

**Financial and Banking Services Market**

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**EVOLUTION OF FISCAL POLICY
IN TRANSFORMATION ECONOMIES****Abstract**

This paper analyses problems in the fiscal policy of the Eastern European countries from the period 1990–2003. Different stages can be interpreted in Eastern European countries' fiscal policy during the course of accession to the EU. Distinct features of the worsening of budget balance in the eve of the entry to the European Union in Poland, Hungary and the Czech Republic are accentuated. The effects of domestic and external factors upon the budget balance are empirically tested.

Key words:

Fiscal policy, budget balance, euro integration, government debt, optimization of intertemporal consumption.

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The European Union (EU) accession has been accompanied by a significant worsening of the budget balance (Fig. 1) and corresponding build-up of external debt of state-member (Fig. 2). Both phenomena attract attention in respect to their root causes, macroeconomic effects, as well as fiscal policy implications. The current worsening of the budget balance can be a «by-product» of the EU membership procedural requirements, or reflect structural problems, attributed to unsolved problems within the province of fiscal policy.

The assessment of fiscal policy developments is rather contradictory. An initial improvement of the budget balance at the beginning of transitional process is rather explained by anti-inflationary and monetary concerns [18: 957], as well as by favorable initial conditions of a short-term duration [16: 18; 20: 46–47]. A subsequent «post stabilization worsening» of the budget balance in most of the countries, except of Estonia, the Czech Republic, Slovenia and Croatia, is explained with many reasons, such as: a steep reduction of tax receipts caused by a deep output slump and popularity of the barter, lack of information about taxpayers in the field of services and exports [21: 14–15], trade liberalization, lower receipts from privatization, burden of social safety net [9: 35–39], decline in profitability due to stronger competition, tax minimization practices in state and private sectors, decline in inflation [1: 11], slow tax reforms and a rapid build-up of the government debt [16: 20]. It was assumed that a restrictive fiscal policy stance could aggravate a slowdown in the real sector [13: 29–30]. A hypothesis of the fiscal policy endogeneity was supported not much by the management of expenditures and revenues, as by the character of policy stabilization, structural deformations and institutional factors [20: 45]. Domestic bond-financed budget deficit was considered as an instrumental factor of dealing with the monetary «overhang» and deceleration of inflation [18: 957–958].

In the mid-1990s, a fiscal discipline was viewed not as a viable option. A corresponding increase of the government debt was an argument in favor of external borrowing and partly monetization of the budget deficit [16: 20]. On the other side, prospects for running large budget deficits were limited by a worsening of current account balance [6: 62–68].

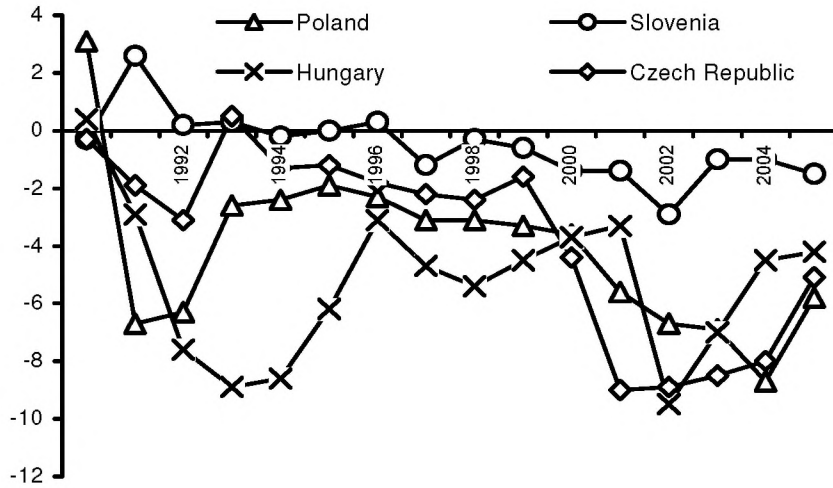
A worsening of the budget balance during EU accession is explained by tax harmonization, simplification of tax code and rationalization of tax administration. Also it includes increase of capital flow as well as decline in the interest rate [22]. Using similar arguments on the federal-regional budget relationship [19], either a decline in the cost of government borrowing, or expected donations from the EU budget may come into consideration.

High budget deficits can reflect a sort of fiscal «self-confidence», especially in the countries with a high political weight [7], or structural problems [3: 49]. Assuming a low external debt/GDP share, an improvement in the budget balance is not urgent in most of the transformation economy [14]. Specific problems for the fiscal policy are created by external shocks [17: 11] or short-term risks [15], as the instability of euro/dollar exchange rate [2: 54–57]. With the EU entry, macroeconomic supply shocks rise in prominence [11: 31–32].

Figure 1.

**The budget balance in transformation economies
(% of GDP), 1990–2005**

a) The Luxemburg group



b) The Helsinki group

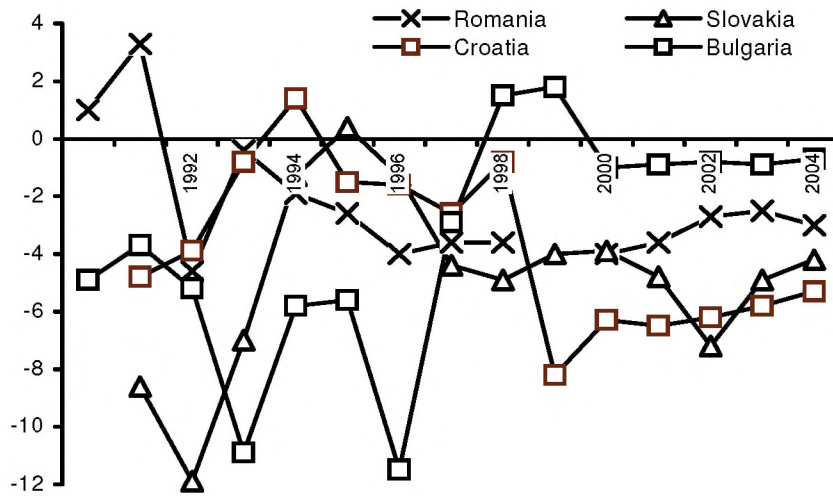
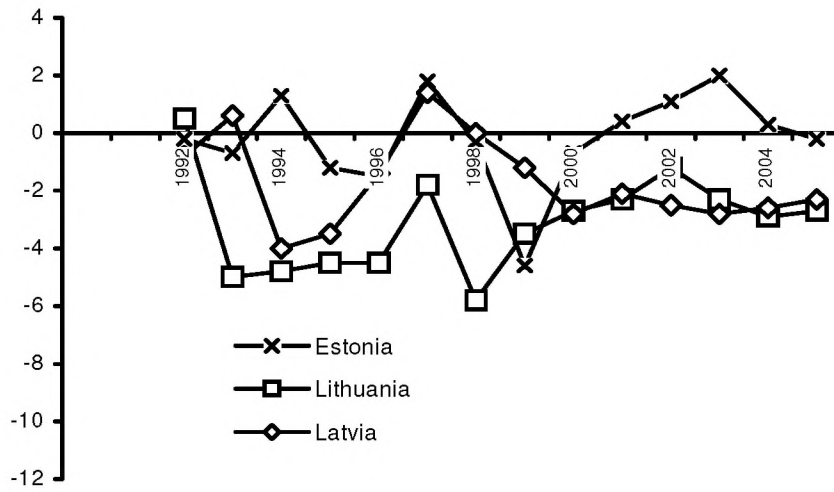
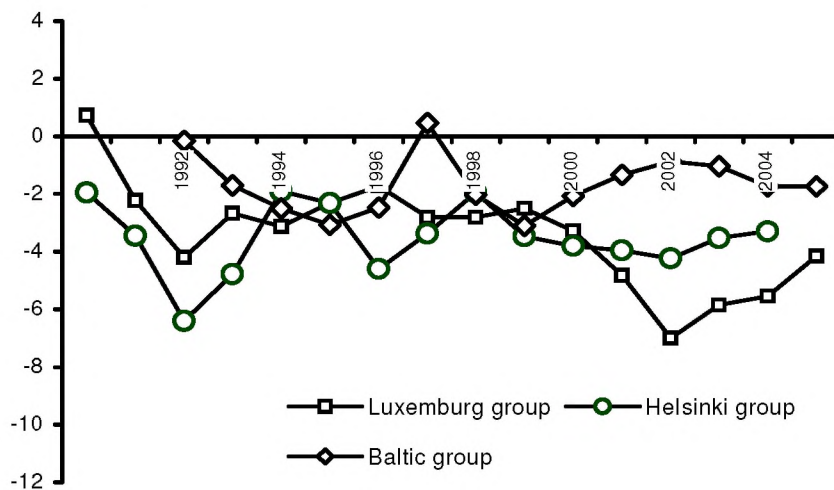


Figure 1.

c) The Baltic countries



d) Average values



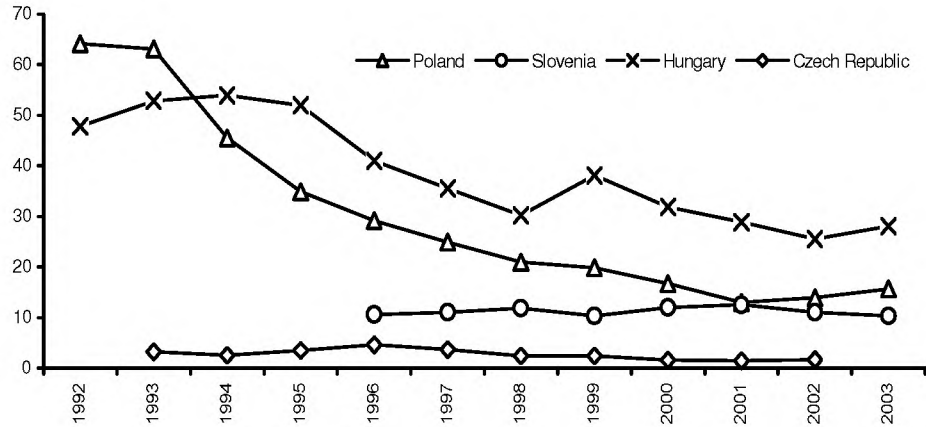
Note: Forecast values are provided for 2004–2005.

Source: International Financial Statistics, Dresdner Bank, Bank Austria Creditanstalt, [21: 24]

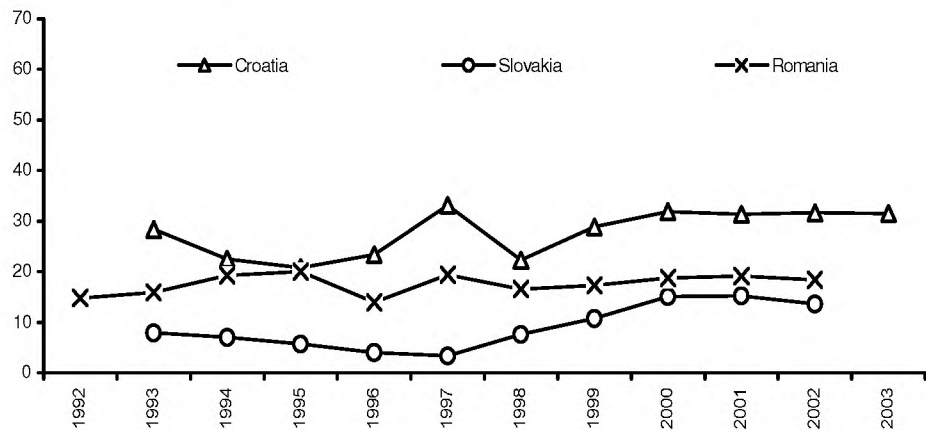
Figure 2.

**External debt of certain transformation economies as% of GDP,
1996–2003**

a) The Luxemburg group



b) The Helsinki group



Source: www.worldbank.org, Bank Austria Creditanstalt.

Certain methodological difficulties are set up by the budget balance definitions [9: 5; 10: 3], including endogeneity of GDP, interest rate, and current account [14: 4]¹. There is a need of detailed analysis of the evolution of fiscal policy, addressing the issues of transition process, important macroeconomic relationships, economic transformations and European integration. This kind of analysis allows to expose dominant tendencies, follow present fiscal problems in retrospective connections, and explain the choice of proper theoretical tool for the study of fiscal policy.

Stages of fiscal policy

In order to trace basic tendencies in the fiscal policy of three groups of countries – the Luxemburg, Helsinki and the Baltic groups the Hodrick–Prescott filtering is used². Important differences between the Luxemburg and Helsinki groups in respect to the EU accession are considered *a priori* to reflect differences in the rate of economic transformation in general and fiscal policies in particular. The budget balance, as the most integrated indicator of fiscal policy, has macroeconomic importance of its own and attracts attention to the problem of public debt. Analysis of budget expenditures and revenues are touched in a limited context of the budget balance management.

Visual comparison of the budget balance trends (Fig. 3g) reveals three stages of fiscal developments: 1) financial stabilization (1989–1995), 2) recovery of economic growth (1995–1999), 3) preparation for the EU accession (2000–2004). Comparison of trend and actual values of the budget balance supports an informal division by M. Dombrovski of the financial stabilization period into three stages of a) primary stabilization, b) secondary fiscal crisis, and c) fiscal consolidation [1: 15]. Some differences refer to the level of trend and deviations from it. Similarity of trend budget balances is very close for the Luxemburg and Baltic groups. These countries began the transition process with a very small budget deficit, but later this indicator had declined more significantly for the Luxemburg group. A steep worsening of the budget balance in 1992 had occurred simultaneously in both groups of the countries, when the actual values deviating considerably from the trend. Comparing to a successful Luxemburg group, the Helsinki group is characterized by a high initial deficit, which was worsening with time. In the Baltic group, a fiscal trough occurred somewhat later in 1993–

¹ In short, accumulation of the external debt is sustainable, if its rate of growth does not exceed the level of interest rate or the rate of GDP growth. The IMF experts assess the sustainability of budget deficit by the use of 5-years time horizon forecasts, holding unchanged main macroeconomic indicators, as GDP growth, investment, inflation, trade and current account balances, foreign exchange reserves, credit growth, structure of budget revenue and expenditure. Comparisons between actual and forecasted budget deficits are used to determine the financing needs and trajectory of national debt. If the build-up of external debt raises concerns, a scenario for the restrictive fiscal stance is developed [10: 11].

² The procedure of EU accession for Estonia, Poland, Slovenia, the Czech Republic and Hungary was initiated on the March 1998 EU summit in Luxemburg. A similar decision concerning Bulgaria, Romania, Slovakia, Latvia and Lithuania was taken on the December 1999 EU summit in Helsinki. For technical reasons, Croatia is included into the Helsinki group.

1995, but in these countries a considerable worsening of the budget balance below trend at the end of financial stabilization never materialized.

Along with the EU accession in the period 2000–2004, the path of budget balance for the Luxemburg and the Baltic groups, is quite different. While the trend of budget balance reveal a steep worsening in the former, no changes had happened in the latter. In 2002, the average budget deficit of the Luxemburg group reached to 7 percent of GDP (mainly due to the Czech Republic and Hungary), with the trend value increasing to 5.3 percent of GDP. In 2003, the budget balance improved a bit. Though a similar tendency is predicted for 2004–2005, the trend value of budget balance remains well in excess of the Maastricht requirements.

Asymmetry of actual and trend values of the Baltic countries in the Luxemburg group comes into sight. Actual budget balances of the Baltic countries improved in 2002, even though a worsening of the fiscal stance is forecasted for 2004–2005. It does not cause any concerns as the budget deficit of the Baltic countries is kept within 3 percent of GDP. The trend value of budget balance in the Helsinki group is very stable, with closer actual and trend values, if for the period 1990–1999 deviation of actual values from a trend was at 29.8 percent, this figure declined to 8.6 percent in 2000–2003.

Particular features of the fiscal policy stages are given in Table 1. The classification is extrapolated beyond 2004, counting for the deepening of European integration, the Maastricht requirements and entering the European monetary union (EMU). A diminishing of the state participation in economy became the strategic purpose of fiscal policy with the beginning of transition. The share of private sector in GDP exceeded 70 percent in Albania, the Czech Republic, Estonia, Hungary, Lithuania and Slovakia at the end-1990s [21: 6]. Fiscal measures of 1989–1994 were aimed at deceleration of inflation and strengthening of the currency. Initial improvement in the budget balance (fiscal surpluses were attained in Poland, Slovenia, and Romania) was attained mainly by the reduction of expenditure on the defense and administration, decline in public investments, cut off in subsidies to state enterprises and private customers³, and also by taxation of windfall profits resulted from price liberalization [16: 18]. Profitability of enterprises was improved by price hikes, reduction in real wages, revaluation of supplies and currency deposits following a devaluation of the exchange rate⁴, while commercial banks profited from a higher margin between credit and deposit rates⁵. An external debt write-off improved the budget balance in Poland and Bulgaria, with revenues from privatization on top of this.

³ In 1989–1993, public subsidies were cut in Poland and Hungary by 10.7 and 7.3 percent of GDP, respectively [1: 27]. For the former Czechoslovakia the reduction of subsidies amounted to 20 percent of GDP during the 1989–1992 period. In Bulgaria, public subsidies were cut by 13.7 percent of GDP in 1989–1992, but in 1993 there was a reverse in the treatment of subsidies.

⁴ In 1991–1994, the annual depreciation of the currency averaged 25 percent in Poland, 14 percent in Hungary, 15 percent in the Czech Republic, 214 percent in Bulgaria, 202 percent in Romania, 214 percent in Croatia, 6.5 percent in Slovakia, 98 percent in Slovenia, and 68 percent in Lithuania.

⁵ A bank margin for the 1991–1994 period averaged 14 percent in Bulgaria, 527 percent in Croatia, 7 percent in the Czech Republic, 13 percent in Estonia, 7 percent in Hungary, 1 percent in Poland, 6 percent in Slovakia, 52 percent in Slovenia, 38 percent in Latvia, and 9 percent in Lithuania.

Table 1.

Classification of the fiscal policy stages in transformation economies

Aims	Favorable circumstances	Risks
I. Financial stabilization (1989–1994)		
<ul style="list-style-type: none"> • Decrease of the state sector share in the economy • Restructuring of enterprises • Deceleration of inflation • Strengthening of the currency 	<ul style="list-style-type: none"> • Reduction in subsidies • Price liberalization • Privatization • Rise in profitability • External debt write-off 	<ul style="list-style-type: none"> • Unemployment benefits • Competition • Weak tax system • Monetary «overhang» • Decrease in inflation • Dollarization • Industrial slump • Higher costs of external debt servicing
II. Transition to a stable economic growth (1995–1999)		
<ul style="list-style-type: none"> • Improvement of the current account • Rise of the confidence towards economy • Optimization of the external borrowing 	<ul style="list-style-type: none"> • Privatization • «Accumulation» of economic reforms • Faster economic growth 	<ul style="list-style-type: none"> • Premature implementation of the euro standards • Higher sensitivity to macroeconomic shocks
III. Preparation to EU accession (2000–2004)		
<ul style="list-style-type: none"> • Stimulation of GDP growth • Implementation of <i>Acquis Communautaire</i> 	<ul style="list-style-type: none"> • Grants and subsidies from the EU budget • Comparatively low external debt • Investors confidence • Better conditions for the external borrowing 	<ul style="list-style-type: none"> • Unstable capital flows • Higher social standards
IV. Implementation of the Maastricht requirements (2005–2008)		
<ul style="list-style-type: none"> • Achievement of the 3 percent of GDP budget deficit threshold • Anti-cyclic macroeconomic policy 	<ul style="list-style-type: none"> • Decline in the interest rate • Grants and subsidies from the EU budget 	<ul style="list-style-type: none"> • Financing of the euro-standards • Worsening of the current account • Economic «overheating»
V. Entering the EMU (approximately from 2009)		
<ul style="list-style-type: none"> • Better coordination with a monetary policy • Anti-cyclic macroeconomic policy 	<ul style="list-style-type: none"> • Decrease in the currency risk 	<ul style="list-style-type: none"> • Worsening of current account • Insufficient flexibility of prices and wages

In 1991, the Parisian Club wrote-off a half of the Polish external debt, with 45 percent of the debt to the commercial banks of the London Club to follow in 1993 [12: 27]. Also in 1993 foreign banks wrote-off about a half of the Bulgarian debt. From privatization in 1990–1994 Hungary received 4 billion dollars, with proceeds in Poland and the Czech Republic amounting to 2 and 1 billion dollars, respectively. In 1995, all three countries received from privatization 3.8, 1.5 and 1.2 billion dollars, respectively [8: 5].

Favorable factors were short-lived, and consolidation of financial stabilization took place under conditions of the worsening of fiscal stance. According to D. Rosati worsening of the budget balance happened mainly by a reduction in receipts resulting from the industrial slump and legislative loopholes [20: 49]. However, M. Dombrovski notices «explosive» growth of social charges [1: 10]. It is difficult to deny a considerable burden of the unemployment benefits, health care and pension payments [16: 18–19]. For example, in Poland extra budget expenditures amounted to 4 million due to the payments for «young» pensioners and unemployed.

Contradictory enough is the explanation of higher budget deficit by a decrease in inflation. A worsening of the budget balance may happen if an increase of the real expenditure (the Patinkin effect) exceeds an increase of revenue (the Olivera–Tanzi effect). It is possible to assume that a combination of higher expenditures and insufficient revenues brings a higher budget deficit. In such an explanation it is not a decrease in inflation, but either ineffective tax management, or premature «socialization» of fiscal policy are responsible for the worsening of a fiscal stance. Regardless of the demand considerations above, a decrease in inflation may improve the budget balance through an increase in output and higher tax collection.

Higher costs of the public debt servicing are likely to worsen the budget balance through an increase in interest rate. On the reverse, a lower budget deficit not only limits public debt requirements, but also creates a downward pressure on the interest rate. Quite surprisingly, a decline in the interest rate may be seen as a pretext to increase the share of public debt in GDP.

The dynamics of interest rate and exchange rate is of particular importance during a switch to a stable economic growth. Reasonable concerns about the balance-of-payment (BOP) equilibrium inclined towards the policy of gradual exchange rate depreciation. A simultaneous increase in the interest rate did not conflict with the logic of the BOP adjustment, as, first, it constrains a domestic demand, and second, it facilitates capital inflows through the favorable interest rate differential. In general lower budget deficits only strengthened a tendency for the improvement in current account balance, but a full-scale use of restricted fiscal policy was moderated by demand considerations.

During a transition to the stable growth path, which had been taking place during the second half of 1990s, stability of a low deficit fiscal stance may be explained by a precarious balance between the BOP equilibrium and demand incentives for the real sector. An excessive budget deficit used to undermine credibility and create a sudden reverse of capital inflows, as it happened in the Czech Republic in 1997. From a similar point of view, the fiscal discipline is necessary for the improvement of a current account balance. It is not ruled out that a decrease in the budget balance will stimulate private capital inflows, which in turn compensate for a reduction in the aggregate demand. In a more general case, either budget deficit, or surplus may be expansionary, dependent on the

way the current account balance is determined by demand or supply of the tradable goods [5: 244–245].

Economic recovery and the so-called «cumulative effect» from economic reforms are to improve fiscal discipline. This proposition looks convincing for Slovenia and Estonia, less so for Latvia and the Czech Republic, and even less likely for Hungary and Poland. The experience of Bulgaria provides an opposite example, as a considerable budget deficit is reported against the background of an industrial slump.

In Poland and Hungary, a worsening of the budget balance stipulated an attempt to accelerate the introduction of euro-standards, thus requiring an increase in government expenditures. In the Czech Republic, a timely warning was sent by the financial crisis of 1997, which had the fiscal origin and culminated in the devaluation of local currency – *krona*. The Asian and Russian financial crises of 1997–1998 had not a significant impact upon the Eastern European countries, which could be seen as the sign of credibility, especially of the Luxemburg group countries. Respectively, on the stage of preparation for the EU accession there was a temptation to solve both tasks – of GDP growth and implementation of *Acquis Commutarie* – by the foreign debt-financed budget deficit. The Baltic countries had chosen a more conservative strategy of targeting the budget deficit below a threshold of 3 percent of GDP. Among other reasons, such a choice can be explained by a steeper, comparing to other countries-candidates, worsening of the current account deficit, amounting as of 2003 in Estonia and Latvia to 13.7 and 9.0 percent of GDP, respectively.

By the end of 1999, the EU accession for Estonia required an increase of the public expenditure by 2 percent of GDP, but was complimented by a decrease in interest rate up to 1 percentage point [22: 25–26]. On the other side, it can be viewed as a specific form of the soft budget constraint, explaining excessive expenditure by reception of financial resources or extra presence government guarantees.

Financing of the budget deficit led to accumulation of domestic and external public debt. An increase of the foreign debt burden is most visible in Slovakia (Fig. 2). Since end of 2001, an increase of public external debt renewed in Poland and Croatia. A reduction in the external debt is the feature of Slovenia only. Developments in the Luxemburg group look consistent with the logic of intertemporal optimization of private and public consumption, i. e. a contemporaneous worsening of the budget balance in order to stimulate aggregate demand should be followed by a future improvement of the fiscal discipline brought about by a higher GDP growth rate and a favorable decline in interest rate. The optimal policy of country with high cost of capital is that to accumulate external debt up to a certain threshold, with a future switch to the radical improvement of budget balance aimed at the improvement of credit rating and a reduction in the cost of public borrowing. Alternatively, even a steep decline in the budget balance do not lead to expected reduction in the cost of

borrowing, as it had happened in Italy at the beginning of 1990s [14]. The improvement of budget balance becomes convincing enough for investors only in the cases of high initial public debt. In such context, a dynamic increase of the public debt on the eve of the EU accession does not contain any considerable threats, but optimistic projections for individual countries are weakened by the high value of interest rate, ranging from 5 to 11 percent in the Luxemburg group countries (Slovenia has the highest interest rate, while the cheapest credit can be found in the Baltic countries).

Changes in the budget balance of the Luxemburg group do not reject the logic of intertemporal optimization (Fig. 3a), though not without substantial risks. First, it can be instability of capital flows, which will react to the interest rate differential for quite a long time since the EU entry. The LIBOR rate positively correlates with the budget balances of Luxemburg and Helsinki groups, with the coefficients of 0.62 and 0.67 respectively, while the negative coefficient of correlation for the Baltic countries is (-0.72). A positive correlation is likely to mean that «crowding out» of capital from the European markets by a low value of LIBOR makes it easier to finance the budget deficit, thus contributing to the worsening of fiscal discipline. In such interpretation, low values of LIBOR not only foster capital inflows into the Eastern European countries, but also contribute to higher budget deficits. For the case of negative correlation, it is natural to assume that the rise in LIBOR increases the cost of foreign debt servicing, thus increasing the budget deficit. Second, negative effects of high LIBOR can be aggravated by the «strong» euro. As shown by O. Calabanya, the appreciation of euro in respect to the dollar leads to a decline in the growth rate and an increase of interest rate [2: 54–57]. Third, prospects for impressive future GDP growth rates can be exaggerated as a result of low investment efficiency.

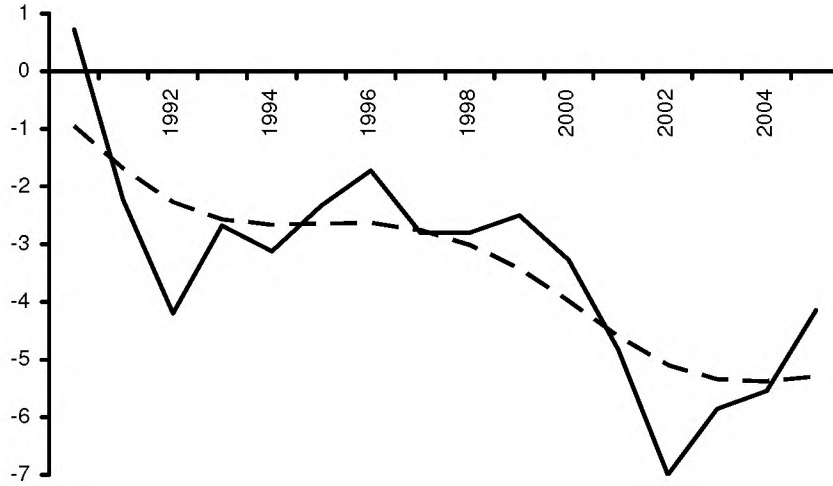
Having been accepted into the EU, a country aimed at the participation in euro zone should limit its budget deficit to 3 percent of GDP and national debt to 60 percent of GDP. Implementation of both requirements needs a high rate of economic growth. Empirical computations show that meeting of the Maastricht criteria requires annual GDP growth of 5 percent [9: 15]. This task looks demanding enough for a simultaneous implementation of *Acquis Commutarie*, being seriously complicated by the lack of productive income – tax revenue relationship.

A worsening of the current account balance can weaken favorable consequences of a decline in the interest rate. In general, the ability to run a high budget deficit for quite a long time is crucially dependent on the external equilibrium. The economic overheating and acceleration of inflation pose another potential threats. Both outcomes require a decrease in the aggregate demand, which in turn prevents from the use of budget balance for the anti-cyclic demand management. A possible steep decline in GDP growth will have an unfavorable impact upon the budget balance.

Figure 3.

Average and trend values of the budget balance, as% of GDP, 1990–2004

a) The Luxemburg group



b) The Helsinki group

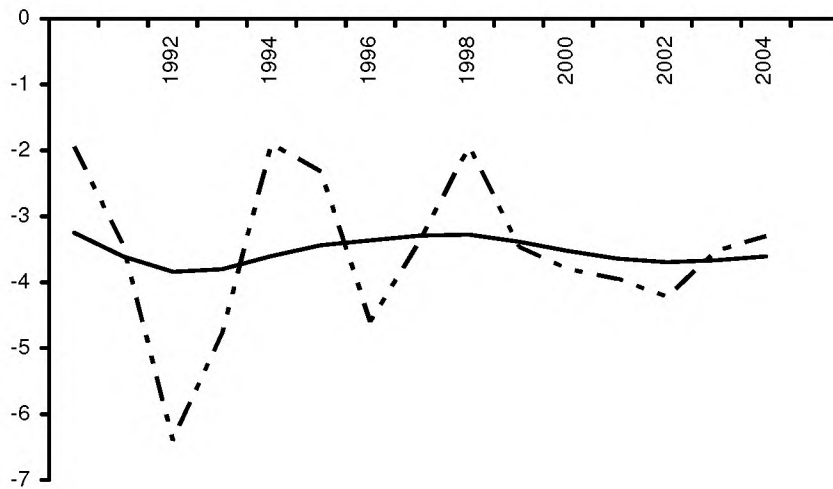
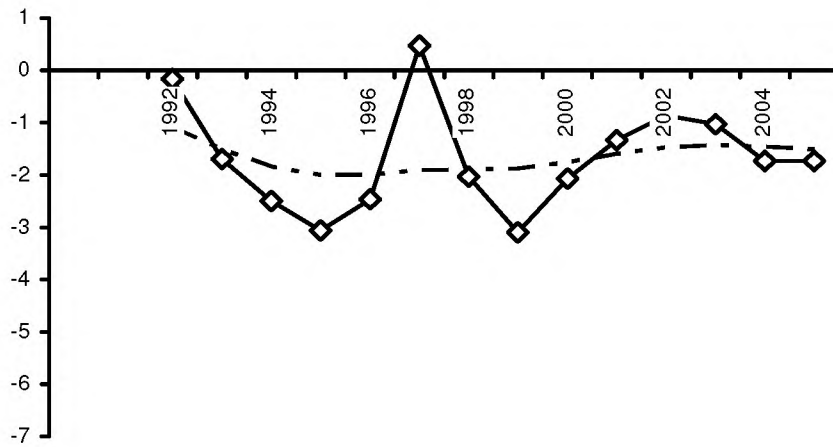
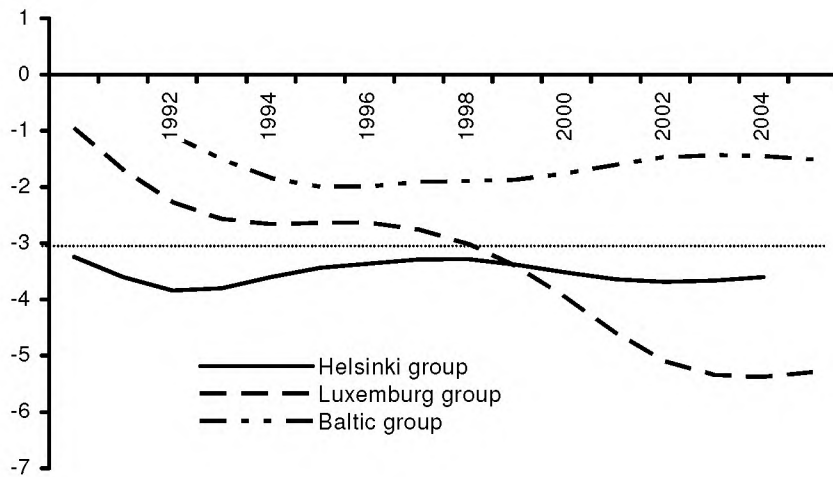


Figure 3.

c) The Baltic group



d) Trend values



Source: International Financial Statistics, Dresdner Bank, Bank Austria Creditanstalt, [21: 24].

In the longer-run, participation in the EMU will require an improvement in the fiscal-monetary policy aimed at the anti-cyclic demand management, raising the risk of a worsening of the current account in the case of the use of expansionary policies for the promotion of income growth. An important problem is created by a contradictory character of the fiscal policy mechanisms. Effectiveness of the economic policy coordination in general and fiscal policy in particular is determined by the effectiveness of a few among the budget balance determinants, such as: dynamics of GDP, interest rate, exchange rate and current account. On general a higher growth rate, compare with the growth rate of «old» EU member states, as one of the main products of the European integration, should improve the fiscal discipline, but under condition that economic growth generates sufficient budget revenues. Reliance upon the decline of interest rate, as a factor of behind reduction in internal and external indebtedness, also is dependent upon the interest rate sensitivity of the budget balance. Extra problems are created by the relationship between the budget balance and capital flows.

Empirical results

The data set covers 11 countries in total – Bulgaria, Estonia, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, Hungary, Croatia, and the Czech Republic, for the period 1990–2003. All time series are obtained from the IMF's *International Financial Statistics* and Austria Creditanstalt's *CEE Report*. Variables used in the analysis are as follows: BD_t and CA_t are the budget and current account balances (in percent of GDP), Y_t is GDP growth, $LIBOR_t$ is the London Inter-Bank Offer Rate, r_t is the interest rate (all in percent), E_t is a nominal exchange rate, and $EURO_t$ is the euro/dollar exchange rate. Estimates of the budget balance determinants are made with the use of OLS for a few alternative specifications, as presented in Tables 2 and 3. Relevant dummies controlled the country-specific effects.

According to the Fisher test, all specifications are statistically significant at the 1 percent level. The goodness-of-fit (measured by the adjusted R^2) shows that independent variables explain about 30 percent of the budget balance. The Durbin–Watson statistics does not reveal any significant autocorrelation of the residuals. For the sample of all 11 economies, coefficients on all independent variables fall short of establishing causality (Table 2). Regardless of a specification, the budget balance is characterized by a moderate inertia, as a coefficient on BD_{t-1} ranges from 0.27 to 0.43 percent being statistically significant at the 1 percent level. It means that a prospect for the self-correction of fiscal discipline must be viewed with a great deal of care. It is possible to argue that the country-specific effects are important.

Table 2.

Factors of the budget balance in the transformation economies, 1990–2003

Independent variables	Dependent variable – BD_t				
	I	II	III	IV	V
BD_{t-1}	0.360 (4.321*)	0.334 (3.959*)	0.432 (4.566*)	0.340 (4.018*)	0.345 (4.188*)
Y_{t-1}	0.047 (0.589)	–	0.128 (0.035)	–	–
CA_t	0.140 (1.580)	–	–	–	–
$LIBOR_t$	–	0.063 (0.855)	–	–	–
E_t	–	–	0.128 (1.564)	–	–
r_t	–	–	–	–0.031 (–0.377)	–
$EURO_t$	–	–	–	–	0.052 (0.713)
R^2	0.29	0.28	0.28	0.28	0.27
F -test	4.50*	4.78*	4.54*	4.54*	4.38*
DW	1.88	1.82	1.87	1.77	1.81

Note: * means statistical significance at the 1 percent level (** – 5 percent, *** – 10 percent).

Table 3.

Factors of budget balance in countries of the «Luxemburg» group, 1990–2003

Independent variables	Dependent variable – BD_t				
	VI	VII	VIII	IX	X
BD_{t-1}	0.357 (2.718*)	0.196 (1.419)	0.397 (3.057*)	0.328 (2.521**)	0.207 (1.511)
Y_{t-1}	0.289 (2.443**)	–	0.263 (2.188**)	0.361 (2.930**)	0.243 (2.153**)
CA_t	0.314 (2.261**)	–	–	–	0.407 (2.993*)
$LIBOR_t$	–	0.319 (2.734**)	–	–	–
E_t	–	–	0.205 (1.643***)	–	1
r_t	–	1	1	0.385 (2.557**)	–
$EURO_t$	–	–	–	–	0.283 (2.495**)
R^2	0.43	0.44	0.40	0.47	0.50
F -test	6.06*	7.38*	5.72*	6.76*	6.77*
DW	1.96	1.85	1.74	1.81	1.83

Note: * means statistical meaningfulness at the level of 1% (** – 5%, *** – 10%).

On determinants, quite different are the results for the sample of Luxemburg group countries (Table 3). Independent variables explain 40 to 50 percent of the budget balance, with most of the coefficients being statistically significant. A favorable effect of (lagged) GDP growth upon the budget balance for the most advanced pro-European integration countries is well established, as all coefficients on Y_{t-1} are high and statistically significant at the 5 percent level. This outcome is broadly in line with the autoregressive coefficient of 0.32 obtained by H. Berger, G. Kopits, and I. Székely [7: 9]. Annual growth of GDP of 4 percent, as it is predicted for the Luxemburg group countries for 2004–2005 by the experts of Austria Creditanstalt, is to improve the budget balance by 1.2 percent of GDP. Acceleration of GDP growth to 6 percent increases this figure to 1.7 percent of GDP, but it is not enough to meet the Maastricht budget criteria. It is reasonable to conclude that administrative measures to increase receipts and cut expenditures are a must to improve fiscal policy. It is a matter of concern that for a shorter sample of 1995–2003 a coefficient on Y_{t-1} becomes statistically insignificant, which may reflect a weaker tax collection during a period of capital inflow.

A positive effect of an increase in LIBOR upon the budget balance is relevant to the coefficient of correlation, and it strengthens argumentation about a capital inflow-motivated worsening of fiscal discipline. The impact of $LIBOR_t$ on fiscal discipline is strong enough, as its increase by 5 percentage points improves the budget balance by 1 percent of GDP (regression VI). This result supports a hypothesis that an increase in the budget deficit in 2000–2003 is caused by favorable external conditions.

Regardless of its primary source – independent or in connection to the capital inflow, a worsening of current account balance may cause serious problems for the fiscal policy, as every percent of the current account deficit is mirrored by a worsening of the budget balance by 0.3 percent of GDP (regressions VI and X). Deliberate targeting of the «investment» current account deficit is in conflict with the goal of fiscal discipline. The new Eastern European EU members have to find the ways of improvement in the foreign trade balance, which could jeopardize any attempts to join the EMU prematurely. Indirectly, an improvement of the current account balance is expected from an increase in the LIBOR rate, as it limits a capital inflow, of portfolio investments in the first place.

The devaluation of exchange rate improves the budget balance (regression VIII). A devaluation of 15 percent, as it is allowed by the Maastricht criteria, improves the budget balance of 3 percent of GDP. The depreciation of the euro in respect to the dollar has similar effects (regression X). This result may reflect such a line of reasoning: first, a weak euro stimulates an increase in exports, thus contributing to output growth; second, higher output leads to an increase in the tax revenue. Another argument can be traced to an anti-inflationary increase of interest rate in the euro area.

Somewhat unexpectedly, an increase in the interest rate brings about a worsening of the budget balance (regression IX), which could be explained by

high capital mobility. Assuming costs of public debt servicing, an inverse relationship between an interest rate and the budget balance would have been quite natural.

Conclusions

Our analysis reveals a similarity of the fiscal policy in the Eastern European countries during a financial stabilization and switch to a stable economic growth (by the mid-1990s), i. e. an initial improvement in the budget balance was followed by the worsening of fiscal discipline. A steep increase in the budget deficit in the most successful Luxemburg group countries on the eve of the EU entry incline to conclusion that differences in the fiscal policy are motivated by the process of European integration. Besides *Acquis Communautaire*, a worsening of the budget balance is likely to be caused by favorable external conditions, as signalized by the LIBOR, and attempts to materialize advantages of the intertemporal optimization of aggregate demand, assuming future accelerated income growth and a decrease in the interest rate. The effects of LIBOR upon the budget balance are very distinct. Significant increase of the budget deficit in the Luxemburg group in 2000 – 2003 looks resulted from a decline in the LIBOR, causing capital inflows and a decrease in the cost of foreign borrowing. There is a direct relationship between GDP growth and the budget balance for the Luxemburg group, which is lacking in the extended sample of 11 countries. It is possible to conclude that the accession of the Helsinki group will be accompanied with a similar worsening of the budget balance, with a present lack of positive income – budget balance relationship to cause serious concerns. Though successful continuation of the fiscal policy in the new EU member-countries looks dependent upon the mechanisms of intertemporal optimization of private and public consumption, it would be superficial to expect an evolutionary achievement of the fiscal discipline. In order to bring the budget deficit to a required level of 3 percent of GDP decisive administrative steps are required. In a wider context, instability of capital flows and a strong euro may be an obstacle for the intertemporal optimization. All said, flexibility of a nominal exchange rate is to be preserved for fiscal purposes.

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