IS IT WORTH CONSIDERING NET WORTH? FISCAL POLICY FRAMEWORKS FOR CENTRAL EUROPE

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The Great Recession has showed very clearly that the Stability and Growth Pact failed to put the budgetary positions of European Union Member States on sustainable footing. Despite the recent attempt to resuscitate the SGP the paper argues that it is necessary to redesign national fiscal frameworks based on country specific circumstances. Central European countries are characterized by relatively low level of debt, chronic deficits, not sustainable pension and healthcare systems, high degree of creative accounting and lack of transparency. Moreover, their growth performance is highly dependent on capital inflows. According to the authors, in this environment shifting the focus from flow variables toward the concept of net worth might be beneficial. The balance sheet approach can increase the public awareness of unsustainable public finances and contrary to the SGP can help to bring to the forefront long-term solutions by not punishing structural reforms. Since the concept of net worth is not yet operational it can serve only as a benchmark for transparency and starting point for budgetary rules. The paper argues that multi-year nominal expenditure ceilings together with independent fiscal institutions are the most suitable frameworks for Central European countries.

1 Motivation

Even before the outbreak of the recent crisis, budgetary positions of many OECD countries were on an unsustainable path. As Kumar and Ter-Minassian (2007) show, fiscal balances of both industrial and developing countries have been negative in each of the past 30 years. Deficit persistence and rising public debt in many countries suggest that deficit bias played an important role. This problem alone would be sufficient motivation to redesign fiscal frameworks,[1] unfortunately, there are at least three other factors calling for changes. First, countries all over the world need credible exit strategy after the huge impact of the recent crisis on their budgetary positions. The deterioration was caused not only by the working of automatic stabilizers, but also counter-cyclical fiscal policy and bail-outs of the banking systems played an important role. Due to changes to the potential output (and possible its growth), the underlying budgetary position is worse than it seems at the first sight. The increase in public debt resulted also in a surge in interest expenditures. Second, unfavorable demographic changes in developed countries are imposing additional burden on budgetary positions. According to the projections of the European Commission (2009) age-related expenditures in the European Union (EU) will rise by 4.3 percentage points of GDP by 2060. Third, some argue that the requirement for greener growth is likely to slow economic growth in the next decades, creating another headwind for fiscal policy. Internalization of negative externalities from greenhouse gases will probably result in higher prices and less consumption.

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[1] Fiscal framework in this paper refers to the overall institutional set up, including fiscal rules, independent agencies, transparency and procedural rules, etc.

Central European (CE) countries are not an exception. Although their debt levels are lower and growth potential higher than in Western Europe, default risk premiums usually kick off at lower level of public debt than in developed countries (Kopits, 2004).

It is clear that the Stability and Growth Pact (SGP) fails to ensure budgetary improvements in good times (Calmfors, 2005). Moreover, one can argue that it is even harmful in some cases due to discrimination of funded schemes, increased use of creating accounting practices (Milesi-Ferretti and Moriyama, 2006)[2] or postponing market reactions to unsustainable budgetary developments. The European Commission (EC) recognizes the problems with the one-size-fits-all fiscal rules and calls for a supplementary tool, namely strengthening national fiscal frameworks (EC, 2010a). This paper attempts to define the main features of stronger national fiscal frameworks in the context of Central European countries.

After investigating the characteristics of Central European countries relevant for the choice of fiscal frameworks, we propose a general framework suitable for this type of catching-up countries. We see the decrease of the informational asymmetry between the public and policy makers as the most important step against deficit bias. In our view, broadening the scope of analysis from general government to the whole public sector can be very helpful. In this regard, calculating indicative balance sheets and public net worth can help to remove bad incentives coming from the narrow focus on the flow variables. In addition to that, we advocate for expenditure rules, independent fiscal agencies and implicit or explicit debt limits. It is very important to see these suggestions not as individual options, but rather complements, since there are important synergies between them. Our proposal is to implement these in one package, if possible in the form of fiscal responsibility acts, together with transparency requirements and procedural rules.

It is also important to bear in mind that there are no magic solutions without political will. Fortunately, the current difficulties in many periphery countries in the EU and the need for credible exit strategies created (at least *ex ante*) political will to put public finances on sustainable footing in many countries.

The paper is organized as follows. The second section provides a short overview of the possible causes of deficit bias in general and particularly in Central Europe (henceforth CE). The third section highlights the main characteristics of CE countries relevant for the choice of appropriate fiscal frameworks in order to impose commitment technologies on governments with *ex ante* willingness to consolidate. Section 4 builds a general framework based on the requirements identified in section 3. The fifth section describes the recent reform proposal in Slovakia. Section 6 offers conclusions.

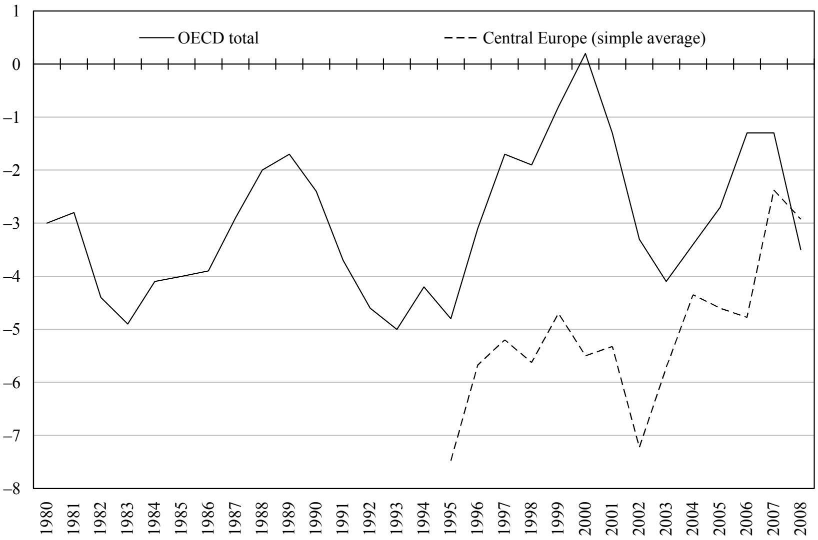
2 Deficit bias in Central Europe – theory and evidence

Kumar and Ter-Minassian (2007) and Hagemann (2010) show sustained high deficits and increasing public debt both in developed and developing countries in the last thirty years. High deficit over such long periods can be harmful not only for economic growth, but is also not compatible with optimal fiscal strategies. As Calmfors and Wren-Lewis (2011) show, although there is little agreement on an optimal debt level in the literature, tax smoothing is generally a basic characteristic of optimal policies. Figure 1 shows general government net lending in the OECD and CE.

[2] Easterly (1999) shows a tendency to run down government assets instead of structural consolidation in a number of developing countries with IMF programs.

Figure 1

General Government Net Lending
(percent of GDP)



Source: OECD.

Deficits have lead to an increase in gross public debt in the OECD to 100.7 percentage points of GDP in 2011 from 68.7 per cent in 1993 (OECD, 2010). Gross debt in Central Europe is approaching 60 per cent of GDP (simple average) compared to 45 per cent ten years ago. It is well accepted fact in the literature (see for example Debrun *et al.*, 2009), that these sustained deficits and increasing debt levels are to some extent due to the so called deficit bias.

One can find several sources of deficit bias in the literature. Based on Cukierman and Meltzer (1986), Drazen (2004), Debrun *et al.*, (2009) and Calmfors and Wren-Lewis (2011) we can mention at least six possible causes: (i) informational problems; (ii) impatience; (iii) myopia; (iv) common-pool theory; (v) time inconsistency and (vi) electoral competition. We claim that informational problems, myopia and the common-pool theory are the most relevant explanatory factors in Central Europe. In our view the source of the deficit bias is important when designing fiscal policy frameworks.

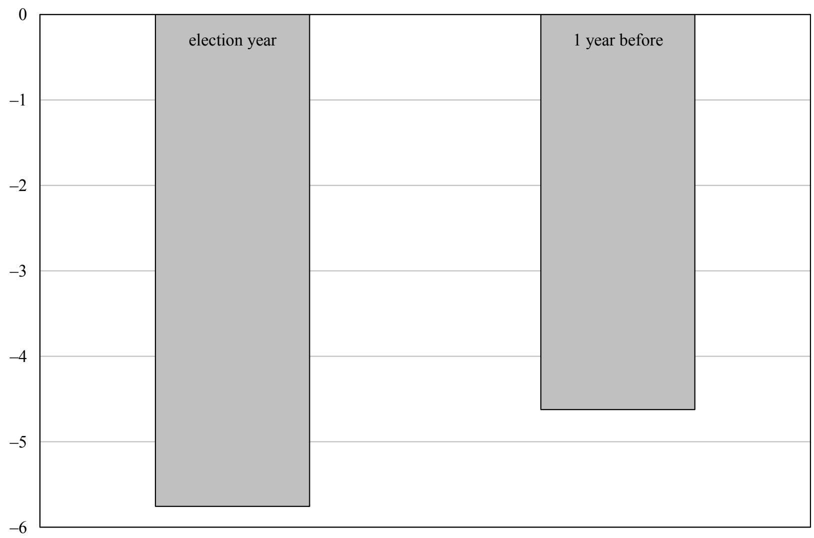
Deficit bias in principle should not be a long-term problem if financial markets would react to inadequate fiscal policy early enough. However as the literature shows markets seems to penalize unsustainable fiscal policies in a non-linear fashion and only at a later stage. Hauner and Kumar (2006) and Balassone, Franco and Zotteri (2006) show that interest rates and credit ratings usually impose only small costs on governments. In monetary unions with some degree of political integration such as the euro area, the delays can be much longer due to the little credibility of no bail-out clauses.

Another line of defense against 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.

Despite the prevalence of big deficits in Central Europe, according to opinion polls voters and companies usually care about future generations and increasing public debt. According to KPMG (2010), 75 per cent of managers of Czech and Slovak firms were very or extremely concerned about public debt levels – the highest number among the 26 countries polled. Poland ranked 11th, while Hungary only 18th. The high sensitivity to public debt is surprising, because at the time of the survey, gross debt levels in the Czech Republic and Slovakia were below 40 per cent of GDP. Polls among citizens show very similar picture. Around 90 per cent of citizens considers public debt as a major threat in Hungary and Czech Republic (Nezopont Intezet, 2011 and Ipsos Tambor, 2010). In Poland less than 50 per cent of voters were in favor of increasing the constitutional debt limit (GfK Polonia, 2010). In Slovakia rising public debt was one of the main topics before the 2010 parliamentary elections. It is also interesting to note that despite the short-term negative budgetary impact, three out of the four CE countries introduced fully-funded mandatory pension pillars and other structural reforms with long-term positive impact on public accounts. Voters in Central Europe seems to be more willing to support deep structural changes than in more matured democracies.

Figure 2

Cyclically-adjusted Balances (CABs) in Central Europe
(percent of GDP)



Source: MFSR, NBP, CNB, MNB, CAB – average of the four countries between 2000 and 2007 (9 occasions from which 7 showed higher deficits in election years).

At the same time, transparency of budgets in Central Europe is still – despite many improvements in recent years – below Western European standards. According to the International Budget Partnership (2010), Poland, Czech Republic and Slovakia scored around 60 points on a 100 points scale of budget transparency compared to UK, France and Sweden scoring above 80 points. P. Kiss (2007b) and Horvath and Odor (2009) identify relatively ample room for maneuver for creative accounting in Hungary and Slovakia.[3] This room was extensively used in Hungary in the last several years (P. Kiss, 2011).

The sensitivity of public to high debt and the low transparency of budgets in Central Europe suggest that informational asymmetry has been an important source of 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 deficit bias in Central Europe is myopia. As Figure 2 illustrates structural deficits in election years were on average higher than one year prior elections. Moreover, there were significant upward revisions to deficit because of reclassification of PPP projects (for example highway construction in Hungary, P. Kiss, 2007b) and financial transactions into capital transfers (Slovakia in 2009). It clearly shows that governments often care only about the short-term consequences of their action. Their interest for future is lessened due to the uncertainty over next elections.

The third significant cause of deficit bias in CE is the common-pool theory. Decision makers

[3] For the discussion of creating account practices in OECD see Koen and van den Noord (2005).

Table 1

Pro-cyclicality of Fiscal Policy in Central Europe

	2005	2006	2007	2008	2009	2010
Czech Republic						
Output gap	**0.0**	**2.8**	5.5	**4.5**	–2.7	**–1.6**
Consolidation effort	**–0.8**	**–1.1**	1.3	**–2.0**	–1.0	**0.6**
Hungary						
Output gap	**3.2**	**4.2**	2.4	1.8	**–4.7**	**–5.5**
Consolidation effort	**–1.9**	**–0.5**	3.1	2.4	**1.7**	**0.5**
Poland						
Output gap	0.1	1.6	3.0	**2.7**	–0.5	–1.3
Consolidation effort	0.9	0.4	0.9	**–1.5**	–2.4	0.0
Slovakia						
Output gap	**–1.6**	–1.2	**1.1**	2.2	–4.9	–2.5
Consolidation effort	**0.7**	–0.3	**–0.5**	0.3	–4.2	–0.5

Source: MFSR, NBP, CNB, MNB; in bold are cases of pro-cyclical policies; consolidation effort is the change in the cyclically-adjusted primary balances net of one-off effects.

under the pressure of various interest groups are unable to internalize the overall costs of higher debt. Tornell and Lane (1999) suggest that this incentive is stronger in good times and leads to substantial pro-cyclicality of policy. Years 2006-08 were especially good for CE countries. According to the estimates of the European Commission (2010b) 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 (Table 1).

The Stability and Growth Pact was unable to impose significant costs on policy makers pursuing pro-cyclical fiscal policy in good times and failed to eliminate the deficit bias. This calls for tailor-made solutions at the national level. European Commission (2011) also encourages national governments to supplement the Pact by strengthening national fiscal frameworks. One of the six legislative proposals is a draft Council Directive on requirement for budgetary frameworks of the Member States. The next section highlights the main requirements for such a framework in Central Europe.

3 Fiscal policy environment in Central Europe[4]

Policy makers in Central Europe face slightly different environment for fiscal policy than their counterparts in more developed countries. This section identifies the main challenges to be taken into account when designing frameworks for fiscal policy in this region. We do not want to

[4] We do not want to state that Central Europe is a perfectly homogenous region, however in our view it is possible to distinguish this region from the other EU Member States based on some economic characteristics.

Table 2

Business Cycle Volatility in Central Europe

	Volatility (s.d.)	Volatility of Growth Rate *(quarterly)*	Autocorrelation	Correlation with GER
Czech Republic	1.47	1%	0.78	0.86
Hungary	1.50	1%	0.83	0.78
Poland	2.69	2%	0.73	0.52
Slovakia	1.40	1%	0.75	0.68
Germany	1.29	0.6%	0.91	1.00

Source: author, based on seasonally-adjusted and HP-filtered quarterly data (1995-2010) with parameter 1600.

state, that the features identified are not present in developed countries; however we believe that their importance is higher for catching-up economies.

We have identified 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. We analyze each of them in turn and draw lessons for designing fiscal policy frameworks in CE countries.

3.1 Higher macroeconomic volatility

It is well documented fact in the literature that emerging market business cycles are more volatile than their counterparts in developed economies. For example as Aguiar and Gopinath (2007) show, output volatility in emerging markets is twice as high as in developed markets, current accounts are strongly counter-cyclical and consumption volatility exceeds income volatility. They argue that these characteristics can be explained mainly by shocks to trend growth rather than transitory fluctuations around a stable trend. They conclude that in emerging markets "cycle is the trend." García-Cicco, Pancrazi and Uribe (2010) challenge this explanation and using longer time series show that standard RBC models are not capable of explaining business cycle facts in Mexico and Argentina. According to them, international financial frictions could be the missing element. Balassone and Kumar (2007) also claim that developing countries are facing much more volatile macroeconomic environment and uncertain access to international capital markets. Table 2 shows the estimated business cycle volatility in Central Europe using Hodrick-Prescott filter compared to that of Germany. Apart from regime switches and sensitivity to international capital flows (described below), underdevelopment of financial markets (liquidity constraints), weaker automatic stabilizers, higher share of industry in value added (and higher concentration of exports) or higher risk-aversion might explain the excess volatility.

Fiscal frameworks in CE thus should take into account that it is much harder to assess in real time the cyclical position of the economy and the structural deficit than in developed countries.

3.2 Regime changes

Regime switches are endogenous factors contributing to higher macroeconomic volatility. Frequent changes in political cycles are not unknown also for developed countries (Italy); however political and economic cycles are more intertwined in Central Europe 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. De Ferranti *et al.* (2000) estimates that 15 per cent of excess volatility in Latin American countries has been due to volatility in fiscal policy.

In Central Europe especially large structural breaks are visible mainly in Slovakia and Poland. Their business cycles are the least correlated with that of Germany. 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. The first is related to the expansionary fiscal policy from 1996 till 1998, which increased substantially the current account deficit. The second came after the elections in 1998, when the government had to approve a relatively harsh austerity package to cure the chronic twin-deficit problem. In 2003-05 (again after the elections) a package of very ambitious structural reforms were put in place (see Miklos, 2008), which resulted in a surge in potential output. The fourth break is the result of the financial crisis. Similar breaks are visible in the remaining three countries.

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 strong normative elements are not recommended for fiscal frameworks in Central Europe.

3.3 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. Majority of the post communist countries are undercapitalized. Without foreign direct investment the catching-up process would be much longer. On the other hand, business cycles would be probable less volatile. In our 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 (see Banerjee *et al.*, 2010) and underestimating the signals from the widening current account deficits, which can lead to substantial problems if international capital flows stop.[5] As Giavazzi and Spaventa (2010) argue, an important mistake was made in the downgrading of the problem of current account deficits in the euro area: although monetary union (and partially currency board arrangements) eliminates the threat of currency devaluation, high current account deficits can cause problems if the proceeds of external borrowing are not used for productive purposes. Using external resources to finance investments in non-tradables or domestic consumption can lead to problems in meeting the intertemporal budget constraint. Currently only Slovakia is a member of the euro area out of the four Central European countries. Although it is important in all 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. Pro-cyclical behavior of fiscal policy is of course a general problem highlighted by Balassone and Kumar (2007), but more severe in “good times” and for catching-up countries. According to their estimates for developing countries, procyclical discretionary fiscal

[5] See Kaminsky, Reinhart and Vegh (2004) for evidence of pro-cyclicality of international capital flows.

Table 3

Tax Systems in Central Europe
(percent of GDP)

Country	Total Taxes	Income Taxes	Social Security
Czech Republic	36.2	8.6	16.2
Hungary	40.5	10.6	13.8
Poland	34.3	8.6	11.4
Slovakia	29.3	6.4	12.0
Germany	40.6	11.3	15.3
EU27	40.5	13.1	12.8

Source: Eurostat.

policy in good times appears to be stronger than the impact of automatic stabilizers. Table 1 illustrates this problem for Central European countries.

Therefore fiscal frameworks should allow automatic stabilizers to fully operate as a minimum requirement. Since automatic stabilizers in Central Europe 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. Independent fiscal councils can play this role.

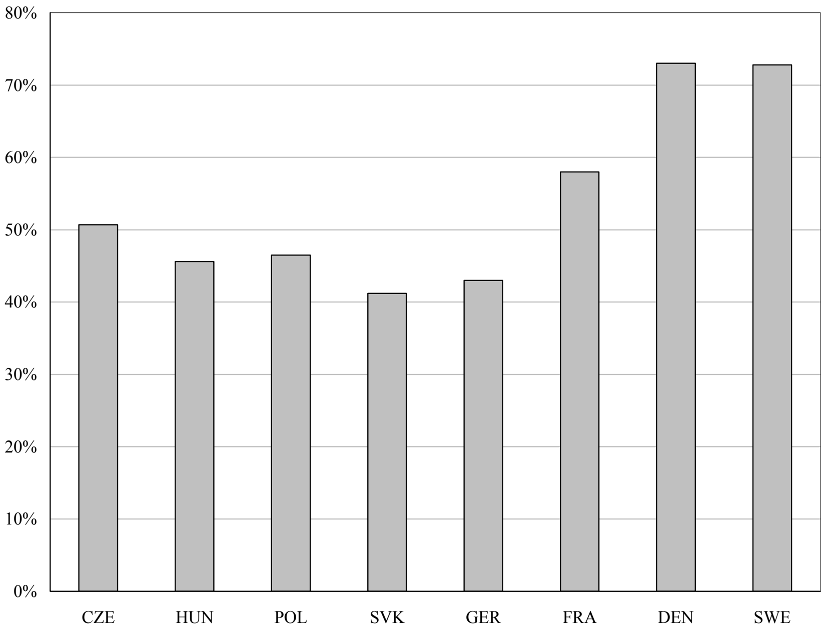
3.4 *Lower tax potential*

Tax burden in Central Europe is much lower than in the western part of Europe (Table 3). 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 matured economies. Therefore 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. For example in Hungary, Poland and Slovakia the vast majority of self-employed reports net earnings below or at the minimum wage. That is one of the reasons why the macroeconomic effectiveness of the labor taxation is so low (Figure 3).

In the long run it is expected that 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 small and big role of the state in the economy.

Figure 3

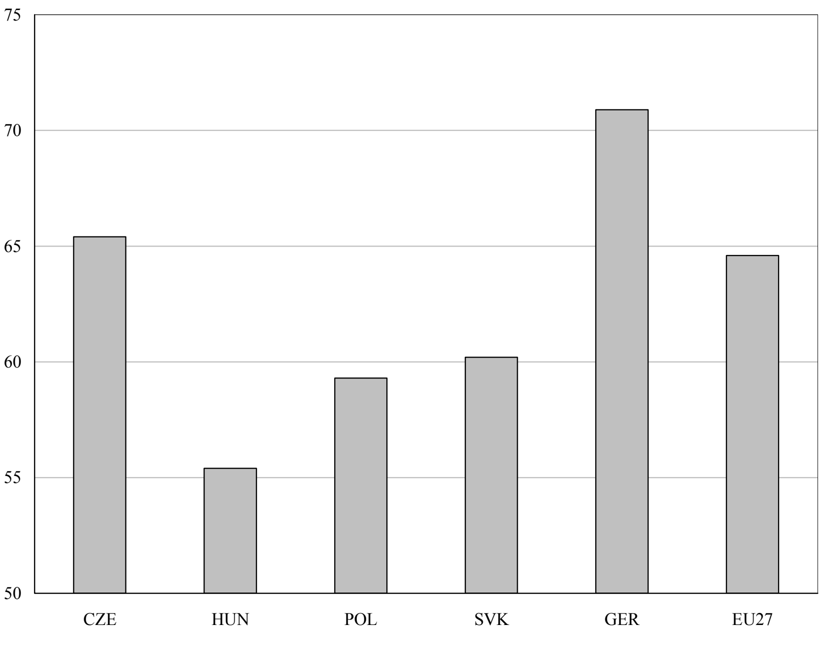
Effective Labor Taxation in 2007



Source: Filko *et al.* (2010), calculated as ratio of actual labor tax revenues (as a percent of their macroeconomic tax base) to effective tax wedge.

Figure 4

Employment Rates in Central Europe in 2009
(percent of the labor force)



Source: Eurostat.

3.5 *Expenditure pressures*

Expenditure pressures are also present in Central Europe 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 former 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. Employment rate in Central Europe is therefore far lower than for example in Germany (Figure 4).

State companies represent a special case for expenditure pressures. In many cases 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 (P. Kiss, 2011).

Aging of the population is another potential source for pressure. While it is not as immediate problem

Table 4

Old-age Dependency Ratio

	2010	2025	2050	2060	Change 2060-10
CZE	21.83	33.75	54.81	61.4	39.57
HUN	24.22	33.26	50.83	57.64	33.42
POL	18.98	32.86	55.69	68.97	49.99
SVK	16.95	28.5	55.46	68.49	51.54
GER	31.17	39.53	56.43	59.08	27.91
FRA	25.81	35.85	44.68	45.2	16.39
EU27	25.9	34.23	50.42	53.47	27.57

Source: EUROPOP2008.

for new member states as for Western Europe, its impact will be substantial in the long run (Table 4). 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 (EC, 2009).[6]

The good news is that three out of the four Central European countries implemented fully-funded pension pillars to distribute the burden of ageing on next generations more evenly. However recent developments show that since SGP creates distortions toward these kinds of schemes, Hungary and to some extent Poland reduced of the importance of their fully-funded pillars.[7] This is unfortunate if the only objective is to cut the deficit in the short-run.

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

3.6 Corruption and law enforcement

Central European countries rank high as far as corruption is concerned and low in terms of budget transparency (Table 5). As P. Kiss (2007 and 2011) shows the room for creative accounting and off-budgetary operations is significant in Hungary. The situation is not much better in the remaining three countries. One of the major sources of 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.

[6] Hungary and Poland were classified among "medium" risk countries.

[7] Hungary de facto eliminated the second pillar (only 3% of constributors stayed in the mixed system).

Table 5

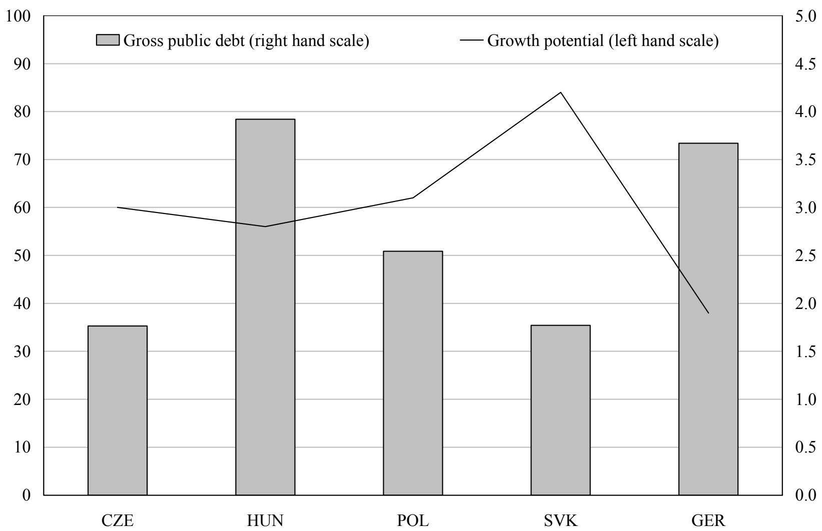
Corruption and Transparency Indices

	CPI 2010	OBI 2010
CZE	4.6	62
HUN	4.7	NA
POL	5.3	64
SVK	4.3	57
GER	7.9	68
FRA	6.8	87

Source: Transparency International – higher score = lower corruption, www.openbudgetindex.org – higher score = more transparency.

Figure 5

Gross Public Debt in 2009 and Growth Potential in 2015



Source: Eurostat, Sustainability Report 2009.

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

3.7 *Low debt levels*[8] *and higher growth potential*[9]

Compared to Western Europe, gross debt levels in Central Europe are lower and potential output estimates higher (Figure 5). This means that Central Europe 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 case of developed economies. The prudent debt level is therefore arguably lower for the new Member States. It would be impossible to maintain ratios above 100 per cent of GDP, especially with aging population.

8 With the exception of Hungary.

9 The expected higher growth based on conditional convergence is of course not guaranteed (see for example Greece). It depends also on the choice of economic policies.

Table 6

Requirements for Good Fiscal Framework in Central Europe

CEE Characteristics	Implications for Fiscal Frameworks
Macroeconomic volatility	Operational target not on structural deficit
Regime changes, policy reversals	Allow for different value judgments, no strong 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

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

4 Designing fiscal frameworks in Central Europe

Today Central European countries operate under the SGP and national fiscal frameworks (Appendix 1). If we look at the fiscal performance of these countries from 2004, it is clear that the current frameworks in place are not sufficient to eliminate deficit bias and place public accounts on a sustainable footing. As Horvath and Odor (2009) show the current environment creates a lot of bad incentives for policy makers (Table 7 and Appendix 2 for more details). The most promising reform to cure these ills was carried out in Hungary, however the initial set-up was not politically sustainable, which illustrates that political consensus is the top priority in every reform proposal.

Many of these bad incentives are 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 budgetary indicators. The proposal of the KESZT advisory body in Hungary (2010) follows this path. Their proposal is to calculate a cash-based budgetary measure of the financial requirement including adjustments concerning: the financial need of public enterprises, PPP projects, overdue bills, big one-off revenues and guarantees. The second option is to broaden the focus of the debate on public finances systematically by calculating indicative intertemporal public balance sheets. In this paper we argue that the concept of net worth in a broad sense could play an important role in this regard.

Analysis of companies and private entities is concentrated on the: (1) balance sheet, (2) profit and loss account and (3) cash-flow. We understand that it is impossible to draw close parallels between public and private entities; however from an analytical perspective missing public sector balance sheet could create a distortive picture of the public sector and can hide important risks.

Table 7

Bad Incentives in Current Fiscal Frameworks

Bad Incentives	Coming from
Reform postponements or reversals	Ignoring implicit liabilities
Bias toward PPPs	Ignoring implicit liabilities
Sale of assets to decrease debt or deficit	Ignoring changes in assets
Underfinancing maintanence	Missing depreciation
Underfinancing state companies, healthcare providers	Narrow focus on general government
Depletion of natural resources and ignoring environmental impacts	Ignoring changes in assets
Risk taking in legal conflicts	Ignoring contingent liabilities

Source: Horvath and Ódor (2009).

A balance sheet approach (and more focus on the intertemporal budget constraint) has been recommended among others by Buiter (1985 and 1993), Blanchard (1990) and more recently Milesi-Ferretti and Moriyama (2006). As Traa and Carare (2007) argue, studying the accumulated stocks of assets and liabilities of a country and mismatches among them can be a useful supplemental guide to uncover distress. In recent years, the IMF has incorporated analysis of stock variables in its monitoring processes (see for example Allen *et al.*, 2002 and 2007). The OECD definition of creative account practices also relies on a concept of net worth (see for example Koen and van den Noord, 2005).

Our proposal to base fiscal frameworks in CE on the concept of net worth does not mean, that we advocate for an operational target for net worth. Due to valuation and data problems it would be highly problematic. However, good approximations for the *changes* in net worth are available. And these changes should feed through the operational framework. One example of conceptual intertemporal public sector balance sheet is in Table 8.

Estimating the changes in net worth and sensitivity analysis might help on the one hand to remove bad incentives (Annex 2) and on the other hand can serve as better source of information for the public about the effects of fiscal policy. Evaluating fiscal policy based on the balance sheet approach is just a starting point. The next step is to decide over rules and institutions.

Requirements for fiscal frameworks in Central Europe presented in Table 6 are sometimes in conflict; therefore it is not straightforward to design appropriate frameworks. However if we consider the key sources of 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 (as shown in Annex 2). Therefore rules for transparency and reporting requirement for off-budgetary items can be very useful. Even if a country is formally not calculating net worth, improved reporting requirements can help to contain bad incentives. Adoption of fiscal responsibility acts (FRAs) might be a very useful tool to address these information gaps (see Corbacho and Schwartz, 2007, for review). It can help to broaden the public debate.

Table 8

Balance Sheet of the Public Sector

ASSETS	LIABILITIES
A1 Buildings, lands, etc.	L1 Explicit debt
A2 Infrastructure	L2 Net implicit liabilities
A3 Net capital stock	L3 Contingent liabilities
A4 Financial assets	L4 Other liabilities
A5 Net worth of the central bank	
A6 Net worth of public enterprises	*Net Worth*
A7 Natural reserves	
A8 Ecological wealth	
A9 Other assets	

The more complicated issue is the question of fiscal rules versus independent fiscal institutions. As Horvath and Ódor (2009) argue, 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. P. Kiss (2007b) reached similar conclusion. His reform proposal for Hungary included three basic pillars (expenditure ceilings, golden rule for municipalities and an independent fiscal council) and three additional constraints.

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. – operational target for the structural budget balance would be highly problematic. It would be disputable whether the government has fulfilled its goals or not. Focusing on headline budget balances would be equally wrong: due to high business cycle volatility, it would create significantly pro-cyclical fiscal policy. The remaining options are expenditure limits and debt ceilings. Operational target for the debt level is very transparent, but it also incorporates pro-cyclical bias. So the most appropriate operational framework in our view is employing medium-term expenditure ceilings. If these 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 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. Another issue is the inclusion or exclusion of mandatory items. We argue that from a medium-term perspective, mandatory items should be included. Otherwise there is a built-in bias against the most needed reforms, for example in the pension systems.

How to derive expenditure ceilings? The easiest possibility is to introduce some fixed nominal growth rate at least three years in advance. The second possibility isto derive them from some measure of sustainability. Some countries employ cyclically-adjusted balances (Sweden, Finland), however target for real debt could be another example. All these calculations should be based on cautious macroeconomic assumptions. The difficulty to calculate cyclical positions pops up once again in the derivation of ceilings. However the question here is not whether the government has sticked to its rules or not, but rather to find some prudent rate of economic growth *ex ante*. Using market consensus or forecasts of independent institutions can help to mitigate this problem. It would be useful to include an explicit reserve item (0.5-1.0 per cent of GDP) to absorb unexpected shocks.

The tougher 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.[10] 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 Ageing Working Group. 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 Central Europe are more often than not the result of the very different view of political parties on the role of the state in the economy. As Kornai (2010) argues, defining the state role is a political decision, which rests on value judgments. According to him, independent fiscal institutions should keep far away from such decisions. He sees the roles for independent fiscal councils in three broad areas: (1) analysis of effects of political decisions, (2) checking for consistency and (3) transparency. Checking for consistency means in the words of Kornai: "spending heavily and levying high taxes is perfectly legitimate policy…an independent fiscal advisory body should not argue either for or against it… Its role is to keep an eagle eye on whether the big taxes are sufficient to cover the big spending". Similarly, independent institutions should not argue for or against cutting taxes, however they should look carefully at whether the cut in taxes is accompanied by adequate cut in expenditures. One can therefore rephrase the "checking consistency" into checking sustainability. These requirements suggest strictly positive role for such independent fiscal councils in Central Europe. Of course there is no one-size-fits-all recipe; the new institution should fit into the existing framework for every country.

Is there a case for macroeconomic forecasts in the mandate of independent fiscal agencies? In countries where the track record of government projections is not very good probably yes. However we see clear disadvantages. As Kay (2010) notes, the underlying unreliability of economic forecasts can on the one-hand reduce the credibility of such bodies and on the other hand can redirect resources from more important activities of the council. Moreover, the value added of independent councils in macroeconomic forecasting is very limited. Basically, one can use consensus forecasts of private forecasters or international institutions to evaluate the government projections (for example this is the case in Slovakia).

5 Institutional reform proposal in Slovakia

To illustrate a possible reform of fiscal framework in Central Europe, we highlight the main features of the current proposal in Slovakia.[11] This reform proposal tries to integrate in one framework the requirements mentioned above and to maximize the possible synergies between the

[10] Excluding one-offs, such as valuations.

[11] The current government included all basic building blocks of this proposal in its manifesto.

basic building blocks. The plan is to adopt a Fiscal Responsibility Act, which would incorporate the features shown in Scheme 1. According to the proposal, the most important objective of fiscal policy will be long-term sustainability (*i.e.*, meeting the intertemporal budget constraint).

5.1 *Net worth*

The whole framework rests on a concept of net worth. It is important to note, that the balance sheet approach is not an operational concept, but rather (1) a benchmark for transparency and (2) starting point for sustainability analysis. Annex 3 illustrates the main differences between our definition of net worth and that of Buiter (1993).

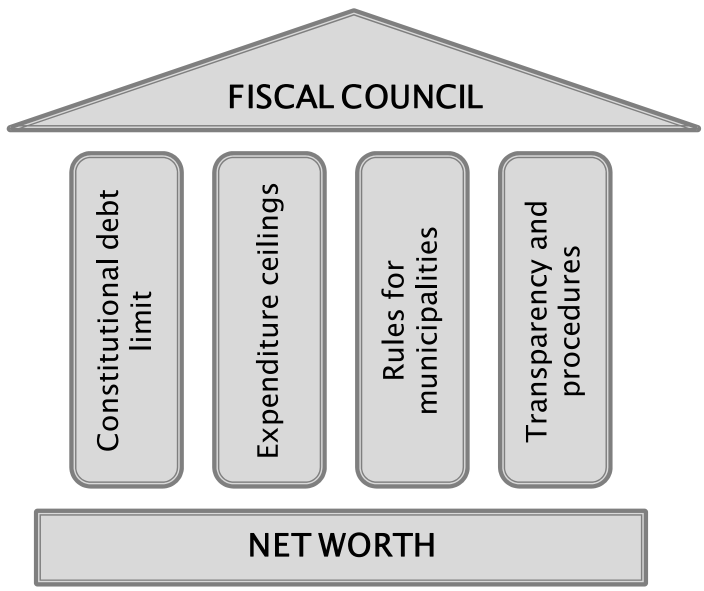
5.2 *Expenditure ceilings*

There are two types of fiscal rules in the proposal. The main operational targets are medium-term (3-year) rolling expenditure ceilings in nominal terms. The definition of ceilings is relatively broad: consolidated general government expenditures minus expenditures of municipalities plus tax expenditures. The following items are also excluded: interest expenditures, spending European Funds and cyclical items. Of course the government can break down the overall limit into partial limits.

The interesting question is how to derive the overall expenditure ceilings? Since the main objective of fiscal policy in the proposal is long-term sustainability, the starting point should be some measure of fiscal gap. The European Commission uses the well-known S2 indicator (for methodology see EC, 2009). The Slovak proposal defines a new indicator GAP, which is similar to the S2 indicator, however it includes also non-age-related implicit liabilities and financial wealth of states companies and the central bank.[12] Annex 4 shows the main differences between the conventional general government balances and changes in the net worth and also highlights which of them affect the expenditure ceilings.

Scheme 1

Proposed Reform of Fiscal Institutions in Slovakia



[12] Cyclical position and prudent growth rates are estimated by the Tax Forecasting Committe, currently in place.

Table 9

Political costs associated with the debt limit
(penalties are cumulative)

Level of Gross Debt	Penalty
45-48%	Open letter of the Minister of Finance to the Parliament
48-50%	Government consolidation package to the Parliament
	Wage freeze for MPs
50-52%	5% savings in the actual budget
	No reserves can be used
	No expenditure growth in the next budget
	No expenditure growth for municipalities
52-55%	Balanced budget for next year (also municipalities)
	No nominal growth of public wages, pensions and social benefits
55%	Non-confidence voting against the government
57%	Resignation of the government

At the beginning of the election period, every government indicates, how much of this GAP would like to erase and by what means: budgetary measures or structural reforms. Both ways have equal implications for the calculation of the ceiling by the fiscal council. Ceilings are updated every year based on adopted structural and/or tax reforms and reduced if there was overspending in the previous year or if some of the revenue or expenditure items were not met. It is important to note that expenditures ceilings are associated only with reputational costs.

5.3 Constitutional debt limit

Expenditure ceilings with reputational penalties will of course not eliminate all kinds of non-responsible fiscal policies. Unexpected large shocks can also cause substantial fiscal deficits. In these cases abandoning the whole fiscal framework would be tempting for policy makers (see for example UK). Therefore it could be helpful, if second line of defense – a kind of emergency break – would exist. Constitutional debt limit in Slovakia would serve exactly this purpose. According to the current proposal, this limit will be set on gross public debt[13] released by the Eurostat at the level of 55 per cent of GDP. In this case not only reputation is at stake, but various sanctions starting from 45 per cent of GDP will be in place. It starts with an open letter of the Minister of Finance to the parliament and ends with a possibility of government resignation.

5.4 Rules for municipalities

There is a golden rule currently at place at the municipal level. Moreover there are two other requirements. Debt cannot be higher than 60 per cent of current revenues from the previous year

[13] In Slovakia there is only small difference between gross and net debt figures.

and debt service should remain below 25 per cent of current revenues. There is a proposal to decrease the latter to 15 per cent, to include every PPP project in the debt figure and to impose an automatic financial sanction, if the debt exceeds 60 per cent of current revenues. Moreover if the debt figure exceeds 62 per cent, there can be a new referendum to replace the mayor.

Two other important aspects are worth mentioning. First there is a proposal to have a strict no-bail-out clause in the constitutional law. Second, managed bankruptcy along the lines of the bankruptcy mechanism for citizens is proposed.

5.5 Transparency and procedures

The draft explicitly defines several interesting analytical concepts:

- net worth;
- long-term sustainability;
- baseline (no-policy-change) scenario;
- structural primary balance (for the whole public sector!);
- tax expenditures;
- implicit liabilities.

All these concepts should be included in the basic budget documentation and closing accounts. Moreover, the now informal Macroeconomic Forecasting Committee and Tax forecasting Committee should receive a formal status. All relevant information should be available at least for the two previous and next three years.

As far as the budget procedures are concerned, no law should be passed without fiscal impact assessment. Important feature of the reform proposal is to implement the PAYGO principle.

5.6 Fiscal Council

An independent Fiscal Council with three members and around 15 analysts should operate to monitor fiscal performance. There would be three explicit tasks in the mandate of the Council: (i) to publish a long-term sustainability report, (ii) calculation of expenditure ceilings and (iii) evaluation of the fulfillment of fiscal rules. Apart from these basic functions the Council can prepare fiscal impact assessments and issue recommendations and risk assessments regarding fiscal policy. The Council would be financed by the central bank. An important side-effect of the establishment of the Council can be the improvement of the quality of fiscal analysis and hence more informed policy debate (similar to the development of research capacities at independent central banks).

If one would like to judge the proposal against the Kopits-Symansky criteria (1998) the following would emerge. The proposal contains relatively *well-defined*[14] rules and concepts and is very strong in *transparency* and *efficiency*. By introducing net worth (augmented with basic generational accounting) the room for creative accounting is limited and at the same time benefits of structural reforms can be easily demonstrated. In terms of *flexibility*, the combination of expenditure rules with fiscal council can relatively well cope with unexpected shocks and cyclical movements of the economy. The proposal scores mixed in terms of *adequacy and consistency.* On the other hand, the framework is not *simple*, *i.e.*, easily understandable to the public and politicians. Therefore the inclusion of fiscal council is key to "translate" the outcomes to the public in an

[14] However oen can argue that the derivation of the ceilings is to some extent arbitrary.

accessible way. The last criterion is *enforceability*, where the verdict is again mixed. On the one hand the proposed framework includes important sanctions (in case of the debt limit), breaching the expenditure ceiling is constructed to have only reputational costs.

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 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.

ANNEX 1
FISCAL POLICY FRAMEWORKS IN CENTRAL EUROPE

All four Central European countries are currently operating under the Stability and Growth Pact. This annex highlights the main features of their national frameworks.

	FRA	Fiscal Rules at Central Level	Independent Bodies	Transparency Requirements	Procedural Rules
Czech Republic	No	No	No	Limited	Some
Hungary	Yes	Real debt rule	Fiscal council	Yes	PAYGO
Poland	No	Debt limit	No	Limited	Some
Slovakia	No	Central government expenditure limit in good times	Macroeconomic Forecasting Committee, Tax Forecasting Committee	Limited	Some

Source: NBP, MNB, CNB, MFSR; FRA refers to single fiscal responsibility acts.

The Czech Republic has neither fiscal rules nor independent institutions in the budgetary process. The process rests on a typical medium-term framework with no strict transparency requirements or procedural rules.

Hungary adopted its Fiscal Responsibility Act in 2008. Within this framework a Fiscal Council was established and a medium-term real debt rule put in place. Despite the very promising start and a broad agreement over the necessity of fiscal rules and an independent body, the current government significantly changed the set up of the Council.[15] There are important transparency requirements in the law (PPP, etc.) and a PAYGO rule.

Poland has a public finance act since 1998, which contains majority of regulations on the fiscal framework and fiscal rules i.e. features which would be included in a fiscal responsibility act. It has a Constitutional debt rule (60 per cent ceiling) accompanied by 50 and 55 per cent thresholds, the breach of which induces consolidation measures. Since this year it also has a temporary expenditure rule – as long as Poland is in EDP, the growth of non-mandatory spending of the central government (around 5.2 per cent of GDP in total) may not exceed 1 per cent in real terms. There is no independent fiscal council.

Slovakia has 2 laws concerning the budgetary process of central government and municipalities. There is only one formal rule at the central level: if the revenues in the state budget exceed the budgeted amount, expenditures can increase only at a maximum of 1 per cent (not GDP). Municipalities have golden-type rule. There are two semi-independent bodies evaluating the macroeconomic and tax forecasts of the Ministry of Finance. There are is no detailed list of transparency requirements beyond the publication of the medium-term fiscal framework.

[15] The government cancelled the budget of the Council and removed its analytical capacity. Moreover, replaced all Council members.

ANNEX 2
SOME EXAMPLES OF BAD INCENTIVES IN THE CURRENT FRAMEWORK[16]

Let us now mention a few examples of bad motivations for economic-policy makers, if only the budget, and not the net worth, is under public scrutiny. Then scope for creative accounting and fogging is still rather wide. We will show that with correct handling of net worth concept, these tricks would have no meaning.

Motivation No. 1: Sales of some assets

Governments may have a motivation to sell a building or to privatize a state enterprise not because it has economic importance, but for example because they do not want to exceed the 3 per cent of GDP general government deficit or the 60 per cent limit (of GDP) of government debt. It is often the case that a favorable price plays only a secondary role in these reflections.

Example 1a: The government sells a building for half price and in this way will decrease the deficit. The target has been achieved. If it took into consideration the net worth concept, results would be negative. If we assume that all income will be transformed into capital stocks, the net worth decreases. A3 namely grows a half, against the A1 drop.

Example 1b: The government privatizes a state enterprise and decreases its gross debt from the revenues, in order to meet Maastricht Criteria. Although the gross debt drops, the net worth will not change. Both A6[17] and L1 will decrease by the same value (we suppose that the privatization will be performed at market price).

Motivation No. 2: Neglecting repairs and maintenance[18]

With public pressure on saving, it is often the easiest solution for budget-makers to decrease expenditures on repairs and maintenance. Roads will be of lower quality and computers old fashioned, but in the end the point is to decrease expenditures, i.e. savings at first glance. However, if we look at the balance sheet, a problem comes to light very soon.

Example 2: The government decreases expenditures on the repair of schools. A look at the net worth will reveal a negative evolution, as A1 will go down (depreciation).

Motivation No. 3: Too big an emphasis on PPP projects

A real motivation for performing PPP projects should be the fact that in some cases the private sector can be more efficient in delivering a project than the state (e.g., thanks to longer experience in the particular area or a stronger motivation to decrease costs efficiently). Or in the background, there might be reflections about a transfer of a major part of risk to the private sector or about bigger inter-generation fairness: often future generations profit from the current investment too. However, it can be said, and is confirmed by experience, that in fact in most cases

[16] Actually 8 out of the 10 reported bad incentives were used in Slovakia to decrease the general government deficit.

[17] Refers to Table 8.

[18] It is important to note, that capital expenditures in the public sector are included in the deficit, while in the private sector are not part of the profit and loss account. From a net worth point of view, capital expenditures from government surplus represent just a change in the composition of assets.

the real motivation is lower budgetary expenditures in the short term. As the efficiency question is in these cases secondary, the real effect on tax-payers can often be negative.

Example 3: The government, instead of building a highway from public sources for EUR 1 bil., will conclude a PPP project of total value of EUR 1.5 bil., paying EUR 150 mil. annually (for 10 years). The budget expenditures will drop by EUR 850 mil. in the first year and it looks like a saving. However, a look at the net worth will show that together with the A2, also the L2 will grow. Even with low interest rates, the current net present value of the implicit debt can be significantly higher than the highway's value. In such a case, the net worth of the state will drop.

Motivation No. 4: Saving at the expense of state enterprises

As mainly general government deficit is under the scrutiny of analysts and statisticians, there are often attempts to decrease public finance deficits, and at the same time problems in state enterprises accumulate. In other cases, problems of state enterprises are solved by transactions which, in spite of the high risk of their unsettlement, are declared as financial (guarantees, recoverable financial assistance, or capital increase).

Example 4a: The government will decrease a public enterprise subsidy for actions performed in the public interest. Public finance expenditures will drop, as well as deficit. Looking at the state balance it is clear that the L1 will go down, but at the same time the A6 will decrease too, at least by the same sum, because the enterprise will have to borrow from the market (the risk margin of the enterprise is higher than that of the state).

Example 4b: The government does not deal with the problem of the state enterprise and when there are problems, it simply increases the capital or provides recoverable financial assistance (loans) on paper. Though the impact on the public finance budget is zero, the net worth will decrease by means of the A4 decrease or by means of the L1 rise. When not dealing with the situation, the A6 drops.

Motivation No. 5: Aversion to funded schemes

Although some funded schemes (e.g., in the area of pensions or the health system) can bring higher stability and better results of systems in the long term, current official statistics of public finance discriminate them against pay-as-you-go systems.

Example 5: The government is considering introducing a fully-funded pillar in the pension system. In the end though, it will choose not to carry out the reform because of a negative impact of the change on public finance in the short term, as the reallocation of a part of social contributions to private pension fund management companies means a drop of income and so a higher deficit. A look at the net worth shows that through a higher deficit the L1 will grow, but at the same time the L2 will decrease, and in the end it can even have a positive impact on the net worth of the state.

Motivation No. 6: Asymmetric handling of Central Bank profit/loss

It may happen that if the Central Bank makes a profit, the government will wish to obtain a part of the profit; however, with a loss it will not provide a subsidy to the Bank.

Example 6: Although in the case of strong domestic currency appreciation foreign government debt decreases, the value of foreign exchange reserves of the Central Bank decreases too. The result is a clear positive impact on the budget, yet a questionable impact on the net worth of the state. The L1 will drop, as will the A5.

Motivation No. 7: Too rapid natural resources depletion

States rich in natural resources can very quickly 'overeat themselves' if they do not have a correct view of the state balance.

Example 7: The government is extracting crude oil quickly and from the revenues finances current expenditures. Though the deficit is all right, net worth is clearly decreasing through the A7. This is the reason why many countries place revenues from crude oil into funds for future generations (the A7 is decreasing, but at the same time for example the A4 is rising).

Motivation No. 8: Tendency for greater risk with legally ambiguous issues

If contingent liabilities are not recorded, motivations for the government may be wrongly set when deciding about some legal issues.

Example 8: For political reasons, the government decides to cancel a contract with a supplier in spite of risks that it will lose the law-suit. The immediate impact on the budget is zero, but the impact on net worth can be negative through the L3.

Motivation No. 9: Ignoring environmental costs

The quality of the environment is part of the wealth of a state (even though its quantification may be rather problematic). State activities may disturb this quality rather significantly.

Example 9: The government cuts down forests and builds a highway. The impact on net worth may be questionable if we also consider environmental costs. The A2 will grow, but the A8 will drop.

Motivation No. 10: Securitization

The government sells assets to a Special Purpose Vehicle, which finances itself from the market. The issued bonds are usually backed by the income stream generated by the purchases state assets.

Example 10: The government sets up a highway company outside the general government without explicit state guarantees, but transfers the highways and the right to collect fees from using these highways to this SPV. The SPV issues debt to finance highway construction. This way the government can finance capital expenditures without increasing the budget deficit and official public debt.

As we have seen, looking at public finance in a more complex way through the net worth prism, the scope for deformed motivations of economic-policy makers and non-transparent accounting is considerable smaller. It would therefore be beneficial to focus on the net worth of the state. We find it important that first state balances start to be disclosed and such should be improved gradually. Apart from that, the net worth concept can serve as a very useful benchmark for evaluating and analyzing real fiscal development. At least it makes economic-policy makers take into account the wider context of their decisions.

ANNEX 3
COMPARISON WITH THE PUBLIC SECTOR BALANCE SHEET IN BUITER (1993)

Assets	Correspondence with Table 8	Liabilities	Correspondence
Social overhead capital	A1, A2, A3	Net debt	L1, A4
Equity in public enterprises	A6	Money stock	A5
Land and mineral assets	A7	Present value of entitlements (implicit liabilities)	L2
Net foreign exchange reserves	A5		
Present value of taxes (implicit assets)	L2	*Net worth*	NW, A8, A9, L3, L4
Imputed net value of cash monopoly	A5		

There are three important differences when comparing the balance sheet in this paper (Table 8) with the concept in Buiter (1993). First, on the asset side we consider also ecological wealth. This item is of course hard to measure, however with the global debate over climate change it will gain on its significance. Second, in our opinion contingent liabilities represent an important item when decreasing the space for creative accounting. The third difference is the inclusion of other assets and liabilities. Here we can consider for example contingent assets or PPP projects.[19]

[19] These are in many countries not reported as a part of the explicit debt.

ANNEX 4
CORRESPONDENCE BETWEEN NET WORTH AND EXPENDITURE CEILINGS

One issue is the creation and reporting of public balance sheet *ex post* as an informational benchmark, the other one is the use the concept of net worth as a starting point for fiscal rules. In the Slovak proposal, not all changes in the net worth are used to update expenditure ceilings. The next table shows the main differences between net lending and change in net worth and also how are these treated when updating expenditure ceilings in the Slovak proposal.

Differences Between Conventional Measures of Budget Outcome and Changes in Net Worth	**Treatment in the Slovak Proposal (Impact on the Expenditure Ceilings)**
Conventional Budget Balance	
+ capital investments	No impact
– depreciation	No impact
+ capital gains and losses	One-off
+ net purchase of assets	One-off
+ change in net wealth of the central bank	Feeds through (except of valuation)
+ change in net wealth of public companies	Feeds through
+ change in ecological wealth	Not yet operational
+ change in natural resources	Not yet operational
+ change in the value of other assets	Feeds through
– change in the value of net implicit liabilities	Feeds through
– change in the value of contingent liabilities	Not yet operational
– change in the value of other liabilities (PPP)	Feeds through
Change in Net Worth	

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