

# Large Current Account Deficits – The Case of Central Europe and the Baltic States

Maciej Krzak<sup>1)</sup>

## **I Introduction**

In the early to mid-1990s, several Latin American and East Asian countries experienced large and persistent current account deficits. These developments raised the issue of whether these deficits are sustainable, i.e. whether they can be continued into the future. The potential unsustainability may lead to a currency crisis or to a debt crisis if macroeconomic policies are not adjusted in time. Such crises inevitably force a change in policy. The concern about sustainability has sparked interest in the economic literature on the factors with an impact on current account sustainability, and economists have elaborated a taxonomy of these factors. This paper attempts to apply the results to selected transition economies, namely the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, and Slovakia, some of which have been running considerable current deficits for a number of years and others which have just begun to recently. Hungary was the first among the examined transition countries to encounter serious balance-of-payments problems in 1995, triggering the adoption of a comprehensive austerity package. The fixed exchange rate regime of the Czech koruna did not survive currency speculation in May 1997, when the current account deficit was large. Other economies can still finance their deficits without much trouble, despite the fact that some of them (the Baltic states) have larger deficits than the Czech Republic.

This paper attempts to pinpoint the differences among these countries, which may have explanatory power based on each country's different experience. It is organized in the following manner. Section 2 presents a brief overview of the findings on current account sustainability in economic theory and supplements it with empirical evidence. In section 3, current account sustainability is analyzed country by country. The conclusions attempt to provide some generalizations.

## **2 Theory and Empirical Results**

The notion of sustainability of current account deficits is not well defined in the economic literature. The simplest definition is that a current account deficit is sustainable as long as foreigners are willing to finance it. Private capital flows are highly susceptible to changes in market sentiment, and therefore they are easily reversible, especially if they are short-term. The judgment about sustainability is *ex post*; a sudden breakdown of financing implies that it has not been possible to finance the deficit. This factual observation, however, does not enrich our knowledge at all, and one should take a step further and ask what kind of factors caused such a reversal in sentiment and hence in capital flows. One possible answer is that foreigners either doubted the ability to pay or the willingness to pay debt obligations caused by cumulative current account deficits.

This leads to the theoretical reasoning based on the intertemporal model of international borrowing and lending.<sup>2)</sup> International capital mobility allows to trade off present levels of absorption (consumption and investment) against future levels of absorption; a current account deficit is a result of the excess of investment over domestic saving, as the national accounting identity shows. Current account positions over time are the outcomes of

forward-looking dynamic saving and investment decisions, which are driven by expectations of future demand, productivity growth and interest rates determining returns. Current account deficits accumulate as external debts, which eventually have to be repaid. This is where the notion of sustainability enters: First, it is about the *ability to pay*. Current account deficits are sustainable as long as the continuation of current policies into the indefinite future does not violate the intertemporal budget constraint; a discounted sum of current accounts over time should be equal to the initial debt. This constraint is very flexible, as it does not say much about the time profile of current account positions, e.g. a country can run high deficits upfront accumulating as international debt, which will be repaid by means of surpluses worked out at later dates or vice versa. Given a current account deficit, one could calculate numerous current account paths into an indefinite future, which would be consistent with the requirement of intertemporal solvency. The strong indeterminacy would practically jeopardize an unambiguous judgment.

Thus, such an interpretation of current account sustainability is not very operational, as it assumes that certain parameters are constant into the future. Furthermore, current account positions are a result of public and private decisions, so the exclusive emphasis on a continuation of policies is misplaced.

A variant of this model applies the permanent income hypothesis, which provides the rationale for consumption smoothing. Current account deficits are a reflection of this process. A sudden rise in the permanent income of society should induce it to consume or invest more upfront to obtain a more equal pattern of consumption. Such a model can estimate a path of current account positions consistent with this assumption. Then actual deficits are compared with the ones specified in the model. If they are larger than the ones resulting from the model, they should be considered excessive, and a correction of policies is required.<sup>3)</sup>

The models outlined so far have focused on the ability to pay as a criterion of current account sustainability and have tacitly assumed that all debts will be honored. However, the ability to pay is not equivalent to the *willingness to pay*. Therefore the notion of current account sustainability should also take the latter into account if the perspective of a lender is taken into account. A rapidly growing debt ratio relative to GDP and/or an increasing debt service ratio may raise lenders' doubts about whether debts will ever be repaid. Therefore, they are unwilling to finance current account deficits if this ratio rises above a certain threshold or as it increases indefinitely. The simplest model of this situation is to impose a steady state with a constant foreign debt ratio to GDP as an upper limit for feasible debt.<sup>4)</sup> Then, the solvency requirement implies that the stock of foreign debt of the country can increase without limits as long as its rate of growth does not grow faster than the real interest rate, i.e. the ratio of foreign debt to GDP must not increase without bound. Therefore, the long-run net resource transfer (trade surplus) that an indebted country must undertake in order to keep the ratio of external liabilities to GDP constant has often been used as a simple measure of solvency. This often reduces those levels of

sustainable deficits as calculated from the previous model, since the limits of financing will decrease relative to those based on the model with the intertemporal budget constraint and assuming consumption smoothing over time.

However, this approach has its evident limits as well. Its shortcomings lie in giving no reference to the “optimality” of the debt-to-GDP ratio, because only its stability is weighed. Taking the case of transition economies, one may notice that protracted current account deficits may imply a transition of these countries toward a higher level of output, so that steady-state conditions are an inappropriate benchmark in judging the sustainability of these deficits. There is no presumption that a fast-growing economy with a low level of external liabilities should aim at stabilizing the ratio of external liabilities to GDP or to exports at the current level.

The bottom line of these models is that no simple theoretical rules exist that can help determine whether the current account is sustainable or not. The lack of data often makes the whole exercise inoperational as well; such is the case of Central and Eastern European economies, as their time series are very short. Therefore the latest efforts concentrated on an empirical verification of economic and political indicators which could be used to evaluate the sustainability of current account deficits.<sup>5)</sup> The ongoing research has identified various variables which impact current account sustainability.

The identified macroeconomic indicators are economic growth, the investment rate, export performance, openness to trade, the real exchange rate and the size of the current account deficit relative to GDP. Financial variables such as domestic credit expansion, stock market performance and loan quality, which describe the health of the financial system, were also found relevant. Prudential regulation and supervision are accounted for as well. A lack of confidence in the financial system of a given country will inhibit the willingness of foreigners to finance the current account by participating in the domestic economy. The ratio of broad money (M2) to foreign currency reserves, the size of short-term liabilities relative to total debt and foreign currency reserves are useful in evaluating a country's vulnerability to sudden swings in investor sentiment. The degree of currency convertibility plays a role as well, especially within the capital account; obviously, more convertible regimes allow for more currency speculation. External variables such as foreign interest rates and the terms of trade help in the assessment of resilience to various shocks.

Political instability may cause uncertainty about the economic environment, and may lead to a lack of confidence in the economy. A change of political regime to one that is not committed to sound macroeconomic policies or even a risk of a policy change to a bad mix can reduce the willingness of international market players to provide financing for the current account deficit. The loss of macroeconomic policymakers' credibility tends to undermine confidence in the economy among domestic and foreign financial domestic players. A bad track record of macroeconomic policy will also affect the sustainable level of the current account gap adversely. A high potential for social or ethnic strife will deter financial inflows as well.

Finally, there is evidence that currency crises tend to spread to other countries. Awareness of this fact leads to a closer scrutiny of markets by financial investors after each crisis episode, and they tend to withdraw capital from countries which are assessed as vulnerable because they have characteristics similar to those of a crisis country or because of expectations that their policies may lead to instability in the near future.<sup>6)</sup>

Research is underway on how to rank these different indicators and eventually translate them into a general synthetic measure of sustainability or vulnerability to external shocks.<sup>7)</sup> So far the results have proven to be the following. Large current account gaps relative to GDP do not automatically imply current account unsustainability regardless of other factors. *Ceteris paribus*, the current account imbalance is likely to be less sustainable if it is large relative to GDP, if it happens due to a decline in savings rather than due to an increase in investment, and if national savings are low. A high current account deficit may result from borrowing to finance viable investment projects whose risk-return characteristics are better than elsewhere. The current account gap becomes less sustainable the higher the trade deficit is while a negative net factor income can imply a withdrawal of profits from completed investment projects and/or be a remnant of previously high foreign debt. A higher degree of openness enhances current account sustainability. A more open country has fewer incentives to renege on its external obligations and should have less trouble servicing its debt.

The real exchange rate appreciation questions the sustainability of a current account deficit if it means a misalignment relative to inflation or to an equilibrium position. If it results from the positive differential of labor productivity growth, then it signals the strength of the economy rather than implying weak exports.

The composition of capital flows seems to matter.<sup>8)</sup> The longer-term the capital inflow is, the less likely a need for a reversal of the negative current account position appears. Large inflows concentrated in time are likely to be highly reversible, thus impairing current account sustainability, and they exert upward pressure on the domestic currency rate of exchange, which will tend to worsen the competitiveness of exports.

The ratio of foreign currency reserves to imports seems to be more important than the ratio of reserves to M2. A worsening of the terms of trade makes countries more vulnerable to current account reversals, as capital inflows slow in anticipation of yawning trade deficits and an imminent devaluation of the home currency.

High international interest rates in industrial countries make deficits less sustainable, as they reduce the incentives for capital to flow to emerging economies. Furthermore, their sudden rise may lead to problems with debt servicing. In this respect the international evidence is ample, as the world experienced a debt crisis in the 1980s.

### 3 Current Account Deficits – The Case of Selected CEECs

In this section, the methodology outlined in section 2 will be applied to get some insight into the sustainability of current account deficits in selected economies in transition. They include the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia. The concern about their large current account deficits is evident. The analysis is unstructured, as tests of formal models such as consumption smoothing are impossible due to the lack of long time series in these countries; large current account deficits have a history of mostly four years. The list of variables which is used to formulate an assessment of the sustainability of current account deficits is limited due to shortcomings of data. It includes the GDP growth rate, the budget deficit-to-GDP, investment-to-GDP, foreign debt-to-GDP, the short-term debt-to-total debt, the debt service, foreign direct investment-to-current account deficit (FDI/CA) and the portfolio flows-to-current account ratios, the real appreciation relative to labor productivity growth in industry or the economy, the foreign currency reserves-to-M2 ratio and foreign exchange reserves as months of imports. References are made to political stability wherever appropriate. All conclusions are drawn on the basis of the attached country tables, which should be read with the text.

The highest ranks as warning signals are given to the current account deficit-to-GDP ratio, real exchange rate appreciation adjusted for labor productivity in industry, and indicators of domestic credit expansion. Based on studies by other authors, these variables have sent the fewest false signals as early warning indicators of balance-of-payments crises.<sup>9)</sup> The first two variables are rather self-explanatory; large current account deficits expose an economy to shifts in foreign capital movements while a real appreciation adjusted for the productivity growth differential may adversely affect the trade balance. The link to banking crises is less obvious. Kaminsky and Reinhard (1996) provided evidence that banking crises and currency crises are closely linked. They studied 76 episodes in five developed and 15 emerging economies over 1970 to 1995. The causality link between the two types of crises is not clear-cut from a theoretical point of view; the empirical evidence favors the causality chain from banking crises to currency crises, but not the other way around. Similar domestic shocks such as a weakening of exports, high real interest rates, a stock market decline or an increase in domestic credit expansion tend to trigger both types of crises. Most banking crises were preceded by rapid domestic financial liberalization.

#### 3.1 Czech Republic

The Czech Republic experienced a currency crisis in May 1997, as the only country in the analyzed group. This indirectly points to the unsustainability of its current account deficit. The underlying characteristics were the following (see Table 1). The current account deficit was large as a proportion of GDP: In 1996, it reached 8.3% of GDP and widened further in the first quarter of 1997.

The real appreciation of the koruna is evident, as the country maintained the nominal fixed<sup>10)</sup> exchange rate in the period 1991 to 1997, but its rate

was lower than productivity gains in industry, which would suggest that it was justified by fundamentals. On another measure (see Table 8), labor productivity was 36% higher in 1997 than in 1992 related to the real exchange rate appreciation of 33.7% against the PPI in this time span, confirming that it should not cause a decrease in competitiveness. However, from 1992 to 1996, unit labor costs grew by 62.7%, suggesting that the gains have all been consumed, which renders industry uncompetitive. This latter fact squares with the stagnation of export revenue in terms of dollars in 1996. In the first quarter of 1997, export growth turned negative. An economic slowdown in major partner countries is also a factor to be reckoned with and possibly not negligible.

Domestic credit expansion was not strong in real terms (Table 1), so it did not finance a consumption boom or asset bubbles. However, the bleak situation of the Czech banking sector has become more and more evident, with a number of bankruptcies occurring in 1996. Substandard loans hovered around 37% of the total in 1996; this ratio has been stable for three years.<sup>11)</sup> Bank privatization was far from complete, and information transparency was poor. In the Czech Republic, private or state-owned firms or banks were borrowers on international financial markets. Because they worried about the solvency of the banking system, foreign investors decided to withdraw in time, realizing that Czech foreign borrowing had increased rapidly. The total debt service ratio (including amortization) was still modest in 1997 (Table 1), but the rapid growth of foreign debt featured a high share of short-term debt compared to the other analyzed transition economies, though still less than a third of the total. Nevertheless, a relatively large amount of short-term foreign capital could be withdrawn quickly.

The negative assessment was supported by other facts. Potential upcoming problems financing the current account deficit were signaled by the fall of foreign currency reserves. The trend reversal started in July 1996. The 1997 fall in reserves is connected mostly with the unsuccessful attempt to defend the fixed exchange rate by heavy intervention at the end of May 1997. The ratio of international reserves to domestic M2 also declined, and was the lowest among the discussed economies, which raised the vulnerability to a speculative attack under a relatively liberal regime of convertibility of the koruna. Prior to membership in the OECD, the Czech Republic freed a considerable portion of capital flows.

The Czech problems were compounded by the worsening fundamentals at the beginning of 1997, as industrial production slowed, unemployment increased and expectations of a slowdown arose amid new government projections revising economic growth downward. In 1996, GDP growth almost halved in comparison with 1995. The budget position, which had been in surplus for years, displayed a tendency to worsen, and a deficit was expected in 1997.

On fixed capital formation, which stood above 30% on average in 1995 to 1997, one would qualify the Czech Republic as matching the East Asian economies. This ratio is closer to between 20% and 25% in other transition economies, but it has not seemed to produce a difference in growth performance. This observation led to the question of the viability of

investment projects. The share of the public sector was high, as Czechs have a huge nuclear plant under construction.

Furthermore, the political situation of the country became unstable, as the coalition had only a slim majority after the elections, and cracks in the coalition began to form once economic problems had started to mount. The government program of fiscal consolidation announced in April 1997 was not evaluated as sufficiently bold by financial markets. The macroeconomic stabilization of the government was evaluated positively, but the structural measures to deal with inefficiencies on the microeconomic level, in particular with the weakness of corporate governance and a lack of supervision of financial markets, were assessed as timid and inadequate. Therefore confidence in the economy waned further.

This confluence of factors finally led to a currency crisis. Short-term capital became more and more scarce in late 1996, up to the point of massive outflows triggering a short-lived currency crisis at the end of May 1997. It can be speculated whether the Thai crisis was a direct trigger. The hypothesis of contagion is tempting, as both countries displayed common features: high current account deficits, weak and vulnerable banking systems, fixed nominal exchange rates, growing external indebtedness and falling international reserves.<sup>12)</sup> Furthermore, an increase in risk aversion due to a crisis in Thailand might adversely affect the Czech Republic, whose fundamentals were discouraging at that time. It should be noted as well that each country

Table 1

<b>Czech Republic</b>				
<b>Selected Indicators of Current Account Sustainability</b>				
	1994	1995	1996	1997 p
Current account USD million	- 745.0	- 1,362.0	- 4,292.0	- 3,156.0
Current account % of GDP	- 2.2	- 2.9	- 8.3	- 6.1
Exports USD million	15,968.0	21,463.0	21,691.0	22,528.0
Imports USD million	17,307.0	25,140.0	27,568.0	26,967.0
FDI USD million	749.0	2,526.0	1,388.0	1,275.2
Foreign direct investment/CA deficit %	100.5	185.5	32.3	40.4
Portfolio investment USD million	855.0	1,362.0	726.0	1,085.7
Portfolio investment/CA deficit %	114.8	100.0	16.9	34.4
GDP growth %	3.2	6.4	3.9	1.0
Investment/GDP %	30.0	31.0	35.6	30.0
Budget deficit % of GDP	0.9	0.5	- 0.1	- 1.0
Real exchange rate index 1992 = 100	122.0	125.4	132.6	133.7
Real exchange rate change %	3.5	2.8	5.7	0.8
Labor productivity change in industry %	5.1	10.6	8.6	9.2
FX reserves USD million, eop	6,145.0	13,843.0	12,352.0	9,778.0
FX reserves as months of imports	4.3	6.6	5.4	3.3
FX reserves % of domestic M2	21.3	38.7	32.6	33.1
Gross foreign debt USD billion, eop	10.7	16.5	21.2	21.6
Debt service to exports %	15.7	11.2	11.9	n. a.
Gross foreign debt to GDP %	33.9	36.4	40.7	n. a.
Short-term debt % of total foreign debt	27.0	31.8	29.6	32.7
Domestic credit expansion % change, eop	17.2	13.1	11.3	10.6
CPI % change	10.0	9.1	8.8	8.5

Source: WIIW database incorporating national statistics, BIS (the real exchange rate is based on producer prices, trade-weighted against 21 countries), IFS March 1998 (GDP, investment), CNB (foreign debt, short-term debt in 1997, exports, imports, current account deficit, foreign currency reserves), Global Development Finance 1998 (total debt service, short-term debt until 1996), own calculations. CA = current account, FX = foreign exchange, eop = end of period, p = preliminary.

fit the assumptions of the first generation of models of a currency crisis, in which fundamental determinants of exchange rates, such as trade deficits, are inconsistent with a given parity. Fundamental imbalances are interpreted by market participants as a signal that a realignment will occur sooner or later, so they rush to attack the currency before it is too late.<sup>13)</sup>

The currency crisis forced a switch from a fixed exchange system to a managed floating exchange rate. The subsequent devaluation of the currency tended to boost exports, while a slowdown in economic activity and mandatory deposits at the central bank led to a reduction in imports in dollar terms. The current account deficit declined to 6.1% of GDP in 1997. The current account gap is projected to fall further in 1998. The devaluation of the koruna could have some impact on the persistence of inflation, though it is rather the overdue hikes of regulated prices which tended to ratchet it up.

### 3.2 Estonia

If the level of a current account deficit served perfectly well as an indicator of a potential currency crisis, then Estonia and other Baltic states should have experienced one; their deficits relative to GDP exceeded the Czech deficit at the time of the Czech currency crisis. However, no crisis has occurred so far, which is indirect proof that the size of the current account deficit is only an imperfect indicator. Estonia has had a large current account deficit for four consecutive years; it has been uptrending for the last three years. In 1997, it reached 13% of GDP compared with 9.8% in 1996, growing by 65% in nominal terms. The deficit is highly correlated with the trade deficit, which has been widening since 1992.

Numerous other factors positively distinguish Estonia from the Czech Republic (Table 2). The country has experienced robust and accelerating growth since 1995 and prospects are positive; a certain slowdown is necessary to prevent an overheating, which threatened in 1997 when inflation stopped falling. Exports and foreign exchange reserves have been rising. Estonia has a strong and improving fiscal position, low foreign debt and a currency board arrangement (CBA). It undertook intensive structural reforms. As in the case of the Czech indicators, the negative factors are a rapidly appreciating exchange rate in real terms and a worsening mix of financing the current account gap. Estonia negatively distinguishes itself from the Czech Republic by its extremely rapid domestic credit expansion.

The Estonian kroon has strongly appreciated in real terms since 1992. Despite that, exports have been growing rapidly in Deutsche mark terms, suggesting that the real appreciation has not been a major factor in reducing their competitiveness. It can be assumed that labor productivity has grown enough to offset the appreciation.

The central bank's foreign currency reserves continued to increase (at the rate of 19.4% year on year in 1997) despite the rising current account deficit, and they covered almost three months of imports at the end of 1997; this located Estonia at the lower end among the examined economies. The ratio improved slightly in 1997. Due to the rapid growth of reserves, the ratio of foreign currency reserves to domestic broad money (MD) increased to 65% at the end of 1997 from 52% at end of 1996, a favorable

development shielding against currency turbulence.<sup>14)</sup> This high ratio is linked to the CBA mechanism, which has been operating since 1992; the CBA had earned credibility as a cornerstone of economic policy. Unlike in Lithuania, devaluation has never been in Estonian policymakers' cards.<sup>15)</sup>

Estonia's foreign currency debt has been rising rapidly in recent years due to commercial bank and enterprise foreign borrowing, but its ratio to GDP is still relatively small – hardly a case for concern in a rapidly expanding economy. It does not give rise to questioning the ability or the willingness to pay. The share of short-term debt has displayed a steep uptrend, but the ratio is still lower than in the Czech Republic or Slovakia: 26% in 1996.<sup>16)</sup> The debt service ratio was a negligible 2% in 1996 and will not pose a problem for a number of years to come. Estonia was rated by the major rating agencies for the first time in 1997, and it obtained investment grades higher than most countries in transition, including the remaining Baltic states.

The most important negative factor is that domestic credit expansion has been extremely rapid in real terms in the last three years (Table 2), and was funded by massive borrowing from abroad due to the sizeable interest rate differential. Lax lending by banks coincided with an exorbitant stock exchange increase (the index climbed 300% in the first eight months of 1997), so an asset bubble could have developed on its back. The pace of credit expansion sends a warning signal, as the economy strongly relies on credit, and a potential slowdown of economic growth or other factors leading to a reduction in profits of firms might impair their ability to service debts. This could shake the banking sector, which seems sound and profitable after the restructuring following the banking crisis in 1992 according to available statistics. Such an unprecedented growth of credit usually implies a deterioration of their quality as well; there is no evidence on that in the case of Estonia, where overdue loans were only 1.2% in December 1997 compared with 2.5% in December 1996. All banks met the raised minimum capital adequacy ratio in 1997. The banking sector has been consolidating since the crisis in 1992, which should strengthen its resilience to shocks.

The growing reliance of the financing of the current account deficit on portfolio investment influenced the sustainability of the deficit adversely. Net FDI amounted to 21.5% of the current account gap in 1997; this ratio had been decreasing in the last two years, while net portfolio investment reached 43.5% of the current account gap. Other investment (which means foreign loans) has risen spectacularly as well; the split between short-term and long-term loans is not confirmed by the balance-of-payments statistics. These statements should probably be qualified for an interesting observation; the income account deficit accounted for over 23% of the current account deficit in 1997 due to a rise in income by foreigners in Estonia, and because the income Estonians earned abroad was approximately the same as in 1996. This represents a quantitative difference from previous years. As the income deficit is registered as an outflow, it tends to exacerbate the current account deficit, but most of it flowed back as a capital account inflow. Such a "recycling" of foreign factor profits eases the current account financing needs and enhances the sustainability of the current account deficit.

A large current account deficit, an appreciation of the real exchange rate and a rapid expansion of domestic credit generally point to the increasing vulnerability of an economy to a balance-of-payments crisis. However, Estonia has not encountered problems financing the deficit up to now. Policymakers have realized that current account deficits of this size can be unsustainable into the future. They started acting when signs of overheating became visible in 1997; the disinflation process stopped while Estonia experienced a GDP growth rate of almost 12% (in real terms) in the first half of 1997. The crash of the stock market in late October 1997 (share prices dropped by 50% within a few days) in the wake of the Asian turmoil was a foretaste of what yet may come if confidence in the Estonian economy wanes. In the fall, the minimum capital adequacy ratio was raised to 10% to tighten liquidity and, more importantly, the government moved abroad the funds from the stabilization fund in the fourth quarter of 1997 in order to reduce the monetary base. The central bank also changed its methods of calculating the required reserve ratios; they are now higher.<sup>17)</sup> As a result of these moves, interbank interest rates rose abruptly, leading to a slowdown in the credit activity of commercial banks; the stock of loans hardly changed in the last three months of 1997.<sup>18)</sup> At the start of 1998, policymakers signaled their readiness to take additional measures to dampen domestic demand if the current account deficit does not decrease. Partial figures for the first two months of 1998 did not point to a change in the current account

Table 2

**Estonia****Selected Indicators of Current Account Sustainability**

	1994	1995	1996	1997 p
Current account EEK million	-2,127.6	-1,899.0	-5,108.5	-8,452.1
Current account USD million	- 165.0	- 165.4	- 423.1	- 608.9
Current account % of GDP	7.0	4.6	10.1	13.0
Exports USD million	1,327.4	1,856.3	1,787.6	2,093.3
Imports USD million	1,682.5	2,530.0	2,831.5	3,279.8
Foreign direct investment/CA %	129.9	149.8	26.0	21.5
Portfolio investment/CA %		- 13.4	34.9	43.3
Other investments account %		43.0	68.3	71.0
GDP growth %	- 1.8	4.3	4.0	11.4
Gross fixed capital formation/GDP %	25.9	25.1	n. a.	n. a.
General gov't budget balance/GDP %	0.9	0.3	- 1.6	1.5
Real exchange rate index 1992=100	279.0	339.4	380.8	399.7
Real exchange rate change %	30.1	21.6	12.2	5.0
FX reserves USD million, eop	443.4	579.9	636.8	760.3
FX reserves as months of imports	3.0	2.8	2.5	2.9
FX reserves % of domestic M2	62.1	57.1	52.1	65.0
Gross foreign debt USD million, eop	186.0	286.4	405.3	n. a.
Debt service to exports %	2.0	1.1	2.1	n. a.
Gross foreign debt to GDP %	4.9	7.0	9.3	n. a.
Short-term debt % of total foreign debt	4.3	10.4	26.4	n. a.
Domestic credit expansion % change, eop	n. a.	63.1	98.2	83.3
Overdue loans % of total loans, eop	3.4	3.1	2.5	1.2
CPI % change	47.7	29.0	23.1	11.2

Source: WIW database incorporating national statistics, BIS (the real exchange rate is based on producer prices, trade-weighted against 21 countries), IFS March 1998 (GDP, investment), Bank of Estonia (balance of payments, FX reserves), Global Development Finance 1998 (total debt service, short-term debt), own calculations.

CA = current account, FX = foreign exchange, eop = end of period, p = preliminary.

trends. This may prompt an additional fiscal consolidation drive; so far, Estonia has planned a state budget surplus of 1.8% of GDP for 1998, but its fiscal policy may become even more restrictive if stability is threatened.

The sustainability of the current account deficit can be enhanced by the fact that Estonia is a tiny economy by capital market standards. Its current account gap, though a breathtaking 13% of GDP in 1997, is less than USD 0.5 billion. It takes only a small fraction of funds of numerous portfolio investors diversifying their holdings across currencies to finance such a small deficit.

### 3.3 Hungary

Hungary was the first central European country to experience serious problems with current account sustainability. These problems started in 1993, but became acute in late 1994 and early 1995. At that time, the country faced a twin deficit problem, as its budget deficit had been high for a number of years; it was above 5% of GDP in 1992 to 1994, with prospects for another increase in 1995 had the policy pursued hitherto been continued. In 1993, the current account deficit reached 11% of GDP and fell to 9.8% in 1994. The surge of the deficit was sudden, as the current account was in small surplus in 1992 (Table 3).

The deterioration came due to a huge 19.6% drop in exports in dollar terms in 1993, which was accompanied by a similar growth of imports in dollar terms. This fall in exports was caused by a number of factors. The real appreciation of the forint is one of them, an introduction of a bankruptcy law which eliminated numerous firms with marginal exports is another, and, finally, a poor harvest, which reduced agricultural exports. These developments may have raised serious doubts concerning the ability to repay the rapidly risen foreign debt (a possible violation of the intertemporal budget constraint). Since the late 1970s, Hungary has been a highly indebted country whose debt service ratio was very high; it relied on rollovers and contracting new debt to meet its obligations. In 1989 to 1990, it had already faced current account problems, which financial market participants surely remembered. The debt service volume had been rapidly rising from 1992 to 1994; i.e. it grew from 49% to 74%. The willingness to pay could not have been doubted, as Hungary had had a proven track record of timely debt service for many years, including the period of the world debt crisis in the early 1980s, but its *ability to pay* may have been questioned.

A drop in FDI by more than 50% in 1994, which was mainly caused by a slowdown of the privatization process in the year of Parliamentary elections, exacerbated the problems with financing the current account gap. Foreign portfolio investment was lower in 1994 than in 1993 because of the reduced foreign debt issuance by the central bank, which faced a shift of market sentiment at the end of 1994 due to the lack of a proper policy response to the high current account deficit for two years in a row. The share of portfolio investment in financing the current account deficit became increasingly important when the share of foreign direct investment fell considerably in 1993 to 1994. Two facts may have deterred a potential speculative attack. Foreign reserves kept well at that time; they were high

relative to domestic M2 and imports. Furthermore, the external debt structure was favorable, as short-term debt was negligible (Table 3). Domestic credit expansion did not keep up with inflation from 1992 to 1994.

As mentioned above, it was evident to any observer that the country suffered a twin deficit problem and needed a decisive fiscal adjustment to contain it. Moreover, Hungary used monetary financing to fund the budget deficit, despite its efforts to finance it on unresponsive private markets. It could have been argued that foreign savings financed private and public consumption in Hungary, which did not enhance the ability to service future obligations. In this environment, a rising investment rate from a low level could not change this perception; Hungary was not a high-investment, rapid-growth economy at that time.

The impact of the real appreciation of the forint is unclear. On the one hand, a considerable real appreciation by 10.8% (as measured by producer prices) took place in 1991, but as only a small depreciation occurred in 1992, it can hardly be responsible for the collapse of exports in 1993, unless it became effective with a very long lag. The modest appreciation of 1993 was offset by the real depreciation of 1994, when exchange rate policy started addressing the problem of the deteriorating current account. Labor productivity in industry had been falling from 1990 to 1992, but it rose at an impressive double-digit rate in 1993 to 1994 (Table 8), so it paid off the real strengthening of the domestic currency in that period. Thus the real appreciation of the exchange rate (as calculated by producer prices) cannot be a factor in dampening exports in 1994, as gains in labor productivity in industry outstripped the appreciation by far.

Hungary's problems with financing the deficit mounted in the aftermath of the Mexican crisis in December 1994.<sup>19)</sup> A hypothesis that contagion effects spread is plausible. An increase of risk aversion on international financial markets led to scrutiny aimed at singling out other potential crisis countries. One of them was Argentina, another one was Hungary, as some Hungarian fundamentals were found to be similar to those in Mexico: a large current account gap, huge external debt, falling exports. There were differences as well: a negative one – a high budget deficit in Hungary, and a positive one – large and stable foreign exchange reserves in Hungary.

Hungary addressed its balance-of-payments problems by launching a resolute stabilization program in March 1995, which proved successful in reducing the current account deficit to 5.8% of GDP in 1995 at the cost of dampened economic growth and a temporary rise in the inflation rate. The initial devaluation of the forint by 9% and the introduction of an 8% import surcharge made imports more expensive. Also, a crawling peg system was phased in with an initial monthly devaluation rate of 1.9% to the basket.<sup>20)</sup> Real wages were cut considerably, which improved the profitability of export output and decreased domestic demand. Budget policy was tightened to achieve considerable surpluses of the primary deficit, and structural reforms were speeded up, in particular privatization; the budget deficit stopped growing in terms of GDP in 1995.

In the case of Hungary, large current account deficits, combined with a real appreciation of the domestic currency (falling exports), high budget

deficits (twin deficit problem), high external debt ratios and contagion (Mexican crisis) seem to have been the factors leading to the current account unsustainability. One should therefore watch carefully for such a combination to identify crisis-prone countries.

Under such circumstances a bold fiscal adjustment is indispensable to correct the existing imbalances. The program taken up by the Hungarian authorities in March 1995 had lasting effects in improving the situation, as the authorities have stuck to its principles since then. Of the countries reviewed in this paper, Hungary had the smallest current account deficit in terms of GDP (2.2% in 1997), as it has constantly reduced this ratio since 1994. Hungary also cut the ratio of foreign debt to GDP, using part of its ample foreign reserves in 1996 and 1997 (along with privatization revenues) to pay back the debt, which enhanced its ability to pay.

Table 3

## Hungary

### Selected Indicators of Current Account Sustainability

	1992	1993	1994	1995	1996	1997
Current account USD million	324.0	- 3,455.0	- 3,911.0	- 2,480.0	- 1,678.0	- 981.0
Current account % of GDP	0.9	- 11.1	- 9.8	- 5.7	- 3.8	- 2.2
Exports USD million	10,028.0	8,094.0	7,613.0	12,810.0	14,183.0	19,637.0
Imports USD million	10,076.0	11,340.0	11,248.0	15,252.0	16,828.0	21,371.0
FDI USD million	1,479.0	2,350.0	1,144.0	4,519.0	1,982.0	2,261.0
Foreign direct investment/CA deficit %		68.0	29.3	182.2	118.1	230.5
Portfolio investment USD million		3,919.0	2,464.0	2,212.0	- 869.0	- 1,047.0
Portfolio investment/CA deficit %		113.4	63.0	89.2	- 51.8	- 106.7
GDP growth %	- 3.1	- 0.6	2.9	1.5	1.3	4.4
Gross fixed capital formation/GDP %	19.9	18.9	20.1	20.0	21.5	n. a.
Budget deficit % of GDP	- 6.7	- 5.6	- 5.5	- 5.5	- 1.9	- 4.1
Real exchange rate index 1992 = 100	100.0	105.9	100.6	96.0	98.9	108.7
Real exchange rate change %	- 1.8	2.0	- 7.0	- 4.4	4.4	5.3
Labor productivity change in industry %	- 4.7	13.4	15.7	10.2	9.4	13.5
FX reserves USD million, eop	4,428.0	6,771.0	6,810.0	12,052.0	9,795.0	8,800.0
FX reserves as months of imports	5.3	7.2	7.3	9.5	7.0	4.9
FX reserves % of domestic M2, eop	26.9	47.4	47.8	97.0	74.1	64.4
Gross external debt USD billion, eop	22.0	24.3	28.2	31.5	27.0	n. a.
Debt service to exports %	49.5	54.5	74.1	54.7	59.0	n. a.
Foreign debt to GDP %	58.2	63.8	68.9	71.5	62.4	n. a.
Short-term debt % of foreign total debt	10.4	8.2	8.5	10.2	12.5	n. a.
Domestic credit expansion % change, eop	1.0	9.7	14.2	9.4	19.5	34.0
CPI change %	23.0	22.5	18.8	28.2	23.6	18.3

Source: Global Development Finance 1998 (external debt), IFS (FX reserves), Bank of Hungary (real exchange rate based on PPI - plus means appreciation, current account, exports, imports), WIW (gross capital formation, labor productivity of firms with more than 20 employees), own calculations.

Note: Data on domestic credit expansion between 1992 and later years are not comparable.

CA = current account, FX = foreign exchange, eop = end of period, p = preliminary.

### 3.4 Latvia

Latvia's current account (Table 4) switched from a surplus of 5.5% of GDP in 1995 to a deficit of 8.8% in 1996. In 1997 the deficit was estimated at around 8% of GDP, so the growth of the deficit was arrested at a high level. The current account deficit is highly correlated with the trade deficit, like in the other countries. The analysis of the presented indicators leads to the conclusion that the current account imbalance was more sustainable in 1997

than in it was 1996, since the inflation rate fell (Latvia had the lowest inflation rate among the Baltic states), GDP growth accelerated and foreign exchange reserves grew, while the current account deficit stabilized. The FDI cover of the deficit was close to 80% in the first half of 1997, while portfolio inflows were negligible. The state finances have been consolidated since 1995, and the central government ran a surplus in 1997, so in principle the deficit is a result of private decisions. This enhances the sustainability of the deficit, even though it would be too optimistic to assume that all borrowing would pass a test of efficiency, but future individual solvency should have been taken into account by lenders at least in theory. Furthermore, Latvia's foreign debt is still a low proportion of GDP (9.4% in 1996), as is the debt service ratio (4.3% in 1996). Short-term debt is small relative to total debt (1996: 9.4%) and foreign currency reserves (less than 10% in 1996). The ability to pay or the willingness to pay cannot be questioned then. In 1997 Latvia was rated an investment grade by both S&P's and Moody's after the first examination in its history.<sup>21)</sup>

The appreciating real exchange rate is not a concern, as exports have been growing rather rapidly for a number of years. Latvia has maintained a fixed exchange rate against the SDR basket since the introduction of its own currency in 1992, a cornerstone of its counterinflationary policy.

In 1997, Latvia became a high-growth economy, as GDP growth in real terms accelerated to around 6.5% from 3.3% in 1996. The breakdown of GDP into consumption and investment is not available, so it is impossible to judge to what extent the current account deficit finances consumption growth or investment. Structural reforms have gained momentum since 1996, which improved the image of the country among investors; FDI inflows accelerated. Latvia has stepped up its privatization efforts of large enterprises, including those in infrastructure. These privatizations attract foreign capital, so the country can count on an inflow of equity investment. Latvia is making substantial efforts to become a viable candidate for inclusion into the first wave of countries, which have already started accession negotiations with the EU.

The central bank's foreign currency reserves have been trending upward since 1995. They covered more than three months of imports in 1997, and this ratio has been stable for three years in a row. They also covered almost 70% of domestic broad money, which protects the Latvian currency against a rapid switch of domestic deposits into foreign currency deposits. During the banking crisis in 1995, the fixed exchange rate regime was never in question, and it may be claimed that such a large foreign exchange cover played a stabilizing role in this respect.

Domestic credit expansion rose nominally by a very strong 77% (63% in real terms) in 1997 after two years of real decline. Such a rise would normally send a worrying signal, but not necessarily in the aftermath of a banking crisis whose impact should be accounted for. This rapid rise is due to catching up with the pace of economic recovery. Unclassified assets were slightly below 10% of total assets in December 1997, an improvement from December 1996. Nonperforming loans fell from 20.4% of total loans at the end of 1996 to 9.8% at the end of 1997.

So far, Latvia has had no problems financing the current account deficit with a capital account surplus. However, three relevant indicators pointed to an increasing vulnerability to a balance-of-payments crisis in 1997 when they are considered in isolation: the high current account deficit, the appreciating real exchange rate and the rapid domestic credit expansion. On the other hand, improved fundamentals increase the credibility of the country's macroeconomic policy. Furthermore, like Estonia, Latvia is a very small economy, so it needs only a negligible fraction of funds circulating on international financial markets to cover its current account gap.

Table 4

**Latvia****Selected Indicators of Current Account Sustainability**

	1994	1995	1996	1997	comments
Current account USD million	201.0	- 16.0	- 454.0	- 442.5	
Current account % of GDP	5.5	- 0.4	- 8.8	- 8.0	
Exports USD million	1,022.0	1,368.0	1,502.0	1,216.2	Q'1-3
Imports USD million	1,322.0	1,947.0	2,429.0	1,904.3	Q'1-3
Foreign direct investment/CA deficit %		1,122.5	72.2	78.6	H'1
Portfolio investment/CA deficit %	n. a.	0.0	0.0	0.0	H'1
GDP growth %	0.6	-1.6	3.3	6.5	
Investment/GDP %	n. a.	n. a.	n. a.	n. a.	
Central government budget % of GDP	- 1.9	- 3.8	- 0.8	1.2	
Real exchange rate index 1992 = 100	345.2	357.6	396.8	430.5	
Real exchange rate change %	32.5	3.6	11.0	8.5	
FX reserves USD million, eop	545.2	505.7	654.1	704.0	
FX reserves as months of imports	4.9	3.1	3.2	3.3	H'1
FX reserves % of domestic M2	62.1	74.6	83.3	69.1	
Gross external debt USD million, eop	373.8	462.6	472.2	n. a.	
Debt service to exports %	2.5	2.5	4.3	n. a.	
Foreign debt to GDP %	10.2	10.4	9.4	n. a.	
Short-term debt % of total foreign debt	1.6	6.7	9.4	n. a.	
Domestic credit expansion % change, eop	36.2	- 44.1	3.5	77.0	
CPI change %	35.9	25.1	17.7	8.4	

Sources: BIS (real exchange rate based on producer prices, state budget, CPI), Global Development Finance 1998 (total debt, short-term debt), Bank of Latvia (domestic money supply and domestic credit expansion), own calculations.

Note: Figures on domestic credit expansion are distorted from 1995, as the licenses of seven banks were revoked.

CA = current account, FX = foreign exchange, eop = end of period, p = preliminary.

**3.5 Lithuania**

The current account deficit has been hovering in the range of 10% of GDP for three years in a row (Table 5). In 1997 the current account gap amounted to around 9.9% of GDP versus 9.2% in 1996.<sup>22</sup>) Judging by the indicators in Table 5, the deficit was less sustainable in 1995 than in 1997, as a number of indicators improved over time. Lithuania had a twin deficit problem back in 1995; subsequently the budget deficit was cut considerably in 1996 to 1997. The structure of financing the current account deficit has improved. The share of portfolio inflows has surged in the financing of the deficit from 12.4% to 38.5% in 1997; the share of FDI also increased from 21.1% to 37.5%.

Economic growth has accelerated, which helped reduce the general budget deficit. While the deficit originally projected for 1997 was 1.9% of

GDP, the actual performance was better at 1.3%. GDP grew by an estimated 5.7% in real terms in 1997, compared with 4.7% in 1996 and 3.0% in 1995. Lithuania may have entered a phase of rapid growth in 1997, which enhances its evaluation by international financial investors. The breakdown of GDP into demand components is unavailable, so the share of investment is unknown. The 1998 government budget is based on a GDP growth rate of 7.0%, which may prove overly optimistic, but a strong expansion is broadly expected. Inflation fell to single digits in 1997, which points to an increasing stabilization of the economy. Like Latvia, Lithuania has recently expressed a commitment to accelerate structural reforms; in particular, large enterprises, among them in the infrastructure sector, are slated for privatization. They will be offered to strategic investors, including foreigners. If successfully implemented, this process should attract new equity investment inflows, which will cover a growing proportion of the current account imbalance.

The real appreciation of the currency has been considerable since 1992 (Table 5), but exports in dollar terms continued to grow at a rapid pace, which suggests that competitiveness has not been dented. Lithuania has maintained a CBA since April 1994, fixing the litas rate to the dollar.

Foreign currency reserves have been growing in dollar terms (in 1997, they increased by 30.8%), but are still relatively low, as they cover slightly over two months of imports. They account for a high proportion of domestic broad money (M2D), which is the result of the CBA, so an attack on the currency can be sustained.

Foreign debt is still at a low ratio of GDP (1996: 15.4%) and its servicing does not pose any problems (1996: 3.8% of exports). Short-term debt also accounts for only a small proportion of total debt (1996: 12%). Hence any concern about the future ability to pay would be misplaced. Lithuania was given an investment grade by S&P's in its first rating ever, and was upgraded by Moody's a notch to a still speculative Ba1 at the end of 1997.

The pace of domestic credit expansion does not send a warning signal. The banking system is still fragile. It has recovered from the crisis of 1995 and 1996, and domestic credit rose by 20.7% in 1997. All banks comply with the minimum capital adequacy ratio (capital made up 15.9% on average of total liabilities of commercial banks in the fourth quarter of 1997), and the amount of unclassified assets decreased to 12.1% of total assets in the fourth quarter of 1997. However, the three state-owned banks posted losses during the first nine months of 1997, and their share in total deposits exceeds 50%. The state-owned Agricultural Bank and State Commercial Bank have been exempted from prudential regulation until their privatization. Only a successful divestiture of these institutions by the state could decisively strengthen the Lithuanian banking sector by injecting new capital.

A planned exit from the currency board regime could adversely affect the sustainability of the current account if it were implemented poorly. Also from this perspective, it would be reasonable for the state to spin off the state banks before the CBA is dismantled. This would give more warranties

that the state would not easily place its securities with them afterwards, so it would have more incentives to continue running a responsible fiscal policy.

The large current account deficit and the real appreciation are warning signals. However, the sustainability of the current account deficit is enhanced by the smallness of the economy (see Estonia and Latvia) and expectations of its robust economic growth and privatization.

Table 5

<b>Lithuania</b>				
<b>Selected Indicators of Current Account Sustainability</b>				
	1994	1995	1996	1997
Current account USD million	- 94.0	- 614.4	- 722.6	- 944.5
Current account % of GDP	- 2.2	- 10.2	- 9.2	- 9.9
Exports USD million	2,029.2	2,706.1	3,281.6	4,173.5
Imports USD million	2,234.1	3,404.0	4,168.7	5,288.5
Foreign direct investment/CA deficit %	33.3	11.8	21.1	37.5
Portfolio investment/CA deficit %	4.9	4.3	12.4	37.7
GDP growth %	- 9.8	3.3	4.7	5.7
Consolidated government deficit % of GDP	- 5.0	- 5.3	- 3.6	- 1.3
Real exchange rate index 1992 = 100	371.0	416.1	499.0	576.5
Real exchange rate change in %	49.7	12.2	19.9	15.5
FX reserves USD million, eop	525.5	757.1	772.2	1,010.0
FX reserves as months of imports	2.8	2.7	2.2	2.3
FX reserves % of domestic M2	65.6	72.9	75.4	70.6
Gross foreign debt USD million, eop	494.0	763.0	1,286.0	n. a.
Debt service to exports %	3.4	1.6	3.8	n. a.
Foreign debt to GDP %	11.8	13.9	15.4	n. a.
Short-term debt % of total foreign debt	6.0	7.0	12.0	n. a.
Domestic credit expansion % change, eop	71.3	0.5	- 5.5	20.7
Unclassified assets of banks				
% of total assets, eop	n. a.	20.7	20.1	12.1
CPI change %	72.2	39.6	24.6	8.8

Source: BIS (real exchange rate based on producer prices, CPI), IFS (current account, foreign currency reserves, budget deficit), Global Development Finance (foreign debt), Bank of Lithuania (exports, imports, money supply, domestic credit expansion), own calculations.

CA = current account, FX = foreign exchange, eop = end of period, p = preliminary.

### 3.6 Poland

Poland is the only country in the group which has not experienced a relatively large current account deficit. However, a rapid reversal of the current account position from a surplus of 4.6% of GDP in 1995 to a deficit of 1% in 1996 and its further widening in 1997 prompted a discussion on its sustainability right after the Czech koruna crisis had taken place. Finally, the level of the current account deficit was within a sustainable range in 1997; it reached just 3.2% of GDP versus the 5% projected by the central bank in summer 1997. In the second half of 1997, the deterioration of the deficit slowed down considerably, and signs of leveling off have appeared. Export growth has picked up while import growth slowed visibly. However, it is still premature to claim that the worsening current account deficit has been arrested by policy measures, including a rise in key interest rates, an increase of minimum reserve requirements and liquidity drainage operations of the central bank (collection of time deposits from the public) as well as fiscal

restraint; the budget deficit was 1.3% of GDP in 1997 instead of the originally projected 2.8% (including privatization receipts).

The real appreciation of the exchange rate was modest in Poland and did not exceed productivity gains in industry (Table 8). It has been mitigated by a crawling peg mechanism, which has been operating in Poland since 1991.<sup>23</sup>) Despite visible progress with disinflation in 1997, the rate of crawling devaluation was not reduced because of concern about the rising current account imbalance.

A high proportion of the Polish current account – above 70% – is financed by FDI inflows. The share of portfolio investment is on the rise, but did not exceed 20% in 1997. Foreign borrowing by firms is still modest. The central bank's foreign currency reserves continued to increase from USD 18.0 billion at the end of 1996 to USD 20.7 billion at the end of 1997, when they covered 6.4 months of imports, one of the highest ratios among the transition economies reviewed here. These reserves were also a high proportion of the domestic money supply (50%), indicating that the central bank is in a position to countervail a speculative attack on the domestic currency.

The pace of domestic credit expansion was strong in 1996 and 1997, and a matter of policy concern. However, due to tight monetary policy measures, it started trending downward in 1997. Rapid credit expansion usually raises doubts about the quality of credits; the share of substandard loans in Poland has been downtrending for a number of years and dropped to 10.4% of total loans in 1997. Loans to households have increased almost twice as rapidly as loans to enterprises. While prudential ratios were improving, defaults on consumer loans increased, which is a signal that banks should provision them more substantially. The banking system is relatively sound, and all large banks are posting profits. These profits were reduced in 1997 from 1996 levels in real terms due to the central bank's policy of high minimum reserve requirements and a rise in deposit interest rates forced by the central bank; it collected deposits from households at fixed interest rates higher than those of commercial banks to make banks raise their deposit rates. The sector is undergoing consolidation with the participation of foreign capital. Privatization was stepped up in 1997 and should continue vigorously in 1998.

Polish foreign debt has been downtrending, as the ratio to GDP and the debt service is low (1996: 10.5%). The country used to be highly indebted and had had a history of rescheduling and interest rate arrears in the 1980s and early 1990s before it benefited from debt forgiveness and the final restructuring of the debt owed to private banks in 1994. Since then, Poland has serviced its obligations on time, and has continued to reduce the debt burden, so the postulate of a nonrising debt-to-GDP ratio has not been violated. There are no theoretical reasons to question the country's ability and willingness to pay for the time being. Short-term debt is negligible, so a reversal of short-term inflows would be manageable.

In recent years, Poland has been a rapidly growing economy whose inflation has been falling gradually. In 1997 it posted 6.9% GDP growth while investment grew by more than 20%, meaning that the rising current account deficit could be treated as a sign of an intensive restructuring of the

economy. The investment share in GDP has been mounting, though it is still relatively low. It is evident that expanded imports have also financed increased consumption, which, however, can be justified. Prospects of long-term growth lead to a revision of permanent income, so current consumption should also increase along the lines of an intertemporal consumption smoothing model (life cycle hypothesis). Such models can be verified only after decades of growth, once time series are long enough to validate statistical inference.<sup>24</sup>) Thus, whether such an adjustment has gone too far or not will remain a matter of subjective judgment on the basis of unstructured analyses of economic indicators.

As mentioned above, the current account deficit proved sustainable in 1997: Capital inflows offset the shortfall entirely and allowed for an increase in foreign currency reserves. The Asian crisis had only a temporary impact on the zloty, which quickly recovered, as the country's fundamentals are favorable: It has a strong growth record, high investment, falling inflation according to projections, and the budget and current account deficits were lower than expected. Furthermore, the large foreign currency reserves of the central bank are high enough to temporarily cushion any potential disruption in financing and to allow for the adoption of the necessary policy steps to ease the pressure. Hence, the risk of a one-off devaluation is remote; it would be signaled by the setting in of adverse tendencies such as a considerable worsening of the reserve-to-imports ratio or a visible rise in a short-term debt ratio (see Slovakia).

Table 6

<b>Poland</b>				
<b>Selected Indicators of Current Account Sustainability</b>				
	1994	1995	1996	1997 p
Current account USD million	2,270.0	5,455.0	- 1,352.0	- 4,268.0
Current account % of GDP	2.5	4.6	- 1.0	- 3.1
Exports USD million	16,950.0	22,878.0	24,420.0	27,229.0
Imports USD million	17,786.0	24,705.0	32,574.0	38,498.0
Foreign direct investment/CA deficit %			202.7	72.6
Portfolio investment/CA deficit %			17.8	n. a.
GDP growth %	5.2	7.0	6.1	6.9
Investment % of GDP	15.9	18.0	20.2	21.8
Budget deficit % of GDP	2.7	2.6	2.5	1.3
Real exchange rate index 1992 = 100	103.1	107.4	111.7	114.4
Real exchange rate change %	- 4.0	4.2	4.0	2.4
Labor productivity change in industry %	13.1	6.6	9.6	11.9
FX reserves USD million, eop	6,029.0	14,963.0	18,033.0	20,670.0
FX reserves months of imports	4.1	7.3	6.6	6.4
FX reserves % of domestic M2	26.5	44.5	45.8	49.9
Gross foreign debt USD billion, eop	42.6	42.3	40.9	38.5
Total debt service to exports %	18.3	17.8	10.5	n. a.
Foreign debt to GDP %	45.5	37.3	30.1	28.3
Short-term debt % of total foreign debt	2.0	0.5	0.2	n. a.
Domestic credit expansion % change, eop		34.7	42.7	33.2
Nonperforming loans as % of total loans	28.7	20.9	13.2	10.4
CPI % change	32.2	27.8	19.9	14.9

Sources: BIS (real exchange rate based on producer prices), NBP (money supply, current account, FX reserves, domestic credit expansion), Global Development Finance (external debt until 1996), WIIW (labor productivity), own calculations.  
CA = current account, FX = foreign exchange, eop = end of period, p = preliminary.

In this favorable macroeconomic environment, high interest rates adjusted for an expected devaluation of the zloty tend to draw short-term capital. Thus, a possible increase in the current account deficit by 1% to 2% of GDP should not pose problems with financing. Financial markets usually start fretting when the deficit reaches 5% of GDP. Poland is the largest economy in the group, so its current account is relatively large in nominal terms, which may impose an additional constraint on the readiness of financial markets to finance the gap. To cope with changes in sentiment on financial markets, Poland widened the band of exchange rate fluctuations from 7% to 10% on either side of the central parity rate. A further widening in order to increase uncertainty about the future course of the exchange rate of the domestic currency and to stem the inflow of short-term capital attracted by high interest rates and the predictable zloty exchange rate cannot be ruled out.

### 3.7 Slovakia

The country experienced twin deficits for two years and is bound to close 1998 with a twin deficit again. The current account position turned around at a breathtaking pace, switching from a surplus of 2.2% to a deficit of 11.0% in just one year (Table 7). Exports stagnated while imports grew rapidly; the current account deficit is highly correlated with the trade deficit, as in the other countries in the examined group. In 1997 the current account gap fell to 6.7% of GDP, as administrative measures taken by the government caused an improvement. In July 1997, an import surcharge of 7% was introduced, and a change for the better started: Despite strong economic growth in 1997, imports in terms of dollars fell by about USD 0.8 billion. This instrument is scheduled to be phased out by the end of 1998, so the future tendency of the current account position is unclear. Tight monetary policy was used as well to dampen domestic demand: Real interest rates fluctuated above 13% annualized in 1997. FDI inflows finance only a small part of the current account gap, which is largely closed by foreign borrowing with a growing share of short-term financing. Portfolio inflows are negligible.

The worsening of the current account position was reflected in the fall of the central bank's foreign currency reserves, which also sank as a cover of imports in 1996. Foreign currency reserves stood at USD 3.2 billion at the end of 1997, which was equivalent to 3.8 months of import dollar expenditure, nearly unchanged from 1996.

A large current account deficit can be a signal that the country is undergoing profound restructuring by means of an investment process. Slovakia has been a fast-growing economy for four years, and, as it enjoys one of the lowest inflation rates in Central and Eastern Europe, its inflation record is impressive among transition economies. The rate of investment in Slovakia matches the East Asian rates, but this reflects large government projects whose efficiency is unclear. The state budget deficit was 5.7% in 1997, up from 4.4% of GDP in 1996. Therefore the long-term sustainability of Slovakia's rapid economic growth may be questioned and may be one of the reasons – along with other factors increasing uncertainty, such as the

poor shape of the corporate sector and political instability – why inward FDI has been only a trickle.

The real exchange rate appreciated, as Slovakia adheres to a fixed exchange rate regime, but the growth of labor productivity in industry practically compensated this strengthening (Table 8). The viability of the exchange rate system may face yet another test. Further disinflation will be slow in view of the delay in increases of regulated prices. In 1997 adjustments of indirect taxes and some regulated prices halted the disinflation process, despite an extremely tight monetary policy. If inflation rises, real appreciation could continue at a rate impairing the competitiveness of exports.

Slovak gross foreign debt has mounted rapidly in recent years, and the debt-to-GDP ratio has been on the rise. At the end of November 1997, foreign currency debt reached USD 10.7 billion versus USD 6.4 billion a year before. It can be argued that an emerging and fast-growing economy can sustain a growing debt burden, especially if debt starts from low levels, but such a rapid accumulation of indebtedness is a matter of concern. The share of foreign debt in GDP rose to 41.2% in 1996 and further increased to over 50% in 1997. The proportion of short-term debt reached 38% already in 1996 and certainly increased in 1997. The debt service ratio was low in 1996 (Table 7), but a potential need to repay short-term obligations if they are not rolled over may trigger financing problems. Furthermore, the condition of the Slovak banking sector is rather weak; the third largest bank, *Investicna a rozvojova banka* (Investment and Development Bank), was put under state control due to high losses and undercapitalization. In Slovakia, a potential currency crisis could spark a banking crisis, as banks' foreign currency exposure is large.

The Slovak fixed exchange system has survived the attacks on the Czech koruna and ripples from the Asian crisis.<sup>25)</sup> In the light of some indicators, this is indeed a puzzle. One factor in this steadfastness is that small foreign investments (negligible portfolio flows) do not provide much room for currency speculation. Moreover, domestic residents still face restrictions on the convertibility of the koruna, so they cannot start converting their savings into foreign currencies en masse. In contrast to the loose fiscal policy, monetary policy has been the tightest in the region, with real interest rates at times exceeding 15%, so investors are rewarded with very attractive interest rates. The deficit was financed by foreign borrowing, which was relatively easy to obtain on account of the country's investment grade rating. The recent downgrading of Slovakia to a speculative grade by Moody's and a change of outlook from stable to negative by S&P's will certainly make borrowing more difficult in 1998.<sup>26)</sup>

The autocratic style of the ruling coalition, which is sometimes on a collision course with the declared goal of European integration and in sharp contrast to the practice of neighboring countries, tends to enlarge its vulnerability. Slovakia failed to become a first-wave candidate for EU accession strictly due to political reasons. This negatively impacts flows of capital into the country, which have been rather modest compared to those of the peer group up to now.

Slovakia is vulnerable to a balance-of-payments crisis on four counts: It has a high current account deficit, an appreciated real exchange rate, a weak banking sector and high external debt with a rising proportion of short-term obligations. Under such circumstances, the level of international reserves may prove to be insufficient to cope with potential disruptions in financing the current account deficit, especially if imports start growing again after a repeal of the import surcharge.

Table 7

<b>Slovakia</b>				
<b>Selected Indicators of Current Account Sustainability</b>				
	1994	1995	1996	1997 p
Current account USD million	719.0	390.0	- 2,090.0	- 1,300.0
Current account % of GDP	5.2	2.2	- 11.0	- 6.7
Exports USD million	6,743.0	8,591.0	8,824.0	8,792.0
Imports USD million	6,634.0	8,820.0	11,106.0	10,263.0
Foreign direct investment/CA deficit %			13.4	n. a.
Portfolio investment/CA deficit %			1.4	n. a.
Other investment/CA deficit %			109.2	n. a.
GDP growth %	5.0	7.3	6.6	6.5
Gross fixed capital formation/GDP %	29.5	29.2	36.6	n. a.
Central government deficit % of GDP	- 5.2	- 1.6	- 4.4	- 5.7
Real exchange rate index 1992 = 100	119.1	123.4	128.6	137.7
Real exchange rate change in %	2.1	3.6	4.2	7.1
Labor productivity change in industry %	8.0	6.8	4.1	5.1
FX reserves USD million, eop	1,691.0	3,364.0	3,419.0	3,230.0
FX reserves as months of imports	3.1	4.6	3.7	3.8
FX reserves % of domestic M2	n. a.	31.3	29.1	27.6
Gross external debt USD billion, eop	4.7	5.8	7.8	10.7
Debt service to exports %	9.1	11.3	11.9	n. a.
Foreign debt to GDP %	31.3	33.6	41.2	56.1
Short-term debt % of total foreign debt	26.6	30.2	38.3	n. a.
Domestic credit expansion % change, eop	1.5	13.7	20.5	3.8
CPI change %	13.4	9.9	5.8	6.1

Sources: IFS, March 1998 (GDP, gross capital formation, imports), BIS (real exchange rate based on producer prices), WIIW (labor productivity of firms employing at least 100 employees), Global Development Finance 1998 (foreign debt), Monetary Survey of NBS (total loans to the economy), own calculations.  
CA = current account, FX = foreign exchange, eop = end of period, p = preliminary.

Table 8

<b>Labor Productivity in Industry</b>		
	1997 p 1989 = 100	1997 p 1992 = 100
Czech Republic	113.6	136.0
Hungary	152.3	179.0
Poland	142.2	161.0
Slovakia	93.3	113.0
Slovenia	128.3	145.0

Sources: The Vienna Institute for Comparative Economic Studies (WIIW).

#### 4 Conclusions

This paper attempts to provide an analysis of several indicators used in the literature to evaluate the sustainability of current account deficits in the case of Central and Eastern European economies in transition. However, generalizations are risky because the sample of countries is small and the time frame is too short, since these countries have run large deficits relative to GDP for only a short period of time.

The following regularities can be observed. The indicators should not be studied in isolation from each other. A large deficit relative to GDP does not have to cause problems with financing or a currency crisis; the Baltic states ran current account deficits larger than that of the Czech Republic and did not experience disruptions of their funding. Therefore the analysis of sustainability should take other variables into account; this squares with the recent research in this area.<sup>27)</sup> The case of the Czech Republic confirms that a balanced budget is not enough of a shield against a currency crisis. However, twin deficits increase vulnerability, as the case of Hungary before 1995 shows. A fall in exports and concomitant foreign currency reserves featured in both Hungary and the Czech Republic, the two countries which have experienced the gravest difficulties with financing their deficits. The Czech Republic and Hungary also shared another feature: high external indebtedness. The level of financial integration of these countries with the world has grown to the extent that contagion effects can spill over to them. The Czech crisis was preceded by the Thai crisis, while Hungary was affected by the Mexican crisis.

The other stylized facts are the following. Trade deficits are the main causes of the current account deficits in this group of countries; exports in dollars have been growing more slowly than imports in dollar terms have expanded. The evidence that real appreciation is a negative factor is rather inconclusive, since gains in industrial labor productivity tend to offset its impact. The need for modernization and pent-up consumer demand are equally valid explanations. This would suggest that economic agents perceive a rise in their permanent incomes and adjust the levels of spending to these new income levels (consumption and investment smoothing over time). This hypothesis cannot be tested because the time series are too short. Smaller economies in the group tend to run larger current account gaps than the bigger economies.

The cyclical component of the current account deficits should not be disregarded. The widening of the deficits coincides with the slowdown of economic growth within the EU, the largest partner in 1996, and a pickup of economic activity in Central Europe. In 1997 the current account deficits expanded more slowly than in 1996 or in fact reversed, which coincided with a quickening of growth in the EU. In a number of countries, current account deficits actually fell relative to GDP, qualifying this statement for a change in macroeconomic policies as well.

The Asian crisis did not diminish the possibilities of financing the current account deficits of the examined economies (with the exception of the Czech Republic, where the Asian crisis coincided with the internal political crisis and an overall crisis of confidence); the inflow of foreign capital continued.

The countries experienced only temporary disruptions on financial markets, in particular on stock exchanges following the market declines in Southeast Asia and industrial countries. The currencies of the Czech Republic, Hungary, Poland and Slovakia, i.e. those which are allowed to fluctuate within certain margins, displayed increased volatility in the same periods, while the rigid exchange rate regimes of the Baltic states were never threatened. In the first quarter of 1998, the currencies were stable again, experiencing upward pressure in the case of the Czech Republic, Hungary and Poland.

Editorial close: June 1, 1998.

## References

- Buch, Claudia M. and Ralph P. Heinrich.** 1997. "The End of the Czech Miracle?" Kiel Discussion Papers 301 (June).
- Eichengreen, Barry, Andrew K. Rose and Charles Wyplosz.** 1996. "Contagious Currency Crises: First Tests." In *Scandinavian Journal of Economics* 98(4): 463–484.
- 1995. "Exchange Market Mayhem: The Antecedents and Aftermath of Speculative Attacks." In *Economic Policy* 21 (October): 249–312.
- Frankel, Jeffrey A. and Andrew K. Rose.** 1996. "Currency Crashes in Emerging Markets: Empirical Indicators." In *Journal of International Economics* 41 (November): 351–366.
- Ghosh, Atish R. and Jonathan D. Ostry.** 1995. "The Current Account in Developing Countries: A Perspective from the Consumption Smoothing Approach." In *The World Bank Economic Review* 9(2): 305–333.
- Kaminsky, Graciella and Carmen M. Reinhart.** 1996. "The Twin Crises: The Cause of Banking and of Balance-of-Payments Problems." FRB International Finance Discussion Paper 544 (March).
- Kaminsky, Graciella, Saul Lizondo and Carmen M. Reinhart.** 1997. "Leading Indicators of Currency Crises." IMF Working Paper WP/97/79 (July).
- Knight, Malcolm.** 1998. "Current Accounts: What Is Their Relevance for Policymaking?" In *Current Account Imbalances in East and West: Do They Matter?* Conference proceedings, Oesterreichische Nationalbank (forthcoming).
- Krugman, Paul.** 1979. "A Model of Balance-of-Payments Crises." In *Journal of Money, Credit and Banking* 11: 311–325.
- Milesi-Feretti, Gian Maria and Assaf Razin.** 1997. "Sharp Reductions in Current Account Deficits: An Empirical Analysis." In *Current Account Imbalances in East and West: Do They Matter?* Conference proceedings, Oesterreichische Nationalbank (forthcoming).
- 1996 a. "Current Account Sustainability." *Princeton Studies in International Finance* 81 (October).
- 1996 b. "Current Account Sustainability: Selected East Asian and Latin American Experiences." IMF Working Paper WP/96/110 (October).
- Obstfeld, Maurice and Kenneth Rogoff.** 1996. *Foundations of International Macroeconomics*. Cambridge, Mass.: MIT Press.
- Ostry, Jonathan D.** 1997. "Current Account Imbalances in ASEAN Countries: Are They a Problem?" IMF Working Paper WP/97/51 (April).

- Reisen, Helmut.** 1997. "Sustainable and Excessive Current Account Deficits." OECD Development Center.
- Singh, Anoop.** 1998. "Current Account Imbalances: A Case Study of Thailand." In Current Account Imbalances in East and West: Do They Matter? Conference proceedings, Oesterreichische Nationalbank. (forthcoming).
- Tornell, Aaron, Jeffrey Sachs and Andreas Velasco.** 1996. "Financial Crises in Emerging Markets: The Lessons from 1995." Brookings Papers on Economic Activity II.

- 1 *I am grateful for comprehensive remarks by Peter Backé (OeNB), Niina Pautola (Bank of Finland) and Olga Radzyner (OeNB). The usual disclaimer applies.*
- 2 *See Knight (1998).*
- 3 *See Ghosh and Ostry (1996).*
- 4 *See Reisen (1997).*
- 5 *See Milesi-Feretti and Razin (1996) and (1997).*
- 6 *See Eichengreen et al. (1995) and (1996).*
- 7 *See Kaminsky and Lizondo (1997), Razin (1997).*
- 8 *See Frankel and Rose (1997).*
- 9 *See World Economic Outlook, IMF (1998).*
- 10 *The peg to the basket of DEM (65%) and USD (35%).*
- 11 *See Buch and Heinrich (1997).*
- 12 *See Singh (1998).*
- 13 *See Krugman (1989) for an early exposition of such a model and Obstfeld and Rogoff (1996) for a survey of models.*
- 14 *Domestic money is broad money minus foreign currency deposits.*
- 15 *After Parliamentary elections in the fall of 1996, the new Lithuanian government signaled its willingness to dismantle the currency board arrangement and wanted to devalue the domestic currency, but backed off when the litas was threatened with a free fall.*
- 16 *It is much lower than in the crisis-prone East Asian economies.*
- 17 *Liabilities vis-à-vis foreign banks, which had been exempted before, were made subject to reserve requirements.*
- 18 *The average interest rate on overnight loans jumped from 5.72% in September 1997 to 17.02% in December 1997.*
- 19 *For a description of the Mexican crisis see Tornell and Sachs (1996).*
- 20 *The forint currency basket at that time was: ECU (70%) and USD (30%). Since then, the DEM (70%) has replaced the ECU.*
- 21 *S&P's: BBB and Moody's: Baa2.*
- 22 *The GDP estimate was preliminary as of writing.*
- 23 *The basket of five currencies, among them the 45% USD and 35% DEM, has not been modified since its introduction in 1991. The original rate of crawl was 1.8% monthly versus the basket.*
- 24 *See Ghosh and Ostry (1996) for evidence on East Asia.*
- 25 *The peg to the basket: DEM (60%) and USD (40%).*
- 26 *From Baa3 to Ba2.*
- 27 *See Milesi-Feretti and Razin (1996) and (1997).*