

Fiscal Position and Size of Automatic Stabilizers in the CESEE EU Member States – Implications for Discretionary Measures¹

Markus Eller²

In the EU Member States in Central, Eastern and Southeastern Europe (CESEE-10), budgetary positions have been observed to react less strongly to GDP changes than in the euro area. In the observation period, automatic stabilizers mostly operated on the revenue side, while the response of government expenditure to GDP changes was quite inelastic. In most CESEE-10 countries, the government expenditure-to-GDP ratio is smaller than the euro area average. Thus, the automatic response of the budget balance to the present downturn is expected to be rather moderate. Moreover, the room for discretionary fiscal measures is limited as there are no sufficient buffers owing to the predominantly procyclical fiscal stance during past “boom times” in several countries and, currently, government debt markets in many countries are rather illiquid.

JEL classification: E62, H6

Keywords: Automatic stabilizers, fiscal space, output gap, cyclical policy, discretionary fiscal policy

1 Introduction

At the current juncture, recessionary tendencies as a consequence of the global financial crisis pose demanding challenges for an appropriate fiscal policy reaction in Central, Eastern and Southeastern Europe (CESEE). On the one hand, fiscal prudence and sustainability are key issues when it comes to keeping the trust of international investors and guaranteeing the availability of external financing. On the other hand, the risk of a recessionary downward spiral pushes the case for discretionary fiscal policy measures that go beyond the built-in countercyclical response of tax and government spending systems to a drop in GDP. Against this background, this short contribution first elaborates to what extent discretionary measures are needed in the EU Member States in Central, Eastern and Southeastern Europe (CESEE-10) given the (pre-crisis) size of automatic stabilizers and, second, delineates the cyclical pattern of discretionary fiscal policy observed over the past few years and outlines current fiscal positions to improve our understanding of the room for fiscal policy maneuver in these countries.

2 Comparison of Automatic Stabilizers in the CESEE-10 and the Euro Area

During an economic downturn, the structure of tax and public spending systems automatically stabilizes the business cycle in at least three ways. First, sizeable tax bases (such as income, profits or consumption expenditure) erode and thus the overall tax burden decreases. Second, the public expenditure category with the most pronounced countercyclical pattern – unemployment benefits – increases as the number of unemployed goes up. Third, many expenditure categories improve

¹ Cutoff date for data: April 16, 2009.

² Oesterreichische Nationalbank, Foreign Research Division, markus.eller@oenb.at. The author would like to thank Peter Backé, Catherine Keppel and Zoltan Walko (all Foreign Research Division) and Lukas Reiss (Economic Analysis Division) for valuable comments as well as Salvador Barrios and Andrea Schaechter (both European Commission, Directorate General for Economic and Financial Affairs) for providing updated figures on budgetary elasticities and answering a number of questions in March 2009.

the stabilizing effects of fiscal policy as they show a certain inertia in adjusting to business cycle fluctuations. For example, a temporary output decline does not induce lay-offs of public sector employees, a stop of public infrastructure projects or the closing of schools and hospitals. Accordingly, Deroose, Larch and Schaechter (2008) argue that “it is predominantly the differences in size of governments that impact how strong automatic stabilizers are.” Consequently, this section presents (1) estimates on both public revenue and expenditure elasticities and (2) cross-country figures on public expenditure-to-GDP ratios (as a frequently used proxy for government size).

2.1 Budgetary Elasticities and Sensitivities

For the implementation of the EU’s fiscal surveillance framework, the European Commission estimates the budgetary elasticities of the EU Member States on a regular basis (see European Commission, 2004). Chart 1 shows the updated budgetary elasticities of the CESEE-10 and the euro area.

The data show that a 1% drop in GDP reduces total government revenues by nearly 1%. As a consequence, the revenue-to-GDP ratio remains almost constant over the business cycle, pointing to a largely proportional tax system (Deroose, Larch and Schaechter, 2008) in the euro area and in most of the CESEE-10 countries. On average, the elasticity of government revenues in the CESEE-10 is only slightly smaller (by about one decimal point) than in the euro area. The response of government expenditure to changes in GDP proves to be rather inelastic. A 1% decline in GDP drives up government spending by 0.10% in the CESEE-10 and by 0.17% in the euro area. Notably, Poland and Slovenia show by far the highest expenditure elasticities of the CESEE-10 at 0.17 and 0.13, respectively.

Overall, budgetary positions react less strongly to GDP changes in the CESEE-10 than in the euro area. A cyclical drop in GDP by 1%, *ceteris paribus*, increases the fiscal deficit-to-GDP ratio by 0.37 percentage points on average in the CESEE-10 (ranging from a 0.27 percentage point change in Lithuania to a 0.47 percentage point change in Slovenia), compared with an increase by half a percentage point in the euro area.

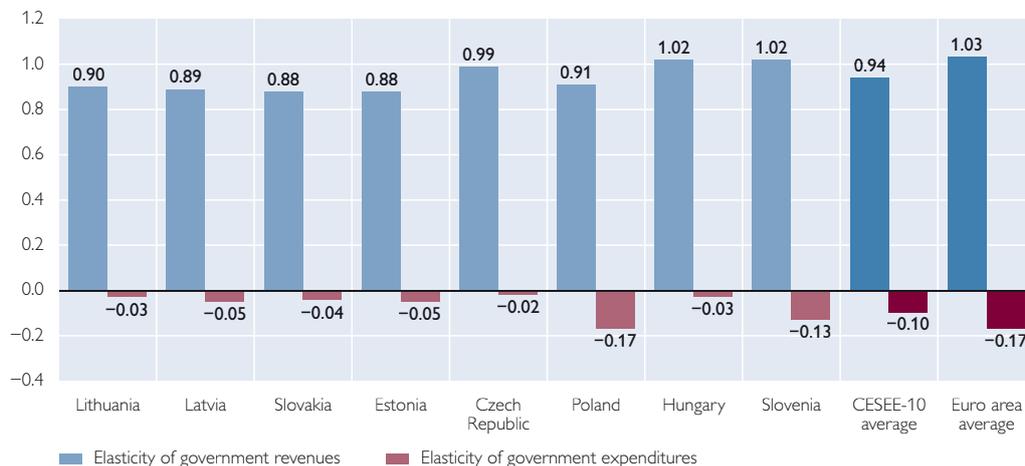
A few caveats have to be taken into account when interpreting these numbers at the current juncture. First, the European Commission’s calculation of expenditure elasticities is based exclusively on unemployment benefits. These, however, account for only a small share in total primary expenditure (about 3.5% in the euro area). Other potentially business cycle-dependent categories, such as health or pension expenditure, have so far not been included in the European Commission’s calculations, and the presented expenditure elasticities are therefore likely to be underestimated. Second, the effective automatic response of budgetary items to a 1% decline in GDP strongly depends on the composition of this decline. In the case of progressive income taxation and proportional profit taxation, for instance, the fiscal deficit ratio is expected to be much more sensitive to a decrease in wages than to a decrease in profits.

Chart 1

Size of Automatic Stabilizers

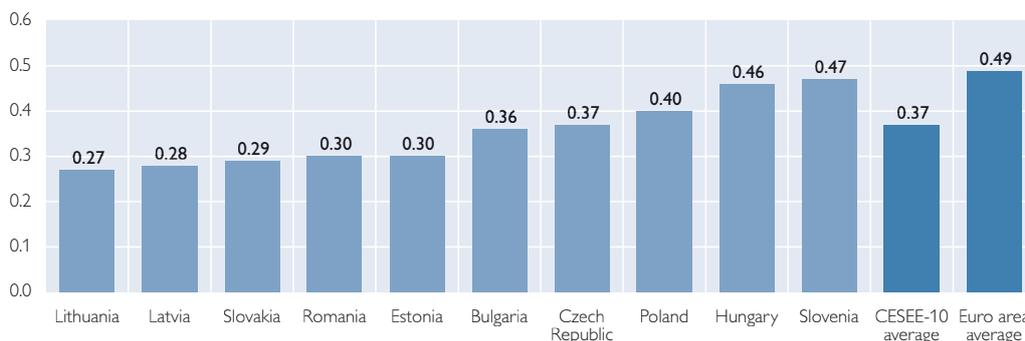
Budgetary Elasticities

Percentage point change in response to a 1% increase in GDP



Overall Budgetary Sensitivity

Percentage point change in response to a 1% increase in GDP



Source: European Commission (DG ECFIN).

Note: In response to a percentage change of the potential output gap, budgetary elasticities represent the percentage change in the level of general government expenditures or revenues, while the overall budgetary sensitivity represents the percentage change of the general government balance-to-GDP ratio. The presented numbers are based on multiannual averages for the period from 1995 to 2004 (more recent data are not yet included in the European Commission's calculations). For Bulgaria and Romania, estimations are available only for overall budgetary sensitivity. Cross-country averages are GDP-weighted.

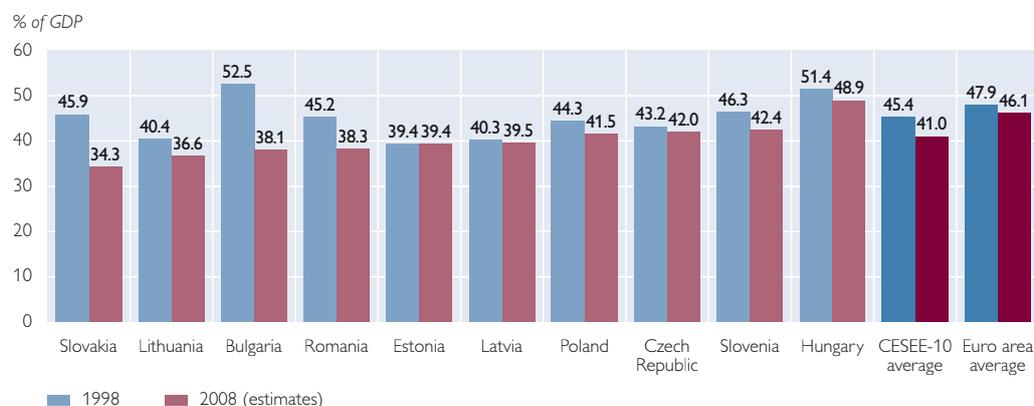
2.2 Government Expenditure-to-GDP Ratio and Structure of Public Expenditure

Chart 2 indicates that in 2008 in most CESEE-10 countries (except Hungary) the government expenditure-to-GDP ratio was smaller (mostly around or below 40%) than the euro area average (about 46%; Austria's share comes to nearly 50%). This restricts the buffers for automatic stabilization and, as a consequence, the public sector's capacity to dampen short-run business cycle fluctuations. But it should be noted that in most CESEE-10 countries the government expenditure-to-GDP ratio is larger than in other emerging economies with a similar level of development.

It should be acknowledged that – driven by the ongoing catching-up process – the CESEE-10 spend more, on average, on (“crisis-resistant”) infrastructure proj-

Chart 2

General Government Expenditure



Source: European Commission, AMECO database.

Note: Cross-country averages are GDP-weighted. 2008 data are estimates as at end-October 2008.

ects than the euro area. The Czech Republic e.g. assigns an average of about 10% of GDP to infrastructure spending, while the corresponding figure for Austria comes to no more than 6%. (For education or health expenditure or the compensation of public sector employees, such a significant difference cannot be observed.)

3 Fiscal Space

The governments in the CESEE-10 exhibit a comparatively low degree of indebtedness. On average, gross public debt as a percentage of GDP is only half as high in the CESEE-10 as in the euro area. In 2008, the debt ratios stood clearly below 20% in Bulgaria, Romania and the Baltic countries, below 30% in Slovenia, Slovakia and the Czech Republic and at 45% in Poland. Only Hungary's debt ratio of 72% surpassed the euro area average of 68% (European Commission, Interim Forecast, January 2009).

Moreover, headline fiscal positions in most of the CESEE-10 countries have improved since 2002 or 2003, respectively. Despite considerable economic growth during this period, however, most of the CESEE-10 countries (with the exception of Bulgaria and the Baltic countries) have run budget deficits of only slightly below 3% of GDP; Hungary even reached a deficit of 9.3% of GDP in 2006 before reducing the shortfall to an estimated 3.4% in 2008.

Table 1 shows the change in the cyclically adjusted primary balance (CAPB) as a percentage of GDP and differentiates between boom, neutral, and downturn stages of the business cycle (i.e. years with clearly positive, moderate and clearly negative potential output gaps, respectively) since 2000.

First, an easing CAPB apparently prevailed in most of the CESEE-10 countries, especially in Romania, the Baltic countries, Poland and also Slovakia. In these countries, the observed improvement of fiscal positions has been achieved more via brisk economic growth than via a consolidation of cyclically adjusted balances.

Second, in six countries out of the CESEE-10, more than 50% of the nonneutral years since 2000 were characterized by a procyclical discretionary fiscal

Table 1

Cyclicality of Discretionary Fiscal Policy in the CESEE-10

Country	Cyclical condition	2000	2001	2002	2003	2004	2005	2006	2007	2008e	Average	Procyclical fiscal policy, % of non-neutral years
<i>Annual change in cyclically adjusted primary balance, % of GDP</i>												
Bulgaria	boom				-0.1	1.1	0.2	0.8	-3.2	3.0	0.4	20
	neutral											
	downturn											
Czech Republic	boom							0.1	1.3	0.1	0.5	33
	neutral	-0.7	-1.8				-1.4					
	downturn			-0.4	0.1	3.5					1.1	
Estonia	boom					-0.2	-0.9	0.3	-0.4	-2.1	-0.7	71
	neutral			0.1	1.5							
	downturn	2.1	-0.3								0.9	
Hungary	boom					0.6	-2.0	-2.4	5.0	1.7	0.6	29
	neutral	0.3			1.6							
	downturn		-1.7	-5.5							-3.6	
Lithuania	boom					-0.7	0.7	-0.2	-1.4	-1.1	-0.5	63
	neutral				-0.4							
	downturn	-0.4	-1.2	1.2							-0.1	
Latvia	boom						-0.2	-1.1	-0.7	-0.6	-0.6	88
	neutral					0.4						
	downturn	1.2	0.2	-0.3	0.6						0.4	
Poland	boom	-0.9							1.0	-0.1	-0.0	57
	neutral					-0.2		0.0				
	downturn		-1.5	0.5	-1.4		1.7				-0.2	
Romania	boom					-1.1		-2.1	-0.4	-1.4	-1.2	80
	neutral				-0.7		-0.1					
	downturn			-1.3							-1.3	
Slovakia	boom					4.4	0.1	-1.1	-1.5	0.5	-0.5	40
	neutral											
	downturn	-4.1	5.6	-2.4							-0.3	
Slovenia	boom	-1.4							0.7	-0.6	-0.4	88
	neutral							-0.6				
	downturn		0.2	1.5	0.1	0.1	0.5				0.5	

Source: European Commission, AMECO database; 2008e indicates estimates as at end-October 2008.

Note: The adjustment of the cyclically adjusted primary balance (CAPB) as a percentage of GDP at current market prices is based on potential GDP. A negative (positive) change of CAPB indicates fiscal easing (tightening). The cyclical condition refers to the direction of the potential output gap, i.e. the gap between actual and potential GDP at 2000 market prices. A neutral cyclical condition represents small output gaps whose size is between the 40th and 60th percentile of the country-specific distribution of output gaps since 1997. In these neutral times, it is not clear whether the economy is in a boom or a downturn stage, and therefore we do not make deductions about the cyclicality of fiscal policy during these times. A boom condition represents positive output gaps above the 60th percentile (i.e. actual GDP lies clearly above its potential), while a downturn condition represents negative output gaps below the 40th percentile (i.e. actual GDP lies clearly below its potential). Figures in bold indicate that discretionary fiscal policy was procyclical (i.e. either fiscal easing during boom times or fiscal tightening during times of downturn). Figures in italics indicate that data were not available for the entire observation period.

stance.³ Fiscal easing during boom times was especially pronounced in Romania, the Baltic countries and Slovenia, while a tendency for fiscal tightening during downturn times can be observed in Slovenia, the Czech Republic, Latvia and Estonia.⁴

³ Procyclicality of fiscal policy is not limited to the CESEE-10. For the euro area in the period from 1999 to 2007, Deroose, Larch and Schaechter (2008) showed that there is a clear procyclical stance in both stages of the business cycle (which is especially pronounced in Germany); euro area fiscal policy appears to have been more strongly procyclical than fiscal policy in the U.S.A.

⁴ There are some differences in the size of the output gap when looking at the deviation from trend GDP instead of the deviation from potential GDP (particularly in Bulgaria, the Baltic countries and Poland). But the direction of the output gap and thus the presented cyclical pattern of fiscal policy remain largely unchanged.

It should be noted, however, that while the potential output gap figures available for 2008 still indicate that production is clearly above potential in the CESEE-10, the potential output gap went down considerably against 2007 (especially in the Baltic countries).⁵ Accordingly, the easing of most cyclically adjusted balances in 2008 can hardly be interpreted as being procyclical. This aspect relates to the difficulty that potential output gap estimates are based on uncertain future growth trajectories. Real-time and ex post output gaps may considerably differ because of statistical data revisions – particularly in the case of an unexpected downturn. Thus fiscal policy decisions might well have been based on information that later turned out to have incorrectly indicated the stage of the business cycle because forecasting errors for real GDP had been too pronounced (see also European Commission, 2006).

4 Current Fiscal Policy Choices

The presented (pre-crisis) estimations of budgetary elasticities and the comparatively small government expenditure-to-GDP ratio in the CESEE-10 indicate that the automatic stabilization function of tax and expenditure systems is not as strongly pronounced in the CESEE-10 as it is in the euro area.⁶ Notwithstanding the above-mentioned caveats, the automatic response of the budget balances to the economic downturn can be expected to be rather moderate. At first sight, this appears to point to a stronger need for a discretionary fiscal stimulus under the current cyclical conditions.

One could argue that in most CESEE-10 countries, recent fiscal positions (especially the gross debt ratio) indicate a certain leeway for taking active counter-cyclical measures. However, there are several limitations in this respect. First, as discussed in section 2, procyclical discretionary fiscal policy during boom times has reduced the room for fiscal maneuver in several countries. Second, given continuing liquidity problems at the government bond market, the financing of budget deficits through bonds (or even the roll-over of maturing public debt) is currently uncertain. Third, the room for fiscal stimulus is more generally limited by the negative effects expansionary policies would most likely have on investor confidence and thus on the availability of external financing.

A recent examination by the OECD (2009) reveals the size of fiscal stimulus packages in OECD countries (as implemented and/or announced up to March 24, 2009). In response to these packages, fiscal balances are expected to ease by about 1% of 2008 GDP in Slovakia and Poland (the same response as in Austria) and by even 3% of 2008 GDP in the Czech Republic (the same response as in Germany) over the period from 2008 to 2010. In Hungary, by contrast, the overall fiscal package has a strongly restrictive impact – the fiscal balance is expected to tighten by more than 4% of 2008 GDP.

It is not certain in advance whether these fiscal stimuli will be capable to contribute effectively to stabilizing the economy in the CESEE-10. Evidence from

⁵ According to the European Commission's estimates of October 2008, the potential output gap is expected to become clearly negative in Estonia and Latvia in 2009 and in Lithuania, Bulgaria and Poland in 2010.

⁶ It remains to be seen whether these relations continue to hold also in the future or whether the global financial crisis turns out to be a major structural break that considerably changes the size of automatic stabilizers or the cyclical pattern of fiscal policy.

multi-country models suggests that fiscal multipliers are smaller the more open an economy is, as domestic fiscal expansion is likely to leak abroad through imports (European Central Bank, 2009, box 7). A further reduction of fiscal multipliers can be expected if the agents behave in a Ricardian manner and parts of the fiscal injection flows directly into higher private savings (see Hemming, Kell and Mahfouz, 2002). Irrespective of Ricardian behavior, in the current setting households may also use additional fiscal benefits to increase their savings for precautionary reasons or to repair their balance sheets. The estimates on fiscal multipliers as presented in OECD (2009) are adjusted for the degree of openness and increasing saving propensities. They indicate that fiscal multipliers for the four OECD Member States in CESEE do not strongly differ from those for Western Europe, though they are clearly smaller than those for the U.S.A. or Japan. An increase of, e.g., government investment by 1% is found to lead to a 0.7% rise in GDP in the first year after the stimulus in Hungary, Slovakia and the Czech Republic (the same reaction intensity as in Austria), while in Poland this response is found to be higher by one decimal point (the same intensity as in Germany).

To sum up, as automatic stabilizers in the CESEE-10 are comparatively weak, there is obviously need for discretionary fiscal measures during the current severe economic downturn. But it is not clear whether fiscal stimuli can be realized in these countries at all because of limited room for budgetary maneuver. Furthermore, uncertainty about how effective fiscal stimulation packages in the CESEE-10 would be in dampening the current downturn is rather high.

References

- Deroose, S., M. Larch and A. Schaechter. 2008.** Constricted, Lame and Pro-cyclical? Fiscal Policy in the Euro Area Revisited. European Commission, DG ECFIN. Economic papers No. 353. December 2008.
- European Central Bank. 2009.** Monthly Bulletin March.
- European Commission. 2004.** Public Finances in EMU – 2004. European Economy No. 3.
- European Commission. 2006.** The EU Economy 2006 Review. European Economy No. 6.
- Hemming, R., M. Kell and S. Mahfouz. 2002.** The Effectiveness of Fiscal Policy in Stimulating Economic Activity – A Review of the Literature. IMF Working Paper No. 02/208.
- OECD. 2009.** OECD Interim Economic Outlook. March.