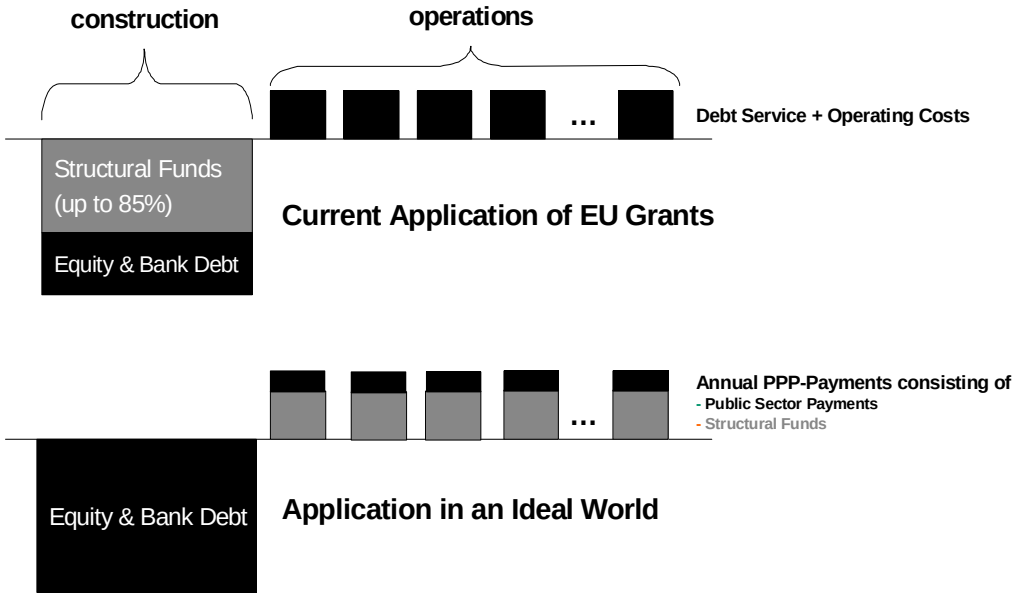
Increasing public indebtedness might on the one hand reduce future investment in public infrastructure. On the other hand, higher public debt might stimulate off-balance sheet models such as PPPs to procure public infrastructure projects.

However, as long as cash flow for individual projects derives from public sector "availability payments" as opposed to user payments (i.e. in toll road projects), long term payment capability of the public sector and therefore affordability of those projects is a key requirement.

While some countries such as Russia, Poland and the Czech Republic show healthy PPP pipelines, poor delivery of previous projects and potential mismatch of local currency project cash flow and Euro long term funding reduces appetite for some sponsors and banks.

Some relief may come from EU and EIB initiatives. Structural and Cohesion Funds from the EU can be used in PPP projects to cover part of the capital costs during the construction phase. However, the idea of a PPP project is to transfer risks from the public to the private sector. Therefore, the funding scheme can be improved by injecting the grants after completion as part of a performance-related "availability" payment during the operation phase.

Chart 3: Application of EU-Grants for PPP Projects



Source: Author's compilation.

Also the Euro 2000 Bond Initiative might provide some support for long-term funding. This initiative is set up by EU and EIB and considers the development of a bond instrument attracting long term funding from institutional investors who require long duration, such as insurance companies and pension funds. Such a bond could be adequate to complement current funding instruments for PPP projects.

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The Role of International Transfers in Public Investment in CESEE: The European Investment Bank's Perspective

Jean Vrla[1]

European Investment Bank

Jean Vrla, Head of Division at the European Investment Bank (EIB), Directorate for Operations in the European Union and Candidate Countries, highlighted in his presentation that the EIB nearly doubled its lending volumes to the CESEE EU Member States in the course of the crisis. The funded projects are focused on areas such as cohesion and convergence policy, small and medium-sized enterprises, environmental sustainability, the knowledge economy, Trans-European Networks or energy. Large-scale infrastructure projects still form the lion's share of the EIB's lending to CESEE, with the share of SME funding having considerably increased during the last two years. Mr. Vrla asserted that the demand for EIB lending in EU and pre-accession countries is expected to weaken in the period 2011–2013 as the access to alternative funding is expected to recover. While the disbursement flows to projects will remain high in the next few years due to the time lag between signature and project implementation, the EIB's 2011–2013 lending volumes are expected to return gradually to pre-crisis levels due to the need for fiscal discipline in CESEE and the uncertain future demand for large public-private partnership (PPP) projects.

[1] Only a brief summary of Jean Vrla's workshop presentation is included here as it was unfortunately not possible for Mr. Vrla to draft a full paper for these proceedings.

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