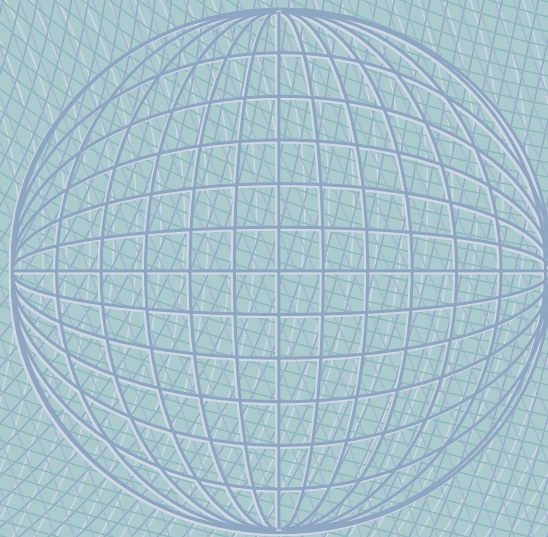




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Editor in chief:

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Contributions:

*Peter Backé, Sandra Dvorsky, Maciej Krzak, Andreas Nader, Niina Pautola, Olga Radzyner
Foreign Research Division*

Editorial work:

*Johannes Chudoba, Olga Radzyner, Inge Schuch, Rena Sperl
Foreign Research Division*

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Schwarzspanierstraße 5, A-1090 Vienna, Austria

Postal address: P.O. Box 61, A-1011 Vienna, Austria

Telephone: (+43-1) 404 20, ext. 2345

Fax: (+43-1) 404 20 2399

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Contents

Imprint	2
Editorial	5
RECENT ECONOMIC DEVELOPMENTS	
Developments in Selected Countries	8
<i>Maciej Krzak</i>	
STUDIES	
Large Current Account Deficits – The Case of Central Europe and the Baltic States	22
<i>Maciej Krzak</i>	
<i>A number of transition economies from Central and Eastern Europe have recently run large current account deficits, which raises the question of the sustainability of such deficits. This paper draws on theoretical results and empirical findings to determine the factors that impact on current account sustainability. Moreover, it addresses the issue of the sustainability of large current account shortfalls by analyzing a number of relevant economic indicators in the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia. As the country sample is small and the time frame short, statistical inferences are impossible and generalizations are difficult to make. The main conclusion is that large current account deficits do not automatically imply problems with their financing or even a currency crisis. However, a combination of large current account deficits with a budget deficit, falling foreign currency reserves, real appreciation, strong domestic credit expansion or contagion effects are a likely crisis trigger.</i>	
The Introduction of the Euro: Implications for Central and Eastern Europe – The Case of Hungary and Slovenia	47
<i>Peter Backé and Olga Radzyner</i>	
<i>The study deals with the implications the introduction of the euro has for advanced transition countries from Central and Eastern Europe. It examines the EMU-related aspects of EU Eastern enlargement, looks into the economic effects the introduction of the euro will have on Central and Eastern European economies and discusses the policy challenges EMU poses for the EU applicant countries. In the analysis, the examples of Hungary and Slovenia are used to illustrate the effects and implications monetary integration has and will have for the Central and Eastern European countries.</i>	
Currency Boards in Central and Eastern Europe – Experience and Future Perspectives	72
<i>Niina Pautola and Peter Backé</i>	
<i>The 1990s have witnessed a revival of currency board arrangements. Central and Eastern Europe has played a major role in this process: Estonia, Lithuania, and more recently Bulgaria have adopted this distinctly rule-based monetary framework. The study reviews the experience of these three countries with or under their currency board regimes to date and analyzes the future perspectives of these arrangements in Central and Eastern Europe, in particular against the backdrop of the unfolding transition process and the prospective integration into the European Union.</i>	

OENB ACTIVITIES	
Lectures organized by the Oesterreichische Nationalbank	116
The Current Economic Situation in Bulgaria –	
First Experiences after the Introduction of the Currency Board – <i>Roumen Avramov</i>	116
The EBRD Transition Report – <i>Christof Rühl</i>	118
Capital Market Development in Transition Economies – <i>Eva Thiel</i>	120
Fiscal Federalism in Russia: Evolution, Problems and Prospects – <i>Stephan Barisitz</i>	122
The “East Jour Fixe” of the Oesterreichische Nationalbank –	
A Forum for Discussion	125
Preparation of EU Enlargement – The Commission’s View – <i>Albrecht Rothacher</i>	126
Attitudes toward EU Accession in the Czech Republic, Hungary, Poland, Slovakia, Slovenia and Austria – <i>Christian Haerpfer</i>	127
Eastern Enlargement of the EU:	
How Much Is It Worth for Austria? – <i>Wilhelm Kohler</i>	128
Presentation of the DG II Spring 1998 Forecast for the Central and Eastern European Countries – <i>Andries Brandsma</i>	129
Conference on Current Account Imbalances in East and West: Do They Matter?	131
Technical Cooperation of the Oesterreichische Nationalbank with Central and Eastern European Transition Countries	133
STATISTICAL ANNEX	
<i>Compiled by Andreas Nader</i>	
Gross Domestic Product	136
Industrial Production	136
Unemployment Rate	137
Consumer Price Index	137
Trade Balance	138
Current Account	138
Total Reserves minus Gold	139
Central Government Surplus/Deficit	139
Gross Debt in Convertible Currencies	140
Exchange Rates	140
Discount Rates	141

The views expressed are those of the authors and need not necessarily coincide with the views of the Oesterreichische Nationalbank.

Editorial

The semiannual periodical of the Oesterreichische Nationalbank "Focus on Transition" is already in its third year of publication. This compilation is addressed to all readers with an interest in developments in Central and Eastern Europe.

Like the previous issues of the Focus on Transition, this volume is divided into four parts: The first section is an update of recent economic developments in the Czech Republic, Hungary, Poland, Slovakia and Slovenia. The second section, the studies section, contains three studies. A third section follows with a summary of the latest activities of the Oesterreichische Nationalbank on transition topics (lectures, discussions, an international conference, technical cooperation and the like), and a statistical annex concludes this edition of Focus on Transition.

The first study examines the timely issue of the sustainability of current account deficits. The paper draws on theoretical and empirical findings and specifically analyzes the relevant economic indicators in the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia. The small country sample and the very short time precluded the use of econometric models; moreover, it thwarts any attempt at drawing a broadly general conclusion.

The second study investigates the implications of the introduction of the euro for advanced transition economies. The paper examines EMU-related aspects of EU enlargement, the economic effects of the introduction of the euro and the policy challenge of EMU for EU applicant countries. The study illustrates the effects and implications of monetary integration using Hungary and Slovenia as examples. These two countries were selected because both of them are examples of the most advanced Central and Eastern European Countries that have already started accession negotiations with the EU, while at the same time having different historical experiences and traditions, distinct starting points in their transition to a market economy and partly divergent transition strategies, not least in the area of monetary and exchange rate policy.

Finally, the third study provides an in-depth examination of currency board arrangements in Central and Eastern Europe. The study reviews the experience of Estonia, Lithuania and Bulgaria with this rule-based monetary framework. In view of the unfolding transition process and the prospective integration into the European Union, the study also analyzes the future perspectives of these arrangements in Central and Eastern Europe.

We invite you to address any comments or suggestions you may have about this publication or any of the studies in it to:

Oesterreichische Nationalbank

Foreign Research Division

P.O. Box 61

A-1011 Vienna, Austria

You may also fax your comments to +43-1-40420-5299

or e-mail them to Olga.Radzyner@oenb.co.at

Adolf Wala

Chief Executive Director

RECENT ECONOMIC DEVELOPMENTS

I Introduction

In 1997, the economies reviewed here experienced robust economic growth, with the exception of the Czech Republic. The best performer was Poland, whose GDP rose by 6.9% in real terms. Industrial output was strong in the Czech Republic, Hungary and Poland. Other macroeconomic trends became more divergent in the review period.

Inflation eased considerably in Hungary and Poland, but only slightly in the Czech Republic and Slovenia, while it edged up in Slovakia. It is evident that the postponed adjustment of regulated prices, a step that is necessary to complete relative price adjustment, hampers further disinflation in those countries which cut inflation rates below 10% annualized. Although inflation did rise in Slovakia, the country still posted the lowest rate of price increase among the reviewed group in 1997: 6.1%. Slovenia enjoyed the lowest inflation rate – 8.4% – of the five transition countries that have been invited to start negotiation talks with the EU.

Current account positions differed. The Czech Republic and Slovakia, whose deficits reached very high levels relative to GDP in 1996, reduced the current account shortfall markedly in the aftermath of the Czech koruna crisis. The deficit in Hungary continued to decrease. The Polish current account deficit widened rapidly until July 1997, then its rise slowed and remained on a manageable level despite earlier fears. Slovakia posted the largest deficit at 6.7% of GDP, down from 11% in 1996. As in 1996, Slovenia had a practically balanced current account as the only one of the ten EU accession candidates.

The currencies of the Czech Republic, Poland and Slovakia suffered increased volatility in 1997 due mainly to the periodical jitters sent through the currency markets by the Asian crisis, but also for other reasons, such as high or rising current account deficits. The Slovenian tolar was generally under upward pressure. The forint, the Czech koruna and the zloty had been subject to upward pressure since the beginning of 1998. The Russian ruble crisis in May had only a transitory effect on these currencies' exchange rates. The forint depreciated slightly in the wake of Parliamentary elections.

Structural reforms continued at an accelerated pace in the Czech Republic and in Poland while in Hungary they kept their momentum. Slovakia and Slovenia lagged behind in this respect. All countries made progress in harmonizing legislation with the EU regulations. Except for Slovakia, all the countries reviewed here have started accession negotiations to the EU. Slovakia has been excluded from the group of first-wave countries for political reasons. The first step of negotiations is the so-called *acquis* screening process serving to examine the compatibility of legislation in the candidate countries with the *acquis communautaire*.

2 Country Reports

2.1 Czech Republic

Most of the Czech economic indicators worsened in 1997. The economy de facto stagnated in 1997, as GDP grew by a mere 1.0% according to preliminary estimates. On the demand side, investment and government expenditures declined by 4.9% (1996: +8.7%) and 1.8% (1996: +4.3%),

respectively, while consumption grew by 1.6% (1996: +7.0%). Net exports improved by 13.6%. On the supply side, industrial output was relatively strong after having performed sluggishly in the first half of 1997; it expanded by 4.9% on 1996 (1996: +1.8%). However, construction was down by 3.9%. In the first quarter of 1998, industrial output and construction mounted by 8.4% and 4.2% year on year, respectively. Growth was mainly seen in the production of electrical and optical instruments, vehicles, rubber and plastics.

In 1997 the unemployment rate surged to 5.2% (1996: 3.5%) of the labor force and continued to climb in 1998, reaching 5.4% in April. This increase reflects not only slowing demand for labor, but also a faster pace of previously delayed restructuring in industry.

Inflation barely fell in 1997 mainly due to deferred boosts in regulated prices. Microeconomic inefficiencies (weak corporate management) are probably another important factor in this poor performance. The annual CPI inflation rate was down to 8.5% from 8.8% in 1996. Since 1994, inflation in the Czech Republic has fallen by only 1.5 percentage points despite a fixed exchange rate until the end of May 1997 and the conservative monetary policy pursued in this period. In April 1998, the CPI was up 13.1% year on year after a series of hikes in regulated prices in January had exerted its impact. New substantial boosts of energy prices and rents are planned in July after Parliamentary elections. Inflationary pressures in 1997 were also exacerbated by a rapid growth of the average real wage by 6.1% in the first half of 1997, which slowed to 3.1% only in the second half of 1997. Real average wages in industry and construction fell by 0.6% and 2.7% year on year respectively in the first quarter of 1998, easing inflationary pressures.

A slowdown of domestic demand, the introduction of mandatory deposits for consumer imports and a temporary depreciation of the koruna helped cut the trade deficit to USD 4.4 billion in 1997 from USD 5.8 billion in 1996. This improvement was possible thanks to an increase in exports (+2.8%) and a decrease in imports (-2.8%). In turn, the current account deficit fell to 6.1% of GDP (USD 3.2 billion) in 1997 from 8.3% in 1996 (USD 4.3 billion). Foreign direct investment inflows totaled USD 1.3 billion, slightly less than in 1996. Foreign currency reserves, which declined during the currency crisis, remained stable throughout the rest of the year and amounted to USD 9.8 billion in December 1997, the equivalent of 3.3 months of imports (1996: 5.4 months). The influx of foreign capital triggered reserve growth in 1998 to an estimated USD 10.7 billion in March 1998. Therefore, the Czech koruna was subject to upward pressure. Gross external debt was USD 21.4 billion at the end of 1997, up from USD 20.8 billion at the end of 1996.

As related in the previous issue of Focus on Transition, the fixed exchange rate system was replaced by a managed floating regime after a currency crisis in May 1997, and the central bank adopted monetary targeting as its new monetary policy strategy. The upward pressure on the crown resumed in the first months of 1998, inducing the central bank to intervene in order to cap the appreciation. Monetary policy was tightened as interest rates were raised to high real levels; the lombard rate was 23% from

the end of June 1997 until January 23, 1998, when it was lowered to 19%. As a result of this policy, total credit rose by only 2.7% in 1997, i.e. it decreased in real terms. Since January 1998, the CNB has switched its strategy to direct inflation targeting as the first central bank among transition economies. The bank targets what it calls net inflation, which is the CPI change excluding the impact of tax, tariff and administrative price increases. The target band of net inflation is 5.5% to 6.5% for 1998; net inflation amounted to 7.6% year on year in April 1998.

In 1997, the government budget posted a deficit practically for the first time during transition; it reached approximately 1.0% of GDP. The reason for this deficit, which occurred despite the restrictive policy adopted in 1997, has to do, among other things, with the slowdown in economic activity. In the first five months of 1998 the budget deficit ran to CZK 6.7 billion due to rising welfare spending and lower-than-planned revenues. The deterioration of public finances is likely to continue. In an apparent pre-election move, Parliament decided in May 1998 that the government should finance higher health insurance payments. This sum is not included in the 1998 state budget. The deficit may swell further, since Consolidation Bank posted a CZK 10.4 billion loss in 1997 and it has to be yet decided whether the state is to cover it, as it did in 1997. This amount should be added to the recently revised Ministry of Finance's 1998 budget deficit forecast of CZK 4.5 billion.

The structural problems of the Czech economy, in particular the weakness of corporate governance and financial markets supervision, finally surfaced in 1997. The banking sector is in trouble, as the share of substandard loans is high. It is undercapitalized and badly needs expertise to improve its asset management. Komerční Banka (KB), the largest bank in the country and in transition economies with respect to assets, is in a shaky position mainly because of unprofitable investments in the real estate sector. The state has a large 49% stake in the bank, but has delayed its privatization. However, positive changes are about to come to the banking sector. Investiční a Postovní Banka (IPB) was finally the first large bank to become fully private; Nomura bought a 36% stake from the National Property Fund in March 1998. The bank will enjoy no state guarantees. Agrobanka, which is under central bank administration, is in the process of being sold. In 1998, a tender should be announced for 51% of the state's 66% stake in Československá Obchodní Banka, the former foreign trade bank. The privatization of Česká Spořitelna (Savings Bank) is under preparation. The Securities Commission started operating in April 1998; plans to overhaul stock exchange rules, including the introduction of full reporting of all trading, are under preparation.

At the end of November 1997, the prime minister stepped down amidst serious criticism within the ruling coalition. The central bank governor was appointed prime minister by the President until Parliamentary elections scheduled for June 1998. These elections may bring about corrections in the macroeconomic and structural stance. The uncertainty related to these developments and the Russian ruble crisis arrested the upward trend of the koruna exchange rate.

2.2 Hungary

Economic growth accelerated in 1997, with GDP mounting by a transition period record of 4.4%, signaling that Hungary has overcome its twin deficit problem. Exports and investment drove the economy, while private consumption increased only little (0.9%). Gross capital formation, still on an upward trend since 1992, when it had experienced a trough at 16.1%, amounted to approximately 27.7% of GDP in 1997. The increasing share bodes well for the sustainability of future robust growth in Hungary. On the supply side, industrial output rose by 11%, construction grew by 9% and agricultural output fell slightly.¹⁾ Strong growth was upheld in January through April 1998, when industrial output rose 12.9% year on year.

Economic growth led to a reduction in the unemployment rate with a delay, as it stood at 10.4% at the end of 1997 against 10.7% at the end of 1996. However, its impact has become visible in 1998, as it fell to 9.4% of the labor force in May. The vigorous rise in industrial output has been accompanied by continuing strong gains in labor productivity.²⁾ The Asian crisis has had no visible impact on the pace of business activity. Government forecasts and independent economists expect economic growth to speed up to 5% in real terms in 1998 on the back of favorable internal and outside environments. Like in 1997, exports and investment should remain the engines of GDP growth and consumption should rebound.

The gradual disinflation policy was continued in 1997, as the average annual rate of CPI inflation dropped to 18.3% from 23.6% in 1996. In April 1998, the CPI inflation rate was 16.0% year on year while in the January to April period, the rate of inflation stood at 16.8%, down by 2 percentage points against the same period of the previous year. The crawling peg and wage restraint have been instrumental in pursuing disinflation ever since the austerity package was launched in March 1995. Since the introduction of the crawling peg system, the devaluation rate has been adjusted at times to be lower than the inflation differential between Hungary and its main economic partners. In August 1997, the rate was reduced to 1.1% monthly versus the basket; it was lowered further to 0.9% at the start of 1998. The rate is to be cut again to 0.8% effective June 15, 1998. The central bank conducted a prudent policy of reducing its interest rates only gradually following progress with disinflation; the base rate was cut in a series of steps in 1997 and the first five months of 1998 to 19.0%, effective June 1, 1998. After two years of a considerable fall, the real net wage grew by 4.9% in 1997, which did not exceed productivity gains. In the first three months of 1998, the real net wage was up by 3.2% on the corresponding period of 1997.

The budget deficit of the consolidated public sector was 4.5% of GDP, slightly better than expected. The primary surplus (excluding interest payments) of the public sector was estimated at 3.5%. Public debt fell from 72% of GDP in 1996 to 64% of GDP in 1997, and gross external debt was reduced by USD 4 billion to USD 23.7 billion;³⁾ Hungary even paid back its debt in advance to avoid an unwanted rise in foreign currency reserves. In March 1998, gross foreign debt was decreased further to USD 22.1 billion.

The current account deficit continued to narrow in 1997. It was down to 2.2% of GDP from 3.8% in 1996 and amounted to USD 981 million. Net foreign direct investment (FDI) inflows came to USD 1.7 billion while net portfolio flows and net other investments posted shortfalls of USD 1.0 billion and USD 208 million, respectively.⁴⁾ The improvement of the current account position was due to a reduction of the trade deficit, which amounted to USD 1,740 million, down from USD 2,645 million in 1996. Dollar export revenues rose by 38.5%, while import expenditure increased by 27.1%. The capital account surplus offset the current account gap. Part of the foreign currency reserves were used to repay external debts, so that they diminished to USD 8.5 billion at the end of 1997 from USD 9.8 billion at the end of 1996. Foreign currency reserves widened to USD 9.5 billion in March 1998, tantamount to about five months of imports. In the first quarter of 1998, favorable tendencies continued, as the current account gap was USD 393 million versus USD 477 million in the same quarter of 1997 thanks to a falling trade deficit.⁵⁾ Export revenue and import expenditure in dollar terms were up by 5.6% and 3.1%, respectively, compared to the same period of 1997. Stronger FDI inflows than in the first quarter of 1997 and strong portfolio inflows caused problems with monetary management.

Due to Hungary's sound fundamentals, the forint experienced upward pressure in 1997, with the exception of a few days in the aftermath of the Asian crisis. Most of the time it traded at the stronger end of the $\pm 2.25\%$ wide band of admissible fluctuations. The central bank intervened to keep the forint within the band. This did not change until the Parliamentary elections in May 1998 (see below).

Structural reforms were continued resolutely in 1997. Legal reforms included the overhaul of the pension system, which has been based on three pillars from January 1998. Other developments worth mentioning are the liberalization of regulations on the establishment of branches of foreign banks, which required modifications of the banking law, the securities law and insurance law. In March 1998, Parliament passed a bill on venture capital aimed at creating a better framework. On January 1, 1998, a further liberalization of capital flows came into force, easing restrictions on purchases of real estate by Hungarian citizens abroad.

Privatization of the banking sector was practically completed in the second half of 1997. The state divested its majority stake in Kereskedelmi Bank (K&H) and a stake in OTP Bank. Mezőbank and PK Bank were privatized. Postabank, the second-largest bank in the country, which had chalked up a considerable loss in 1997, was bailed out in May 1998. Efforts to find a strategic foreign investor have not met with success so far. In March 1998, another 20% of Mol, the Hungarian Oil and Gas company, were privatized.

Negotiations on Hungary's accession to the EU as one of five selected transition economies were officially inaugurated at the end of March 1998. The first step of the process, referred to as *acquis* screening, should be completed by summer 1999. The relations between Hungary and the IMF are good; the IMF praises the results of the stabilization program that Hungary launched in 1995, pointing to the need for further disinflation and

to a consolidation of public sector finances. The standby arrangement that Hungary had concluded with the IMF expired in February 1998. The country repaid all debts to the organization ahead of time.

Prior to Parliamentary elections held on May 10 and 24, 1998, the government largely refrained from policy steps that would ignite a political business cycle. The ruling coalition lost its majority. As of writing, talks about forming a new coalition of Fidesz, the Hungarian Civic Party (148 seats out of 386), the Democratic Forum (17 seats) and the Smallholders' Party (48 seats) were about to start. The financial markets reacted nervously on the outcome of elections. The stock market, which had clambered to record highs before the elections, began tumbling between the two rounds of elections and plunged by 8.7% in an immediate reaction to the outcome. Since then, the stock market has rebounded somewhat. The forint came under pressure due to uncertainty over future economic policies. In addition, the Russian ruble crisis in May tended to weaken the currency temporarily.

2.3 Poland

1997 was the fifth straight year of strong economic growth in Poland; healthy growth continued in the first four months of 1998. GDP grew by 6.9% in 1997, with domestic demand – investment and private consumption – as the main engine of growth. Industrial sales were 10.8% higher year on year. For 1998, the government assumes 5.6% GDP growth in its draft budget, but the pace of economic activity in the first four months of 1998 was faster than expected, and numerous institutions, including the government think-tank, forecast the GDP growth rate to be within the range of 6.0% to 6.5%.⁶⁾ Sold industrial output grew by 9.3% while construction increased by 21.3% year on year in the first four months of 1998.

The vigorous growth propelled a substantial reduction in the unemployment rate in 1997: The rate of joblessness was 10.2% of the labor force in December 1997 versus 13.6% in December 1996. Another factor in the decline is the tightened regulation of eligibility for the dole. After a seasonal surge in winter, the unemployment rate fell back to 10.2% in April 1998.

Accelerated economic growth also led to a rapid widening of the current account deficit in 1997 to USD 4.3 billion or 3.2% of GDP in 1997 versus 1% in 1996, still a manageable size. The deterioration can be ascribed principally to a worsening trade deficit, which attained USD 11.3 billion compared with USD 8.2 billion in 1996, as imports advanced much faster (18.3%) than exports (11.7%).⁷⁾ The differential between these rates of expansion shrank during the year. In the first quarter of 1998 export revenue grew by 24.1% and import revenue by 17.2% in dollar terms. Despite this favorable trend reversal, the trade deficit still rose to USD 3.2 billion in the first quarter of 1998 versus USD 3.1 billion in the same period of 1997. This rise was responsible in part for an increase of the current account deficit to USD 2.0 billion in the first quarter of 1998 against USD 1.5 billion in the corresponding quarter of 1997. The shortfalls on other subbalances – services and income – compounded the result.

The surplus on capital movements offset the current account gap, as gross foreign reserves continued to increase in 1997 and in 1998 to reach USD 23.1 billion at the end of March 1998, i.e. they were up by nearly USD 2.4 billion from December 1997 and covered more than seven months of imports.⁸⁾ The structure of capital inflows was favorable in 1997, since foreign direct investment covered nearly 73% of the current account gap in 1997. The strong FDI inflow continued in the first months of 1998.⁹⁾ A favorable reassessment of Polish fundamentals in the aftermath of the Asian crisis entailed an accelerated inflow of portfolio investment as well. These developments caused a rapid appreciation of the zloty exchange rate versus the basket by roughly 8% relative to the central parity rate.

In 1997, considerable progress with disinflation was achieved; the average annual inflation rate had dropped to 14.9% in 1997 from 19.9% in 1996. The government is targeting a 9.5% CPI inflation rate year on year in December 1998. However, the CPI increased in the first two months of 1998 due to hikes in regulated prices and the release of energy prices, as government decided to pass all the relevant measures in January. In April 1998, the CPI ran to 13.7% year on year. The CPI climbed by 6.3% in the first four months of 1998 versus 5.8% in the same period of 1997, so it seems that the 1998 government projection will not be fulfilled. Further disinflation may be challenged by a rapid growth of real wages in excess of the assumptions of the government budget, while it will be helped by the appreciating domestic currency.

Wage growth in 1997 exceeded budget assumptions and the assumptions of the Trilateral Commission; nominal wages in the public sector rose by 21.4% instead of 17% as assumed by the Trilateral Commission. The average real net wage rose by 6.9% in 1997. The real net wage was up 5.7% year on year in the first quarter of 1998;¹⁰⁾ it grew slightly faster than in the first quarter of 1997. Such rapid wage growth is offset by labor productivity gains in industry, but wages have gone up sharply also in loss-making (in particular state-owned) enterprises, which tends to exacerbate inflationary pressures.

In 1997 macroeconomic policy addressed the problem of a deteriorating current account position. The budget law for 1997 called for a deficit of 2.8% of GDP, but the actual deficit was 1.3% of GDP, helped by faster-than-expected GDP growth.¹¹⁾ In 1998, the government plans a budget deficit of 1.5% of GDP (which in effect represents a slight tightening because of assumptions of lower GDP growth), and these plans remain on track in the light of the January to April figures. It is even likely that the deficit will actually come to around 1% of GDP, if trends of previous years are adjusted for 1998. The policy of a primary budget surplus has led to a steady fall in the debt-to-GDP ratio, which was estimated at below 49% of GDP at the end of 1997 from 51% in 1996. The share of foreign debt in total public debt continued to decline as well and amounted to about 28% of GDP in 1997. The debt was estimated at USD 38.5 billion at the end of 1997.

Monetary policy was gradually tightened in 1997.¹²⁾ The increase in nominal interest rates coincided with a fall in inflation and inflationary expectations, so real interest rates started fluctuating above 11%. At the

same time, the rate of preannounced depreciation of the domestic currency remained unchanged at 1% monthly from January 1996 to stimulate exports. This policy brought about the desired results; it led to a considerable slowdown of domestic credit expansion in the fourth quarter of 1997 and the first four months of 1998.

Since the end of January 1998, monetary and exchange rate policy have faced the problem of how to reconcile the need for disinflation with the need to reduce the current account gap. At the end of February 1998, the newly formed Monetary Policy Council (MPC)¹³⁾ decided to tighten the policy stance further by increasing the rate applicable to repurchase agreements to 23.5% and by introducing a new system of calculating commercial banks' required reserves. Additionally, the rate of crawling devaluation was reduced to 0.8% versus the basket. In order to deter higher speculative capital inflows, the fluctuation band was widened to $\pm 10\%$ from $\pm 7\%$.

However, these measures only caused the exchange rate to strengthen further, because when adjusted for the expected depreciation of the zloty, the large interest differential, a factor which attracts investors, widened and market participants ignored the theoretically larger scope for devaluation due to a wider band. On May 20, 1998, following good news on April inflation, the MPC cut the discount and lombard rates by 1 percentage point to 26% and 23.5%, respectively, and the repo rate to 21.5% from its previous level of 23% to ward off continuing appreciation. At the end of May 1998, the Polish zloty, along with other Central European currencies, was temporarily affected by the Russian ruble crisis.

Poland stepped up *structural reforms* in 1997 despite Parliamentary elections.¹⁴⁾ In the first four months of 1998, legislative activity concentrated particularly on the preparation of drafts of regulations on the reform of provincial and local administration, but also on pension, education and health care reforms. The government drafted plans for the privatization of the oil sector, a restructuring of the coal mining sector and the steel sector. There were no major privatizations in the first quarter of 1998, but privatization revenue was on schedule. Privatization of the Pekaó bank group, the largest in terms of assets in Poland, is planned to start in June 1998, and the government is likely to divest its near 47% stake in Bank Przemyslowo-Handlowy (BHP), the seventh-largest bank. The sale of Bank Zachodni, the twelfth-largest bank, is slated next. A revision of the foreign exchange law designed to further liberalize capital movements is planned before summer 1998. The law would also eliminate restrictions on zloty invoicing of foreign trade and services.

Poland has started accession negotiations to the EU along with four other transition economies. The *acquis* screening for Poland is in progress.

2.4 Slovakia

Slovakia recorded 6.5% GDP growth in real terms in 1997 (1996: 6.6%). On the demand side, investment rose by 14.5%, while private consumption increased by 6.3%. On the supply side, industrial output grew by 2.7%, construction by 9.2% and retail trade by 4.6%. Despite strong economic growth, the unemployment rate fell only little to 12.5% of the labor force

(1996: 12.8%). In the January through April period of 1998, output rose by 4.8% year on year in industry while employment was down by 3.5% in that sector, leading to gains in labor productivity. The unemployment rate surged to 13.4% of the population actively seeking jobs in March 1998.¹⁵)

In 1997 the CPI inflation rate rose slightly compared to 1996; it ran to 6.1% versus 5.8%. Domestic demand was strong, boosted by real wage growth of 6.6%. Inflation was kept in check not only by the central bank's restrictive policy, but also by the postponed adjustment of regulated prices. In January 1998, telephone fees, the prices of spirits and tobacco and mandatory car insurance rates were raised. The CPI was up 7.0% year on year in April 1998, while the average nominal wage in industry rose by 10.5% year on year in March.

The current account deficit was reduced to 6.7% of GDP (USD 1.3 billion) from 11.0% in 1996 (USD 2.1 billion). Administrative measures were the compelling force behind this improvement: In July 1997, an import surcharge of 7% was introduced, and despite strong economic growth in 1997, imports in dollar terms fell by about USD 0.8 billion. This instrument is scheduled to be phased out by the end of 1998 (a reduction by 2% every half year), so the future tendency of the current account position is unclear. Slovakia drew an even smaller amount of foreign direct investment in 1997 than in 1996; according to the balance of payments, FDI inflows had diminished to USD 70 million. Net portfolio investment was negligible at USD 22 million, but net foreign borrowing was high at USD 1.5 billion. At USD 3.2 billion in December 1997, foreign currency reserves were little changed from 1996 and covered 3.8 months of imports. From the start of 1998 until May 20, foreign reserves augmented to USD 3.4 billion.

The central bank conducted a tight policy in 1997. The lombard rate remained unchanged at 15% from July 1996 while lending rates stayed above 16%. Yields on public sector bonds were above 25% in the first four months of 1998. This policy was intended to countervail the impact on inflation of the lax fiscal policy of the government, and to defend the fixed exchange rate after the koruna came under pressure due to ripple effects from the Asian crisis. In 1997 and 1998, the Slovak koruna traded weaker than the central rate of its $\pm 7\%$ wide band.

The general government budget deficit amounted to 5.7% of GDP (the central government deficit was 1.8%). It must be reduced if a more balanced current account position is to be achieved. The government projects a central government deficit of 0.7% of GDP in 1998, but several items have been transferred into nonbudgetary funds, and the cost of the social security and health insurance deficit was underestimated. The National Bank of Slovakia projects a deficit of 3.1% GDP under the same macroeconomic assumptions. The National Property Fund (an extrabudgetary agency) is becoming a drag on the financial stability of the country, as it borrowed money abroad in 1997 instead of accumulating financial reserves to cover the privatization bonds replacing the vouchers that had been available under the interrupted coupon privatization program in 1995. The National Property Fund has also guaranteed credits for large companies equivalent to

approximately USD 0.8 billion. The state budget posted a deficit of SKK 2.4 billion (USD 70 million) at the end of May.¹⁶⁾

Slovakia is quickly becoming a country with a high level of foreign debt. Data show that its gross external debt enlarged to USD 10.7 billion at the end of 1997, up from USD 6.4 billion at the end of 1996. The ratios of external debt to GDP and to exports of goods and services are approximately 55% and 122%, respectively. The structure of foreign debt is becoming unfavorable, as short-term debt is almost 50% of the total. The rating agency Moody's downgraded Slovakia's foreign debt to a speculative grade of Ba1 from investment grade Baa3 in March 1998 while S&P's revised its outlook on investment BBB rating from stable to negative in April. Despite these adverse changes in evaluation, Slovakia went ahead with its debut eurobond issue of a value equivalent to USD 0.75 billion. Risk premiums were over 300 basis points above their benchmark interest rates in different currencies, which is much higher than the 60 basis points that the government had expected in November 1997 when it put off the issue due to the unfolding Asian crisis.

The Enterprise Revitalization Act, which has been in effect since May 1997 and which endorses the writing off of some debts of selected insolvent companies, did not harden industrial firms' budget constraint; over 50% of them are in the red. Slovakia has major problems in the banking sector as well. According to various estimates, the share of nonperforming loans remains high. IRB, the third-largest bank, was closed in December 1997 due to high losses and undercapitalization. The state holds a 35% stake in the bank, as it was privatized during a coupon privatization drive in 1992 to 1993. Lately, Slovakia has shelved its plans to curtail the independence of the central bank.

In 1997, the domestic market was opened for issues of OECD countries, but these securities may be issued and traded only in Slovakia. In April 1998, a new foreign exchange law came into force. It eliminates limits on foreign exchange purchases for tourists and enterprises.

Slovakia was not selected to join the first wave of countries to begin negotiations on accession to the EU. The EU made its decision on Slovakia on political grounds. Parliamentary elections are planned in September 1998 and may lead to a revival of prospects for rapid Slovak integration into the EU, if they trigger a change of economic policies.

2.5 Slovenia

GDP rose by 3.8% in real terms in 1997 compared with 3.1% in 1996. The upturn in the EU helped Slovenian exports. On the supply side, industrial production (manufacturing) was up by 1% (0.2%), and productivity in this sector rose by a mere 1.5%, the slowest increase since 1993. The reasons for the industry's poor performance are slow restructuring and weak corporate governance. The government based its budget assumptions for 1998 on 3.5% to 4.0% GDP growth for 1998.

The officially measured unemployment rate rose from 14.4% to 14.8% in 1997; Slovenian unemployment has changed little over the past four years. On the other hand, according to ILO standards, the unemployment

rate was much lower at 7.2% in the third quarter of 1997.¹⁷⁾ In March 1998, the official unemployment rate ran to 14.3%.

In 1997, the CPI inflation rate was down to 8.4% from 9.9% while the retail sale price index fell to 9.1% in 1997 from 9.7% in 1996.¹⁸⁾ Further disinflation is difficult, as inflation displays a strong inertia due to widespread indexation schemes and due to hikes in regulated prices. The prices of energy, some utilities and urban passenger transport were liberalized, exerting an inflationary impact. In April 1998, the CPI inflation rate was measured at 9.1% year on year. In 1999 inflationary pressures may be exacerbated by the long-overdue introduction of VAT. Wage increases tapered off in 1997 compared with previous years, but were still above labor productivity gains. A new wage adjustment law passed in June 1997, which has replaced quarterly indexation of wages to inflation with once-yearly indexation, helped trim wage rises. A freeze on civil servants' pay and a cap on the rise of the minimum wage were also imposed. Real gross wages augmented by 2.5% in 1997 compared to 4.9% in 1996. In the first quarter of 1998, it was up 1.8% year on year.

The public sector budget for 1997 was approved only at the beginning of December 1997. Slovenia conducted an expansionary fiscal policy in 1997, since it recorded a general state budget deficit of 1.2% of GDP practically for the first time since independence.¹⁹⁾ The main reason for the choice of an expansionary policy was the growing deficit of the pension fund; other reasons are a change of the progressive payroll tax scale to ease the burden the lower-range wages represent to employers, and a reduction of customs tariffs following the adoption of the Europe Agreement. Increases in other taxation could not offset this loss of revenue. The government is planning a general budget deficit of 1% of GDP in 1998, mainly as a result of the growing pension burden.

A modest current account surplus of USD 36.6 million in 1997 was practically unchanged from USD 39 million in 1996. Export performance improved and the relatively large trade deficit fell for the second year in a row, diminishing from USD 881.7 million in 1996 to USD 771.6 million in 1997. The trade gap was mostly offset by net tourist receipts. Net FDI inflows grew to USD 295.3 million from USD 177.7 million in 1996.²⁰⁾ In the January to March 1998 period, the current account posted a deficit of USD 39.6 million.

The tolar was subject to upward pressure in 1997 because of increased capital inflows. The Bank of Slovenia continued its policy of neutralizing the pressure by purchasing foreign exchange from banks. This policy prevented the tolar from appreciating more than modestly in real terms based on producer prices; it remained unchanged in terms of retail prices.

Foreign currency reserves increased to USD 3.3 billion in December 1997 from USD 2.3 billion in December 1996, which is equivalent to 4.3 months of imports. In March 1998, reserves still stood at USD 3.3 billion. Gross external debt closed 1997 at USD 4.2 billion in 1997, up marginally from USD 4.0 billion in 1996. The total debt service ratio was 8.5% in 1997.

Slovenia has the most balanced economy of the reviewed countries, yet it is stymied as an underachiever due to its slow track record of structural

reforms. Slovenia is the only EU candidate which has not introduced VAT. The privatization of state-owned firms is slow, and the country has not yet started to privatize state-owned banks, a move which was postponed on account of fears of a sellout to foreign investors. One of the most pressing issues is the privatization of the two state banks NLB and NKB, whose rehabilitation was completed in 1997. Slovenia's two largest banks (state-owned Nova Ljubljanska Banka and the largest private bank, SKB) have recently announced that they intend to merge; their joint share in the total assets of the banking system is estimated at 45%. This merger drive is stimulated by the entry into force of the law which allows foreign banks to open branches in Slovenia. A law on the completion of privatization of the socially-owned enterprises has been approved. Besides privatization, Slovenia also lags behind in introducing changes to financial, foreign exchange, banking, tax, labor and pension legislation. The government is slowly moving in this direction. The preparation of two important reforms – overhauling the tax system (introduction of VAT) and the pension system – should be completed in 1998. A new banking law has been under discussion for years, but has not been approved yet.

Parliament ratified the Association Agreement with the EU in July 1997. Slovenia started accession negotiations along with the other four CEEC candidates in March 1998. The national program to adopt the *acquis communautaire*, approved by the government in March 1998, calls for the harmonization of legislation (environment, agriculture and infrastructure), reforms in the tax system (introduction of VAT), pension reform and the public administration reform.

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- 1 *The leading sector in industry is mechanical engineering (+52%), which illustrates the depth of the structural change which has been going on in Hungarian industry. This sector comprises office machinery, computers, telecommunications equipment, automobiles and other road vehicles.*
- 2 *Hungary enjoys the best improvements in labor productivity among the transition countries of Central Europe; WIIW estimates that labor productivity in industry rose by 52.3% between 1989 and 1997. From 1992, enterprises with more than 20 employees, from 1995 with more than ten employees.*
- 3 *This figure includes foreign interenterprise loans.*
- 4 *Net FDI inflows were at 230.5% of the current account deficit.*
- 5 *Preliminary results released by the NBH in May.*
- 6 *According to unofficial estimates, GDP grew by 7.0% year on year in the first quarter of 1998.*
- 7 *In dollar terms according to balance-of-payments statistics.*
- 8 *Average monthly imports in the first quarter of 1998.*
- 9 *The balance-of-payments figures for the first quarter are not available yet. According to the data of the Agency for Foreign Investment, which adds investment in kind as well, net FDI exceeded USD 1.5 billion in this period.*

- 10 20.4% in nominal terms.
- 11 IMF methodology. The receipts include privatization proceeds.
- 12 See Focus on Transition 2/1997.
- 13 A new body in charge of monetary policy in Poland according to the new Constitution and the new central bank act.
- 14 See Focus on Transition 2/1997.
- 15 The definition was changed to make this figure compatible with the ILO rules. Registered jobless persons who are undergoing retraining or who are sick or on maternity leave are excluded.
- 16 The Ministry of Finance changed the budget balance reporting methodology at the beginning of 1998 to exclude payments of the state debt principal. No comparable retroactive figures on 1997 were available yet.
- 17 The ILO does not treat part-timers or temporary workers as jobless persons.
- 18 The central bank published the CPI for the first time in January 1998, and released retrospective indices as well. Up to then, only the retail price index had been available.
- 19 In 1994, the general government budget deficit was negligible at 0.2% of GDP.
- 20 Balance-of-payments figures.

S T U D I E S

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

Maciej Krzak¹⁾

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.²⁾ 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.³⁾

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.⁴⁾ 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.⁵⁾ 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.⁶⁾

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.⁷⁾ 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.⁸⁾ 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.⁹⁾ 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 fixed¹⁰⁾ 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.¹¹⁾ 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.¹²) 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

Czech Republic				
Selected Indicators of Current Account Sustainability				
	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.¹³⁾

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.¹⁴⁾ 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.¹⁵⁾

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 1996.¹⁶⁾ 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.¹⁷⁾ 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 1997.¹⁸⁾ 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 1994.¹⁹⁾ 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.²⁰⁾ 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.²¹⁾

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 1996.²²) 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

Lithuania				
Selected Indicators of Current Account Sustainability				
	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 1991.²³) 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.²⁴) 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

Poland				
Selected Indicators of Current Account Sustainability				
	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.²⁵⁾ 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 1998.²⁶⁾

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

Slovakia				
Selected Indicators of Current Account Sustainability				
	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

Labor Productivity in Industry		
	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.²⁷⁾ 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.

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- 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).*

The Introduction of the Euro: Implications for Central and Eastern Europe The Case of Hungary and Slovenia

I Introduction

This study deals with the implications the introduction of the euro has for Central and Eastern European countries (CEECs). At the current stage, it is particularly timely to look into this issue for two reasons. With the selection of the eleven EU countries which will take part in the euro zone from its onset on January 1, 1999, the preannouncement of bilateral conversion rates between the currencies of the participating countries and the designation of the members of the Executive Board of the European Central Bank (ECB) in early May 1998, the stage for the inception of Stage Three of EMU has been set. At the same time, preparations for a future enlargement of the EU to the East have entered a new phase this spring with the beginning of accession negotiations between the Union and five applicant countries from Central and Eastern Europe, notably the Czech Republic, Estonia, Hungary, Poland and Slovenia. The main focus of the analysis in this study is on two of these five countries, namely on Hungary and Slovenia. These two countries have been chosen because both of them are examples of the most advanced CEECs while, at the same time, having different historical experiences and traditions, distinct starting points in their transition to a market economy and partly divergent transition strategies, not least in the area of monetary and exchange rate policies.

The study starts out by examining the EMU-related aspects of EU Eastern enlargement (section 2). Subsequently, section 3 looks into the economic effects the introduction of the euro will have on the Central and Eastern European economies. The analysis then turns to the policy challenges EMU poses for the EU applicant countries and sketches some of the main policy responses of the authorities in the countries under review (section 4).²⁾ The main conclusions of the study are summarized in section 5.

2 EMU-Related Aspects of Eastern Enlargement

According to the EU membership criteria for the CEECs set out by the European Council in Copenhagen in June 1993, applicant countries are, inter alia, required to establish a functioning market economy and to build up the capacity to cope with competitive pressures and market forces within the Union. Moreover, candidate countries have to be able to take on the obligations of membership (i.e. the *acquis communautaire*), including adherence to the aims of Economic and Monetary Union. These conditions clearly indicate: Applicant countries are under obligation to pursue *stability-oriented macroeconomic policies*. Yet, the Copenhagen conditions do not imply that the CEECs will have to meet the Maastricht convergence criteria at the time of their EU accession or even before. Fulfilling the Maastricht criteria is not a condition for joining the European Union. Macroeconomic policies should center, as the European Council in Madrid in December 1995 put it, around “the creation of a stable economic and monetary environment,” as one of “the conditions for the gradual, harmonious integration” of the candidate countries into the EU. In this vein, attention should concentrate primarily on qualitative improvements (rather than quantitative indicators), i.e. on the capacity to correct macroeconomic distortions with policies and instruments that are compatible with market mechanisms in general and EU

Peter Backé
and Olga Radzyner¹⁾

rules in particular. Consequently, the convergence criteria should not be viewed as short-term “operational” policy targets. Rather, they are medium and longer-term points of reference for sound policymaking which must ultimately, but not necessarily upon EU accession, be fulfilled by new Member States on a sustainable basis.³⁾

For economic and legal reasons, new Member States will, in all likelihood, *join the euro zone only after having acceded to the European Union*. On economic grounds, it is unlikely that newly acceding countries will be able to achieve a degree of structural adjustment by the time of their EU accession, which would put them in a position to fulfill the convergence criteria in a sustainable manner. In legal terms, acceding to the euro zone presupposes, *inter alia*, formal participation in the Exchange Rate Mechanism (ERM) of the EU for at least two years without devaluation.⁴⁾ As EU membership is a precondition for joining the ERM, according to Community rules as they stand, a country cannot, on legal grounds, join Stage Three of EMU earlier than two years after having acceded to the European Union.⁵⁾

Apart from a stability-oriented macroeconomic policy posture, applicant countries will have to meet two main prerequisites in order to participate in Stage Three of Economic and Monetary Union as non-euro area countries: first, the adoption of those parts/provisions and regulations of the EMU-specific *acquis communautaire* that pertain in principle to all EU Member States no matter whether they are euro zone countries or not and, second, the readiness to participate in institutionalized monetary and exchange rate policy cooperation within the European Union.

The *acquis dimension of EMU* relates to the Treaty provisions on the coordination of economic policies (including adherence to the regulations of the Stability and Growth Pact that are binding for all EU Member States), central bank independence, price stability as the prime objective of central bank policy, the prohibition of direct central bank financing of budget deficits, the ban of privileged access of public authorities to financial institutions and the liberalization of capital movements.

Monetary and exchange rate policy cooperation with the European Union has two main aspects. As part of their general incorporation into EU decision making, the newly acceding countries will be formally included into the EU-wide monetary policy dialogue, most importantly via the participation of their central bank Governors in the meetings of the General Council of the ECB, which will comprise – in contrast to the other ECB decision-making bodies – the Governors of the national banks of all EU countries (as well as the President and Vice-President of the ECB). It will be primarily through this body that monetary policies between euro and non-euro countries will be coordinated.⁶⁾ A condition for meaningful participation in this concertation, and thus for EU membership, is that “monetary policy ... be conducted with market-based instruments and ... [that it] be ‘efficient’ in transmitting its impulses to the real economy.”⁷⁾

Second, upon joining the Union, the Central and Eastern European countries shall treat their exchange rate policies as a matter of common interest (Article 109 m EC Treaty). In more concrete terms, the newly

acceding countries are expected to participate in institutionalized exchange rate policy cooperation within the EU.⁸⁾ Even though any formal decision on how to include the newly acceding CEECs into this cooperation is still some time away, it appears reasonable to expect, from today's perspective, that the institutional arrangement provided for by the ERM II will also be the basic framework for exchange rate cooperation pertinent to the countries of Central and Eastern Europe joining the European Union.⁹⁾

3 The Economic Effects of the Introduction of the Euro on the Central and Eastern European Economies

The inception of Stage Three of Economic and Monetary Union will affect the Central and Eastern European economies through three main channels which are partly interrelated.¹⁰⁾ First, the advent of the euro will impact on the CEECs through the growth effects it will have on participating countries. Second, euro interest and exchange rate developments will be critical determinants of the external economic framework conditions for Central and Eastern Europe. Third, the structural changes that Stage Three of EMU brings about or accelerates, in particular in the participating countries' financial sectors, will affect the CEECs.

Stage Three of Economic and Monetary Union will have positive medium-term growth effects for countries participating in the single currency area. Forecasts on the size of these effects have shown a considerable degree of divergence. The Austrian Institute of Economic Research has estimated that the implementation of Stage Three of EMU (if well managed) will allow the participating countries to move, in the medium term, to a growth path/trajectory which is $1\frac{3}{4}$ percentage points above a hypothetical scenario in which Stage Three of EMU would not be implemented.¹¹⁾ "Hard currency countries" will profit more (+2%) than "soft currency countries" (+ $1\frac{1}{2}$ %).¹²⁾ Through increased demand for imports from third countries, the positive growth effects of Stage Three of EMU will have a *beneficial impact on the CEECs' export and GDP performance*. What order of magnitude will these effects reach for the two countries under review here? Most of the demand for imports from Hungary and Slovenia to the prospective single currency area comes from "hard currency countries,"¹³⁾ which reinforces Hungary's and Slovenia's trade gains induced by Stage Three of EMU. The additional import demand of euro zone countries from Hungary and Slovenia, resulting from EMU/Stage Three-induced real GDP effects as calculated by the Austrian Institute of Economic Research, will increase Hungarian exports by 2.7 percentage points and Slovenian exports by 2.2 percentage points in the medium run.¹⁴⁾ Concomitantly, Hungary's GDP will rise by 0.9 percentage points and Slovenia's GDP by 1.3 percentage points.¹⁵⁾ For other CEECs, these effects tend to be lower due to a generally smaller degree of trade integration with euro zone countries.

These positive effects will probably be weakened by two countervailing sets of factors. First, the implementation of Stage Three of EMU will intensify the trade of goods and services within the euro zone, as currency risks are done away with and transaction costs are reduced within the single

currency area. This would also imply that some trade of euro zone members with third countries is redirected towards intra-single-currency-area trade. According to estimates of the European Commission and the IMF, such *trade diversion* effects, however, will not be significant.¹⁶⁾

Second, *prospective exchange rate developments of the euro* vis-à-vis other currencies and, in particular, vis-à-vis the U.S. dollar may affect the CEECs' trade with countries participating in the euro zone through changing real effective exchange rates.¹⁷⁾ This is especially relevant for those CEECs whose currencies will be pegged or oriented towards one currency (usually the euro) rather than being linked to a basket that reflects trade invoicing shares. The Slovenian authorities have aimed at keeping the tolar's real exchange rate to the DEM fairly stable within the framework of a managed float regime. If Slovenia follows a euro orientation after the inception of Stage Three of EMU, the country's net exports will be affected by potential future exchange rate movements of the euro against the USD. The IMF staff estimates that a 10% appreciation of the euro (against the dollar) could lead to "a current account deterioration of 1 to 3 percent of GDP and could lower cumulative real GDP growth by roughly the same amount over a four-year period" for transition countries with a euro-oriented exchange rate policy.¹⁸⁾ In 1997, roughly four fifths of Slovenia's exports and three fourths of its imports were invoiced in currencies which will be replaced by the euro, while USD shares were at 14% for exports and 19% for imports.¹⁹⁾ Due to the prospective high share of euro-invoiced trade in Slovenia's overall foreign trade from 1999 onwards, the effects of potential exchange rate movements between the euro and the USD on Slovenia's current account can be expected to be at the lower end of the range mooted by the IMF.²⁰⁾

Hungary, in turn, has linked the forint to a currency basket consisting of the DEM (70%) and the USD (30%) under a crawling peg regime. Invoicing shares for Hungary's foreign trade correspond fairly closely to the composition of the basket to which the forint is linked.²¹⁾ Thus, if Hungary sticks to the current basket, exchange rate movements of the euro against third currencies should only have negligible effects on Hungary's real effective exchange rate and thus on its net exports.

How will the introduction of the euro affect the *capital movements* of Central and Eastern European countries? The factors which will cause some trade diversion may also bring about a certain reorientation of *FDI flows*, as some foreign direct investment from euro zone countries may be (re)targeted to other euro zone members rather than to the CEECs. On the other hand, increased demand from the euro zone for imports from the CEECs will induce additional foreign direct investment in the transition countries. This will mitigate FDI diversion effects, and the net impact on foreign direct investment flows to the CEECs will presumably be small.

As to *portfolio investment flows*, the picture is more complex. Russo argues that the advent of the euro should stimulate portfolio capital inflows to the CEECs. In the wake of the convergence of yields between euro zone countries, investors – in a desire to maintain the yield/risk combinations underlying their portfolio diversifications – will turn increasingly to securities from the transition economies. The five CEECs which have started

accession negotiations with the EU “all of which offer assets with higher-yield/higher-but-moderate-risk combinations ... seem particularly well positioned to replace the southern EU countries in the portfolios of international investors.” Other changes induced by Stage Three of EMU – the higher synchronization of business cycles within the euro zone, an accelerated securitization process in the euro area, and the reclassification as domestic-currency investments of assets held by institutional investors in currencies to be replaced by the euro – could intensify these portfolio shifts.²²⁾ Interest rate developments within the euro zone will either moderate or further reinforce the interest-sensitive parts of portfolio capital flows. If euro interest rates are low, the relative attractiveness of assets from advanced transition countries would rise further *ceteris paribus*. Conversely, higher euro interest rates would presumably moderate such a portfolio restructuring process.²³⁾ It goes without saying that factors unrelated to EMU, e.g. the Asian crisis or turbulences in the Russian financial market, could also generate portfolio capital flows into or out of Central and Eastern Europe – flows which could either add to or offset the additional non-FDI capital inflows to the CEECs induced by the advent of the euro.

Prospective developments of the euro interest and exchange rate not only affect trade and investment flows, but also the debt service burdens of Central and Eastern European countries. Changing euro interest rates would obviously alter the CEECs’ interest payments, a factor which will be important for countries with sizeable foreign debt denominated in euros or in currencies to be replaced by the euro. Furthermore, debt service ratios may change due to exchange rate movements of the euro to third currencies, while the magnitude of the effect will hinge upon the size and the currency-denomination structure of foreign debt, the exchange rate regime and the extent to which such risks are hedged.

Last but not least, the inception of Stage Three of EMU will have a considerable impact on *financial sector developments* in the CEECs. The financial sectors of Central and Eastern European countries are experiencing substantial changes and, given the objective of integration into the EU’s single market, the momentum of this process can be expected to remain strong in the next years. The integration and transformation of the financial sectors of countries participating in the single currency area induced by the inception of Stage Three of EMU will have spillover effects on Central and Eastern Europe, which will further accelerate the dynamics of change in the transition economies’ financial sectors. Over the next few years, this additional impetus will be especially pronounced for those CEECs (like Hungary) whose financial markets are most open to foreign participation and activity and which have made most progress in bringing the regulatory environment into line with international (EU) standards.²⁴⁾

4 Policy Challenges for EU Applicant Countries

The preceding analysis suggests that the introduction of the euro poses or sharpens a number of policy challenges to the EU applicant countries from Central and Eastern Europe. Some of these issues will become directly relevant only in the medium to longer run while others will have to be tackled in the more immediate future, and in some respects already today. While most of the challenges are closely linked to the EU accession aspirations of the CEECs, a few will require action by the candidate countries irrespective of their future integration into the Union.

4.1 Policy Areas Affected by EMU

Against the backdrop of the deepening monetary integration within the European Union, what are the policy fields that will require the particular attention of the CEECs' authorities?

First, the advent of Stage Three of EMU further accentuates the need for sound and consistent macroeconomic policies in Central and Eastern Europe. Stability-oriented policies are not only a general prerequisite for accession to the European Union and, eventually, to the euro zone. Healthy macroeconomic policies will become ever more important in the years to come, as the CEECs will subsequently remove the remaining restrictions on capital movements,²⁵⁾ while, at the same time, they will presumably be exposed to an increase in (non-FDI) capital inflows induced by the implementation of Stage Three of EMU. While such flows have beneficial effects – they can raise the efficiency of capital allocation and may be used to finance additional investment, which, in turn, would enhance the growth perspectives of capital-importing countries – they also carry a number of risks: In particular, they increase the countries' exposure to sudden changes in capital flows, which can lead to serious macroeconomic turbulences and financial sector turbulences.²⁶⁾ In order to minimize these downside risks, lasting and solid macroeconomic consolidation, in particular in the *fiscal sector*, is a crucial necessity.²⁷⁾

Overall, Hungary and Slovenia have followed appropriate *macroeconomic policies* in recent years. Hungary has greatly reduced its twin deficits since 1995. Simultaneously, inflation has been brought down to levels clearly below 20%. Slovenia had a roughly balanced budget from 1994 to 1996 and recorded a modest deficit in 1997. Its external position is essentially sound. Inflation in Slovenia has been in the high single digits for the last two and a half years and has been slightly declining. In both countries, commitment in general remains strong to continue sound macroeconomic policies and structural reforms.²⁸⁾

In the fiscal field, tackling the existing structural problems will be instrumental in assuring and further reinforcing the sustainability of the consolidation achieved so far. The need for reforms is especially pronounced in the social security system, and Hungary, in particular, began to act on this front last year with the adoption of a comprehensive old-age pension reform program, while in Slovenia a major revamping of the old-age pension system is still in a preparatory phase. A lot remains to be done, i.a. on the disability pension system or in the area of health care, or in other sectors like education

or administrative reform. There is a need to further improve revenue collection, to reform local finances and to find adequate revenue sharing formulas and, in the case of Slovenia, to introduce a value-added tax (which is planned for next year). Some of these reforms – in particular in the pension, health and education systems – will require additional expenditures in the short to medium run, while leading to efficiency gains and cost reductions only in the longer term. At the same time, the fiscal authorities will be confronted with a number of further challenges: While customs duties, a relatively important revenue category, will go down, expenditures will be under increasing upward pressure due to public investment financing needs in infrastructure and environment, the costs of legal harmonization and administrative preparation for EU membership and perhaps also due to potential necessities to eliminate remaining or resurging financial sector weaknesses.

In the general macroeconomic picture, reducing inflation to low single-digit levels is the main challenge of economic policymaking in the advanced CEECs. A significant further lowering of inflation will be a demanding task, given the persistence of several elements of cost-push inflation, the deep entrenchment of inflationary expectations, the limited scope for further fiscal tightening and potential monetary management problems resulting from capital inflows. Important cost-push factors relate to the adjustment of the remaining regulated prices to full cost-recovery levels (a process that has essentially been completed only in Hungary so far)²⁹) and to nominal wage pressures, in particular if wages rapidly adjust to past inflation as a consequence of rigid inflation expectations. Nominal devaluation/depreciation of the exchange rate may uphold or even increase inflationary pressures, both through cost and expectations channels.³⁰) Imperfect competition and, generally, delays in specific areas of enterprise and financial sector reform may also hamper disinflation.

EMU will have a number of implications for the monetary and exchange rate policies of Central and Eastern European countries. Countries that peg their currencies to a currency or a basket of currencies to be replaced by the euro will have to adapt their exchange rate regimes with the inception of Stage Three of Economic and Monetary Union. For basket peggers, such technical adjustments could also offer an occasion for deliberations of a more strategic nature, namely to lower the USD share in the baskets or even to opt for an outright peg to the euro.³¹) These considerations are relevant for Hungary, which will have to replace the Deutsche mark in its basket. In fact, Hungary has already announced that the euro will substitute the DEM as of 1999. For the time being, however, Hungary will not change the weights of the basket currencies for reasons of export competitiveness. In the view of the Hungarian central bank, the euro may tend to appreciate against other currencies and, in particular, the U.S. dollar during the first phases of Stage Three of EMU, which could negatively affect Hungary's export-led growth strategy if the forint were to be pegged to the euro prematurely.³²)

In a similar vein, Slovenia will have to take a decision before the end of this year on how to replace the Deutsche mark as the de facto reference currency for its exchange rate policy as of 1999. Presumably, a euro-oriented exchange rate policy will supersede the DEM-oriented stance.

In a more forward-looking perspective, both countries will have to meet the EU standards on exchange rate policies and, in particular, get ready for participation in EU exchange rate cooperation. Provided that the ERM II arrangement will constitute the basic framework for exchange rate concertation between the euro zone and newly acceding Member States, Hungary would have to phase out the crawling peg regime it adopted in March 1995. Over the last three years, Hungary has already made some headway in this direction, reducing the automatic monthly devaluation rate step by step from 1.9% per month to 0.8% (see Table 3). The Finance Ministry and the National Bank have declared their intention to retain the crawl until single-digit inflation has been achieved. This would imply that the current regime would not be changed before 2000, when it is hoped that inflation will have been reduced to below 10%.³³⁾

Slovenia will have to tackle the basic issue of whether to switch to a fixed exchange rate system or to retain the float during the remainder of the preaccession period. If the country opts for the former, difficult questions of timing and regime design will have to be answered. Since 1996, there has indeed been some discussion on whether Slovenia should move to a peg regime. Still, there seems to be a broad consensus among policymakers for maintaining the currently pursued fairly successful exchange rate regime. Consequently, the policy objective for the next few years, stated in Slovenia's National Program for the Adoption of the *Acquis communautaire* (NPAA) adopted in March 1998, is to "stabilize the exchange rate of the tolar under the current administered floating exchange rate regime."³⁴⁾ In the view of the Bank of Slovenia, substantial further progress towards stability and consolidation will be required before pegging the tolar to the euro.³⁵⁾ This suggests that a regime change towards a formally fixed exchange rate system will probably occur rather towards the end of the preaccession period or in the context of EU accession.

The effects the introduction of the euro will have on capital flows to the CEECs may further accentuate the trend towards more flexibility which has been characteristic of the exchange rate policies of a number of the advanced CEECs over the past years, although less so for Hungary and Slovenia than for some other advanced transition countries (e.g. Poland, Czech Republic). EU accession aspirations and deepening economic integration may, however, work in the medium run against any policy moves which would greatly expand exchange rate flexibility. What is important for the CEECs in the runup to EU accession is to avoid any disruptive movements in nominal exchange rates and real misalignments that could (be perceived to) threaten their prospective inclusion into the EU single market.³⁶⁾

In the case of Hungary, a widening of the exchange rate band would be the primary step to make the exchange rate regime more flexible. Currently, Hungary's intervention band has a width of 2.25% on either side of the central rate. Unlike in other peg countries in Central and Eastern Europe, it has not been widened during recent years.³⁷⁾ Hungary has considered a widening of its intervention band to $\pm 4.5\%$ since last year. The central bank's 1998 Monetary Policy Guidelines state that a widening of the band during the course of this year could be conceivable, provided that

macroeconomic indicators develop as expected or better.³⁸⁾ During the first months of this year, the authorities have, at several instances, stated that a widening of the band is not on their immediate agenda.³⁹⁾ Most recently, in its comments on the outgoing government's guidelines for next year's budget, the National Bank of Hungary took a positive stance towards a widening of the band.⁴⁰⁾

In the first four months of 1998, non-FDI capital inflows to Hungary increased substantially. The country's financial account recorded a surplus of USD 1,938 million. Thereof, USD 1,759 million were net portfolio investment inflows; the net direct investment balance was at USD 395 million, and other investment recorded a net outflow of USD 215 million.⁴¹⁾ Capital inflows appear to have subsided in the immediate aftermath of the May 1998 elections due to some uncertainty about future political developments in the country.⁴²⁾ As a consequence of the designation by Fidesz-MPP of respected candidates for the positions of Finance Minister and Minister of Economics and their first economic policy pronouncements (which signaled a broad continuity of macroeconomic policies), uncertainty has already been reduced tangibly. Remaining concerns would be further dispelled by the formation of a government with a program in line with recently voiced policy intentions, thereby removing the main factor behind the recent downturn in inflows.

At the current stage, it is perhaps too early to fully assess the underlying reasons for the capital inflow surge that occurred during the first four months of 1998 and to determine, in a conclusive manner, whether the underlying reasons for these flows are of a temporary or of a more permanent nature. Still, it is quite possible that a significant part of these inflows has been induced (as outlined in section 3) by the search of portfolio investors for alternative higher yield/moderate risk assets, after interest rates converged at low levels in the eleven euro zone countries. How will Hungary cope with these inflows if and when they continue after the current pause? Sterilization would be very costly, the room for (accelerated) interest rate reductions is probably small, and a tangible tightening of the fiscal stance cannot realistically be expected before next year. Thus, widening the intervention band may be the only short-term measure that could help contain these inflows by "throwing risk into the wheels" of interest-sensitive short-term capital movements. Still, it is not really clear whether such a policy measure would indeed be effective. If the current surge were only the beginning of a more substantive portfolio shift, the exchange rate would just move to the upper end of the (moderately) extended band without reducing capital inflows but possibly hampering, to some extent, export competitiveness.⁴³⁾

Despite the difference in exchange rate regimes, the case for more exchange rate flexibility appears to be similar for Slovenia too, as the tolar, due to regular central bank intervention, has displayed little (nominal) volatility against the DEM. At least for the near future, there is one main difference, though: Slovenia has had a more restrictive stance on non-FDI capital movements than Hungary,⁴⁴⁾ which has helped to contain inflows so far. In a more forward-looking perspective, when Slovenia moves further

ahead with freeing capital movements, the question of whether to extend exchange rate variability in practice (within the overall context of moving towards a peg regime in the medium run) in order to discourage capital inflows will arise in a similar manner as it has in Hungary.

Upon EU accession, the ERM II would appear to be the obvious frame for institutionalized exchange rate cooperation between the newly acceding Member States and the euro area. Participation in the ERM II would seem to be beneficial for the CEECs, as it could tangibly enhance the credibility of the CEECs' policies, thereby moderating exchange rate variations and facilitating nominal and real convergence with incumbent EU countries.

The Hungarian authorities have not taken a (publicly announced) position on how they envisage the country's participation in EU exchange rate cooperation upon EU accession, as this is not an issue which has to be settled in the near future. Nevertheless, there seems to be a clear inclination towards ERM II membership from the outset of Hungary's EU membership.⁴⁵⁾ Slovenia has, in principle, declared its intention to join the ERM II, with accession to the ERM II taking place at the same time as or shortly after entry into the European Union.⁴⁶⁾

What are the EMU-related challenges to monetary policy? As a condition for joining the EU, applicant countries have to effect monetary policy through market-based instruments. Hungary and Slovenia have based their monetary policy primarily on standard indirect policy instruments for several years already. Against the backdrop of EU accession, there are no substantive adjustment needs in this area, with one major exception: As Hungary and Slovenia are opening their banking sectors to the EU, mandatory reserve requirements, which are high in both countries,⁴⁷⁾ will have to be reduced in order to offer domestic banks a level playing field with foreign competitors. Even though full harmonization of instruments with the euro zone is not required before entry into Stage Three of EMU, it should still be commenced at a relatively early stage to match the sophistication of monetary policy instruments in place within the euro zone, and to eventually meet the need for all national central banks in the euro area to be ready to implement monetary policy decisions taken by the ECB fully and in the smoothest possible manner from day one of participation in the single currency area.

The conduct of monetary policy and, in particular, its room for maneuver will obviously be affected by the course on exchange rate policy. In this context, changing degrees of exchange rate flexibility over time are of special relevance. A specific challenge to monetary policy could emerge in transition economies in which multinational companies play an important role. These firms may wish to use the euro not only for cross-border transactions or accounting purposes but also for effecting domestic payments. If the latter is allowed or tolerated (and in fact, in a liberalized environment, it may not be easy to enforce restrictions in this field), monetary policymaking could be severely complicated.⁴⁸⁾

Another policy domain substantially affected by Economic and Monetary Union is *financial sector reform*. A properly regulated and skillfully supervised, sound and competitive financial sector is, in itself, a condition for entry into

the EU. From a more narrow EMU-oriented perspective, a well-functioning financial sector is important primarily for two partly interlinked reasons. First, healthy banks and functioning, sufficiently deep money and securities markets are preconditions for an effective transmission of monetary policy impulses to the real economy,⁴⁹⁾ which in turn is a prerequisite for effective participation in EU monetary policy cooperation. Second, alongside with fiscal consolidation, they are the key to limiting the risks associated with increasingly liberalized capital movements and increases in the magnitude of prospective flows related to the introduction of the euro.⁵⁰⁾ At the same time, the inception of Stage Three of Economic and Monetary Union itself will further speed up change in the financial sectors in Central and Eastern Europe.⁵¹⁾ Increased competitive pressure from the euro zone financial market will also make it more demanding for the CEECs' domestic financial sectors to become sufficiently competitive for integration into the EU single market.

Table 1

The Financial Sector in Hungary and Slovenia

Some key indicators (1997)

	Hungary	Slovenia
Number of banks	40	28
Combined balance sheet of banks / GDP	71%	70%
Share of private ownership in the banking sector	79%	n. a. ¹⁾
Share of foreign ownership in the banking sector	61%	12%
Average risk-weighted capital adequacy in the banking sector	17%	19%
Pre-tax profits / balance sheet in the banking sector	1.2%	1.0%
Market capitalization / GDP	35%	14%
Turnover at the stock exchange / GDP	80%	4%

¹⁾ Due to the current process of companies' ownership transformation, this figure is not available for 1997.

Financial reform has made substantial headway in Slovenia and, in particular, in Hungary. A number of weaknesses in the sector has been removed or mitigated, and the overall development of the financial systems in both countries has been positive in recent years. In the wake of being consolidated, most banks have increased their profitability, have strengthened their capital adequacy ratios and have tangibly reduced the share of bad loans. Bank privatization has been essentially completed in Hungary, while it is still at a relatively early stage in Slovenia. Foreign participation in the sector is very high in Hungary, while it has remained fairly low in Slovenia. Concentration in the sector has proceeded, competition has significantly increased (more so in Hungary than in Slovenia)⁵²⁾ and the diversity range of financial services has increased and their quality has improved. Money and securities markets have in general developed dynamically, and the role of the stock exchange has greatly expanded, in particular in Hungary. Prudential regulations have been strengthened, and supervision has been considerably tightened. Despite all these improvements, much remains to be done to further broaden and deepen the financial systems in Hungary and Slovenia (as well as in other advanced transition countries) to continue strengthening, in a transparent manner, the soundness of the financial sector in general and that of its weaker players in particular, to improve efficiency and sophistication, and to further open the domestic market to foreign financial institutions.

The advent of the euro accentuates the need to accelerate the reforms of the financial systems in the CEECs in order to continue to reduce fragility in the sector. Moving further ahead with the adoption, implementation and enforcement of the EU rules and standards on financial services will help facilitate the reform process.⁵³⁾ A further strengthening of supervision of financial institutions (and in particular the strict application of state-of-the-art prudential regulations) is of extraordinary importance in a context of rapid change. In fact, it is becoming ever more clear that this is and will, for the foreseeable future, remain one of the main challenges on the agenda for policymakers in Central and Eastern Europe.

The adoption of the EMU-specific *acquis communautaire* pertaining in principle to all EU Member States is another precondition for entry into the European Union. In this study, the focus is on two areas which stand out due to their particular bearing on the monetary realm: central bank independence (understood in a wide sense) and the liberalization of capital movements.

Hungary and Slovenia have made major progress over the last years in these two areas.⁵⁴⁾ Both countries have already come fairly close to the EU standards on central bank independence. The central bank laws of both countries concur broadly with the gist of the EU provisions on institutional and personal independence, although several specific provisions will still have to be brought fully in line with EU norms.⁵⁵⁾ Price stability has not been laid down unequivocally as the prime objective of central bank policy in Hungary's and Slovenia's central bank laws, although in practice it has been a very important or even the principal policy goal for both central banks. Hungary and Slovenia have strictly limited direct lending to the government by the central banks in terms of amount and maturity, but have not yet fully interdicted such lending. There is a general intention on the side of the policymakers to undertake the remaining necessary legal changes in the course of the next few years.

Slovenia completed the liberalization of current account transactions by declaring its national currency to be convertible according to Article VIII of the IMF's Articles of Agreement on September 1, 1995. Hungary did so four months later. Hungary has made major progress in freeing capital movements, primarily in the context of its accession to the OECD in 1996. Basically, most inward flows have been liberalized by now with the exception of short-term movements, while the deregulation of outward transactions has proceeded somewhat more slowly. The country aims at achieving full or close-to-full capital account liberalization by the year 2000 or shortly thereafter.⁵⁶⁾ Slovenia has achieved an intermediate state of capital account liberalization. Some capital controls which were (re)introduced on foreign nontrade-related loans in 1995 and on portfolio investments in early 1997 constitute a certain setback in the overall liberalization process. These restrictions will have to be phased out over the next few years, and the authorities have committed themselves to take actions to this end.⁵⁷⁾ In fact, Slovenia's declared intention is to move to full liberalization by 2001.⁵⁸⁾

The preceding analysis has clearly shown that legal harmonization in the area of capital account liberalization – just as adapting to the *acquis*

communautaire in a number of other fields – is not only a narrowly legalistic exercise. Rather, the example of freeing capital movements demonstrates very well that the development of a country's legal basis towards EU standards raises all sorts of both macro- and microeconomic issues. Against the backdrop of Slovenia's and Hungary's progress with macroeconomic stabilization and financial sector reform, it would seem that the gradual approach followed by the two countries has basically been appropriate (with a certain qualification for Slovenia as regards a few specific aspects of the capital controls put in place in 1995 and 1997). Moreover, plans of the two countries for further phased deregulation appear to be broadly appropriate.⁵⁹⁾

A major open question, in this context, is whether candidate countries should aim to achieve full and unconditional liberalization by the time of their EU accession or whether it would make sense to reach agreement with the Union on retaining, temporarily, a few precautionary restrictions on capital flows. More precisely, it is conceivable that the CEECs keep, for some time after joining EU, well-defined safeguard provisions which would allow the reinstatement of strictly transient controls on short-term interest-sensitive capital inflows in emergency situations (including a concrete time schedule for their subsequent outphasing), after having reached an agreement with the other EU Member States and in consultation with the ECB and the European Commission. Provided these measures could be implemented with some reasonable short-run effectiveness, they would give the authorities in the CEECs some breathing space which could be used to put together a package of corrective measures. In fact, the EU regulations on short-term capital movements are the only part of the EMU-related *acquis communautaire* that is obligatory for all EU Member States in which the EU may be ready to accept transition periods.

Finally, the advent of the euro will affect the CEECs' management of their *foreign debt* and *foreign exchange reserves*. The former is more relevant for Hungary than for Slovenia: Despite a significant reduction over recent years, Hungary's foreign debt is still substantial/at a high intermediate level.⁶⁰⁾ In general, applicant countries "should try to gear their effective debt composition towards [the basket or the currency to which their national currencies are pegged or oriented]"⁶¹⁾ in order to avoid major negative effects in the area of foreign debt management resulting from interest and exchange rate changes.

Expectations about prospective euro interest and exchange rate movements will influence the management of official reserves and, in particular, the prospective currency shares of foreign exchange reserves held by the central banks from Central and Eastern Europe. Here, the question of risk spreading will come in as well: With the introduction of the euro, the stock of foreign exchange reserves they hold will become much more uniform in terms of currency variation. The desire to maintain a given degree of diversification may also make reserve managers adapt the currency weights of their foreign assets or even take additional currencies into their reserve portfolios.

4.2 Prospects of Monetary Convergence

Against the backdrop of the unfolding implementation of EMU and improving macroeconomic performance in the advanced CEECs, the question arises of how speedily these countries should proceed further towards stability in general and towards the Maastricht convergence criteria in particular. Should the vanguard CEECs strive to fulfill these benchmarks as early as legally possible? In other words, should the target date for accession to the euro zone be two years after EU accession, which would imply that the reference year for the fulfillment of the fiscal and monetary Maastricht criteria would be year one of their EU membership? Or would the countries be better advised to envisage a longer preparatory period for full monetary integration?

Table 2

Macroeconomic Performance of Hungary and Slovenia in 1996/97

against the Backdrop of the Monetary and Fiscal Convergence Criteria of Stage Three of EMU

		Average inflation	Average interest rates for long-term government bonds (proxy)	Public sector balance/GDP	Public debt/GDP
		in %			
Reference value	1996	2.5	9.1	-3.0	60
	1997	2.7	8.0	-3.0	60
Hungary	1996	23.6	25	-3.3	74
	1997	18.3	16	-4.6	64
Slovenia	1996	9.9	24	+0.3	33
	1997	8.4	21	-1.5	32

Explanatory remarks: The figures presented in Table 2 can only be understood as *approximate orders of magnitude*, since the statistical methodologies have not yet been harmonized with EU standards. Long-term interest rates are especially difficult to measure in the CEECs. This results from the fact that none of the candidate countries has been in a position to issue 10-year fixed-interest government bonds, which are the benchmark for establishing yield figures. Applicability problems are even more pronounced with respect to the Maastricht *exchange rate* criterion (see Table 3), given that non-EU members do not participate in exchange rate arrangements within the Union. The data displayed in Table 2 are defined as follows: Reference values for inflation and interest rates relate to the unweighted average of the three best performing EU countries plus 1.5 percentage points (inflation) and 2 percentage points (interest rates) respectively. Inflation refers to the rise of the consumer price level (average annual rate). For long-term interest rates, the following proxies were used: for Hungary the yield of fixed-rate government bonds, primary market, weighted average (for 1996 three-year bonds, for 1997 five-year bonds); for Slovenia weighted annual average interest rates on tolar-denominated long-term loans extended by commercial banks for the financing of capital assets. It should be noted that this proxy yields very high rates for Slovenia, while the only available alternative indicator, namely the yield of ten-year DEM-denominated government bonds issued in 1990 listed at the Ljubljana stock exchange (but

very illiquid), would suggest an inconceivably low level of interest rates, namely 9% for 1996 and 8% for 1997. Slovenian experts guess that undistorted long-term interest rates for government bonds would have been in the rough order of 15% for 1996 and 1997 (see Lavrac 1998). The public sector deficit/GDP data are based on general government deficit figures as indicated by national sources. According to Russo (1998), actual general-government-balance/GDP figures are higher than indicated by the national source (especially in the case of Hungary), as some revenue items should indeed be classified as financing items. It should be noted that the rise in the Hungarian budget deficit from 1996 to 1997 is largely due to technical reasons; it results from a shift of public debt from the balance sheets of the central bank to the budget. Public debt/GDP data are based on consolidated general government debt figures. The 1997 figure for Slovenia is an estimate of the authors; its order of magnitude has been confirmed by the Finance Ministry of Slovenia.

Table 3

**Exchange Rate Regimes and Policies in Hungary and Slovenia in 1996/97
against the Backdrop of the Exchange Rate Criterion of EMU**

	Exchange rate regime	Basket	Fluctuation bands	Exchange rate stability	ERM membership
Requirements	ERM	—	“normal” fluctuation margins of the ERM (until August 1993 $\pm 2.25\%$, since then $\pm 15\%$)	currency has to remain within the “normal” fluctuation bands, no initiation of a devaluation for 2 years	yes, according to Article 109 j (1) indent 4 EC Treaty
Hungary	crawling peg	70% ECU, 30% USD until end-1996, 70% DEM, 30% USD since then	$\pm 2.25\%$	automatic monthly devaluation rate 1.2% since January 1, 1996, 1.1% since January 1, 1997, 1% since August 15, 1997 (0.9% since January 1, 1998, 0.8% since June 15, 1998)	no
Slovenia	managed float	—	—	tolar depreciated against DEM by 6.9% (in nominal terms) between January 1, 1996, and December 31, 1997	no

Basically, the target dates for an eventual accession to the euro zone throw light upon how long it will take for these two countries, in their own assessment, to lay the structural foundations which would allow them to meet the Maastricht benchmarks on a permanent basis. Hungary and Slovenia, like the other advanced transition countries, base their EMU strategies on a best-case scenario of their accession to the European Union, as they hope to join the Community around 2002. They wish to accede to the euro area as soon as possible. In Hungary, the central bank began to look into the issue already a few years ago.⁶²⁾ Since early 1997, a public debate has evolved on the matter and, more recently, the Hungarian Finance Ministry has also joined this discourse.⁶³⁾ Remarkably, the discussion has been characterized by a great degree of accord. The target dates the Hungarian authorities have communicated for joining the euro zone fall into the narrow range of 2005 to 2007. This implies that there is consensus on joining the single currency area several years after joining the EU.⁶⁴⁾

The Slovenian position has changed over time and is less uniform. Until last year, there was no explicitly adopted target date for joining the euro area, but the country's policymakers were confident that the Maastricht convergence criteria would be fulfilled by the year 2000 or 2001.⁶⁵⁾ Temporarily, Slovenia explored the idea of joining monetary union before accession to the EU⁶⁶⁾ but this notion was dropped fairly quickly, as the authorities realized that there would be no support at all within the Union for monetary integration to precede the other dimensions of EU integration and, above all, full integration into the internal market of the Community. In 1997, when drawing up Slovenia's strategy for EU integration, the authorities reviewed the country's stance on the issue and set the objective "to become an EMU member in 2005" (i.e. a few years after accession to the EU).⁶⁷⁾ This target date was reiterated in Slovenia's National Program for the Adoption of the *Acquis communautaire*, which is built on the country's EU integration strategy.⁶⁸⁾ However, subsequently, the Prime Minister declared the country's intention to join the European Union and the euro area simultaneously in 2002.⁶⁹⁾ Lately, though, he has been less explicit on the issue.⁷⁰⁾ The Council of the Bank of Slovenia, which discussed the country's EU and EMU strategies in mid-January 1998, came to the conclusion that it would be opportune for Slovenia to be admitted to the EU first and become a member of the euro zone only afterwards; the timing of Slovenia's integration into the single currency area would primarily depend on when the country will have achieved sustainable macroeconomic stability.⁷¹⁾ Finally, the Minister for Economic Affairs stated that Slovenia would join the euro zone most probably around 2007 to 2008 and that the 2005 target date was based on an optimistic and not very likely perception of prospective future developments.⁷²⁾ Apparently, all these statements boil down to a main scenario setting out the year 2005 for accession to the euro zone. By retaining, simultaneously, alternative options in both directions, the authorities avoid any strong precommitment at this stage and preserve their full flexibility on the speed of the integration process, in case developments turn out to be either more favorable or less advantageous than expected from today's perspective.

Any judgment on the appropriate speed towards euro zone membership for the advanced transition countries should be guided by realism. Attaining sustainable nominal and, in particular, monetary convergence will be a longer-term process entailing deep structural change. More broadly, for these economies, it may take an extended period of time to gradually mitigate the downside risks associated with participation in a monetary union: Typically, even the vanguard transition countries are still fairly exposed to asymmetric real shocks, and the likelihood of such disturbances will presumably recede only gradually. At the same time, the adjustment capacity of these economies to asymmetric shocks may well be limited due to rigidities in the goods and labor markets as well as to a fairly narrow room for maneuver for fiscal policy.

In the advanced candidate countries, the assessment on this issue tends to be, in general, more positive.⁷³⁾ The argument here rests on the high dynamics of the unfolding transformation and the deepening of integration

with the EU, which will swiftly make applicant countries less prone to asymmetric real shocks. At the same time, analysts from candidate countries tend to argue that the ability to adjust to such disturbances is high due to the relatively pronounced flexibility of prices and (real) wages.

Still, this line of argumentation should probably not be taken too far for a number of reasons. First, even if transition continues to be fast and economic interaction between the Union and candidate countries retains its momentum, the CEECs' exposedness to shocks will abate only relatively slowly, as structural differences will not level out overnight. Second, price flexibility may be very much related to the speed and the comprehensiveness of change entailed by the transformation process; it may not be present to that extent in the longer run. Third, real wage flexibility has not been high generally in all transition countries and at all times. Rather, it has been pronounced only in specific instances (as in the early transformation phase or during particular episodes, e.g. in Hungary in 1995/96). Fourth, adjustment to a deep asymmetric shock in Stage Three of EMU (in a low-inflation environment) will require not only real but also downward nominal wage flexibility. Fifth, cross-border labor mobility will perhaps contribute only little to adjustment. The free movement of labor may be subjected to longer transition periods at the request of incumbent EU Member States, but even if it were not, it is questionable to what extent labor would move in practice in response to regional disturbances. Studies on migration show that the readiness to migrate is apparently not very pronounced in the advanced transition countries and that pull factors (i.e. the attractiveness of EU labor markets) are decisive for migration decisions, while push factors, in particular high or rising unemployment at home, do not play a tangible role for movements of labor from the advanced CEECs to Western Europe.⁷⁴⁾

Furthermore, potential overambition regarding the meeting of the convergence criteria may divert the focus from the number one policy goal of joining the European Union and the daunting tasks that are associated with all the preparations for EU membership. Furthermore, a premature attempt at meeting the Maastricht criteria could easily lead to inconsistencies in the policy mix and impair competitive positions, which could seriously hamper the catching-up process upon which the advanced CEECs have embarked. Clearly, during the next few years, catching up with Western Europe is a more immediate goal than meeting the Maastricht criteria, primarily because it facilitates EU accession and because it is a precondition for laying a sound basis for the ultimate accomplishment of a high degree of sustainable nominal convergence.

This is apparently also the main reason why Hungary has taken a long-term approach towards meeting the Maastricht benchmarks. Two statements may illustrate this. Halpern holds that "the convergence criteria can only become directly relevant for Hungary in the medium to longer run after EU accession. Adjustment to these benchmarks and the recurrent reference to them diverts the attention from the important (integration-related) questions of the present, and does not facilitate finding answers to them."⁷⁵⁾ Inotai states that Hungary has to keep on following "economic policies which focus on improving the country's competitiveness and thus has to be

decidedly export- and investment-oriented ... Only such a strategy can ensure that Hungary will have become competitive in as many sectors as possible when entering the EU ... This goal must not be put in danger by a forced and overhasty adjustment to the ... Maastricht criteria superimposed from above onto the economy."⁷⁶)

5 Conclusions

This study has looked into the implications the introduction of the euro has for Central and Eastern Europe and, in particular, for Hungary and Slovenia. The main conclusions of the analysis are:

First, the EMU-specific aspects of EU enlargement to the East are basically threefold. They center around sound macroeconomic policies, the adoption of those provisions and regulations of the EMU-specific *acquis communautaire* which in principle pertain to all EU Member States no matter whether they participate in the euro zone or not, and the readiness to participate in institutionalized monetary and exchange rate policy cooperation within European Union.

Second, Stage Three of EMU will affect the Central and Eastern European economies through three main channels which are partly interrelated. It will impact on the CEECs through the growth effects on participating countries, through euro interest and exchange rate developments and through the structural changes the introduction of the single currency will bring about or accelerate, in particular in the financial sectors of the participating countries. Stage Three of EMU will increase the import demand of euro zone countries from the CEECs and thereby spur growth in these two (and other) transition countries. The introduction of the euro will induce tangible additional (non-FDI) capital inflows to the advanced CEECs. Finally, the inception of Stage Three of EMU will accelerate change in the Central and Eastern European financial systems.

Third, the advent of the single currency poses or sharpens a number of policy challenges to the EU applicant countries from Central and Eastern Europe. The implementation of Stage Three of EMU accentuates the need for sound macroeconomic policies. Economic and Monetary Union raises a number of monetary and exchange rate policy issues for the CEECs, inter alia about the appropriate degree of exchange rate flexibility and euro orientation during the preaccession phase. Furthermore, it emphasizes the need for well-designed and probably speeded-up financial sector reforms. Finally, with the unfolding implementation of EMU, Central and East European policymakers will feel an increasing need to develop or further refine their strategies for eventual participation in the euro zone.

In the analysis, the examples of Hungary and Slovenia were used to illustrate the effects monetary integration has and will have for the Central and Eastern European countries. The main conclusions of the study are equally valid for and applicable to the other advanced transition economies that have applied for membership in the European Union.

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- 1 Peter Backé is an analyst in the Foreign Research Division, Olga Radzyner is an economist and Head of the Foreign Research Division of the Oesterreichische Nationalbank. The standard disclaimer applies. The authors gratefully acknowledge valuable comments by Sandra Dvorsky, Vladimir Lavrac and Niina Pautola.
- 2 In Hungary, the ruling coalition formed by the Socialists and the (leftist-)liberal Free Democrats lost its majority in the May 1998 elections. The strongest party in the newly elected Parliament is the center-right Federation of Young Democrats-Hungarian Civic Party (Fidesz-MPP). By June 16, the editorial close of this study, Fidesz-MPP had completed coalition talks with the Hungarian Democratic Forum, a small Parliamentary faction closely associated with Fidesz-MPP, and was in advanced coalition negotiations with the right-wing populist Smallholders, the third-largest party in Parliament. Against this backdrop, this study not only presents the policy actions taken and the announcements made by the outgoing government but also sketches the stated policy intentions of Fidesz-MPP and the Smallholders, its major prospective coalition partner, on selected issues pertaining to monetary integration matters. Postscript: After the completion of the study, the original candidate for the position of Finance Minister, László Urbán, withdraw and was replaced by Zsigmond Járai, whose first statements now that there is far-reaching agreement in the area of macro-economic policymaking between both nominees. Thus the description and the assessment of Fidesz-MPP policy pronouncements covered in this study remain valid.
- 3 See European Commission (1997), Section 3.3 of the Opinions; Backé and Lindner (1996).
- 4 For the precise wording of the EC Treaty see Article 109 j (1) indents 3 and 4. The Treaty is clear in that it demands formal membership in the Exchange Rate Mechanism (see indent 4), and most Member States agree that actual exchange rate stability is not sufficient to qualify for euro zone participation. For EU countries joining the euro zone after 1999, the exchange rate criterion will relate to the revamped Exchange Rate Mechanism II (ERM II) which will govern the exchange rate relations between the euro area and nonparticipating EU countries from the inception of Stage Three of EMU. The principles, objectives and main features of this mechanism, laid down at the European Council meeting in Amsterdam in June 1997 are the following: Participation in the ERM II will be voluntary; nevertheless, non-euro area countries "can be expected to join the mechanism." The ERM II will be based on fixed but adjustable central parity rates of the participating currencies vis-à-vis the euro. There will be a standard fluctuation band of $\pm 15\%$ around the central rates of participating currencies, but formally agreed narrower bands will be possible. Intervention at the margins will in principle be automatic and unlimited, with very short-term financing available. However, the ECB and the central banks of the other participating countries can suspend intervention if it were to conflict with their prime objective of price stability. The flexible use of interest rates by the central banks of non-euro countries will be an important feature of the mechanism, and there will be the possibility of coordinated intramarginal intervention.
- 5 In order to remove this specific constraint, it has been proposed to change the Union's rules so as to render possible a participation of the most advanced transition economies in the ERM prior to EU accession (Bofinger 1996; see also De Grauwe and Lavrac 1998). Russo (1998) takes up this proposal, though with a different underlying reasoning: ERM II membership before EU accession could help to smooth the CEECs' exchange rate relations with the euro area. However, judging from past experience with European monetary integration, prospects for putting such a proposal into practice appear to be fairly low. So far, at least, formal EU membership has always been required as a precondition for participation in the European Monetary System and its Exchange Rate Mechanism.
- 6 Moreover, new Member States will participate in the EU Council's decision making on exchange rate policy matters, as laid down in Article 109 (e.g. by concluding exchange rate agreements with third countries or by adopting general orientations for exchange rate policy vis-à-vis third currencies, decisions which have to be taken in cooperation with the ECB, without any infringing or prejudice on its primary goal of price stability). In addition, the acceding CEECs will take part in Council decisions on certain other monetary matters that fall into the responsibility of the Council as laid down in Articles 105 (6), 105 a (2), 106 (5) and (6), 109 h, 109 i (2) and (3), 109 k (2), 109 l (5) of the EC Treaty. Furthermore, high-level representatives of the central banks and the Finance Ministries of the newly acceded countries will participate in the Economic and Financial Committee (which will replace the Monetary Committee as of January 1, 1999). The tasks of this committee include a continuous review of the economic and financial situation in the Member States and in the Community, contributing to the preparation of Council decisions on monetary matters and regular examinations of the situation regarding capital movements and payments (see Article 109 c).
- 7 European Commission (1997), Section B.3.3 of the Opinions. Full compatibility of monetary policy instruments with those in place in the euro zone has to be achieved only on entry into Stage Three of EMU.
- 8 See for example European Commission (1997), Volume 1, Chapter II.1.3: The newly acceding countries "are expected to participate in an exchange rate mechanism ..." See also European Commission (1997), Section B.3.3 of the Opinions.

- 9 For further arguments see Horváth et al. (1997); Backé (1998).
- 10 In writing this section, the authors have greatly profited from participation in a session on the opportunities and challenges of the euro for non-EU Member States held by the United Nation's Economic Commission on April 21, 1998. This section draws on the contributions to this meeting, in particular on Russo (1998).
- 11 See Breuss (1997). The authors of this study are well aware that there is a number of other well-founded projections about the effects of EMU on participating countries. Clearly, it would be equally legitimate to base an assessment about the effects on third countries on any of these other estimations.
- 12 Giving up the exchange rate instrument will make the latter group of countries undergo fairly significant adjustment processes which will have a perceptible negative growth impact for several years. See Breuss (1997).
- 13 In the case of Hungary, the share was approximately 85% in 1996 while, for Slovenia, it was somewhat below 80%. (In both instances, Italy takes the lion's share of exports to the group of "soft currency countries.")
- 14 These and subsequent calculations are based on 1996 figures. Figures on the income elasticity of import demand of the euro zone countries are taken from Russo (1998), Table 3.
- 15 It has also been argued that the introduction of the euro would reduce the exchange rate risks in the CEECs' trade with EMU countries. However, it remains to be seen whether the Central and Eastern European currencies will be more stable against the euro than against the currencies the euro will replace. What is clear is that the exchange rate risk in the CEECs' trade with euro area countries will become significantly less diverse through the introduction of the single currency.
- 16 See Dixon (1998); Russo (1998).
- 17 This factor/effect per se is not new: Up to now, exchange rate movements of the DEM vis-à-vis third currencies have affected the trade of these countries. Exchange rate developments also affect investment flows and debt service, two issues which are discussed in subsequent parts of section 3.
- 18 See Russo (1998).
- 19 In recent years, USD invoicing shares have been remarkably stable, while the weight of those currencies which will be replaced by the euro has increased at the expense of third currencies. The information on currency invoicing shares in Slovenia's foreign trade has been provided by the Bank of Slovenia.
- 20 The effects of potential exchange rate movements between the euro and the USD could become less relevant over time if the former gains additional weight as an invoicing currency at the expense of the latter.
- 21 Hungary's trade invoicing shares are compiled by Hungary's Central Statistical Office. They are also published in the annual report of the National Bank of Hungary. The figures for 1997 were released in April 1998 (see MTI-Econews, April 23, 1998).
- 22 See Russo (1998).
- 23 Several studies indicate that changes in the interest rate level in the United States have been a major external factor influencing the size and direction of portfolio capital flows from and to Latin America (see e.g. Calvo et al., 1993; Schadler et al., 1993). One may thus expect that variations in euro interest rates will have a similar impact on portfolio capital flows to and from the CEECs.
- 24 Russo (1998) points at securitization, concentration of wholesale banking and equity and derivative markets, and cross-border integration of payment systems as some of the main areas of this "structural contagion process." Increased competition in the financial sectors of the CEECs as a consequence of the inception of Stage Three of EMU is also expected by Dixon (1998).
- 25 Capital account liberalization issues and Hungary's and Slovenia's record in this area are discussed below in more detail.
- 26 Furthermore, capital inflows tend to impede disinflation and entail costly sterilization. Moreover, if not fully channeled into real investments, they may cause asset price bubbles. Besides, short-term capital flows exhibit, at times, erratic fluctuations. If these flows are used to finance long-term projects, shifts in flows will unveil these maturity mismatches and strain the balance sheets of companies (in case of direct financing from abroad) and/or the banking system (if flows have been channeled through the banks).
- 27 Fiscal consolidation is necessary for several reasons. First, strong public finances take the pressure off monetary policy to accommodate public sector deficits which could induce residents to move funds abroad in order to escape the inflation tax. Second, fiscal deficits can raise a country's debt stock over time (depending on their size as well as on real interest and growth rates); this could eventually lead to doubts about the country's creditworthiness, again triggering capital outflows. Third, a consolidated fiscal position can help narrow interest rate differentials if they result from upward pressure on domestic interest rates due to high public sector credit demand. It should be added that, while a sound fiscal position is indeed a precondition for capital account convertibility, progress on strengthening public finances may also intensify the problem of unsustainable capital inflows if confidence in economic policy grows strongly.

- 28 In Hungary, the electoral program of Fidesz/MPP calls for a major reduction of income tax and social security contributions on wages and salaries over the next four years. If fully implemented, this would entail a substantially higher fiscal deficit. Recently, the candidates designated for the position of Finance Minister and Minister of Economics have made clear that any reduction of income tax and social security contributions will have to fit into the overarching objective of maintaining a sound and disciplined overall fiscal stance (see *Magyar Hírlap*, June 4, 1998; *Figyelő*, June 11, 1998; *HVG*, June 13, 1998).
- 29 Hungary's formula for adjusting administered utility prices is based, inter alia, on past inflation, which adds a pro-inflationary bias to the indexation mechanism. The designated candidate for Finance Minister intends to change the adjustment method to expected future inflation in the course of 1999 (*Figyelő*, June 11, 1998).
- 30 As to inflationary expectations, this appears to be most clearly the case if exchange rate movements are preannounced, as in the crawling peg regime applied by Hungary (or Poland). Although such an exchange rate system is beneficial from a predictability point of view, the rate of crawl can easily become a floor for inflationary expectations, thus possibly contributing to the further entrenchment of such expectations.
- 31 See Radzyner and Riesinger (1996); Backé and Lindner (1996).
- 32 See statements of central bank Vice Governor Szapáry (*MTI-Econews*, February 17, 1998; *Banklevél* (8) 3; *Magyar Hírlap*, May 15, 1998; *Figyelő*, May 21, 1998).
- 33 For clear statements on this issue see Reuters, March 25 and 27, 1998; May 23, September 25 and November 27, 1997; November 4, 1996. Given the altered political setting after the May 1998 elections, the following overview on recent exchange-rate-policy-related pronouncements of Fidesz-MPP and the Smallholders appears to be in order. The Fidesz-MPP election program argues for a flexible exchange rate policy in order to support export-oriented growth. At the same time, the exchange rate policy of the last years is depicted as one of the "genuine reasons" for inflation in Hungary and, consequently, "lowering successively the speed of devaluation, in line with income developments and the impact on foreign trade developments" is to be one element of Fidesz-MPP's disinflation policy. Policy announcements in the preelection phase were decidedly critical about the crawling peg regime, which was said to have "outlived its usefulness" and which was termed pro-inflationary, since it entrenched inflation expectations (see statement of Fidesz-MPP vice chairman Varga, Reuters, March 25, 1998; *Világgazdaság*, March 26, 1998). After the election, this criticism was toned down considerably in an obvious attempt to calm the concerns of financial markets about possible policy changes perceived as inappropriate. Varga stated that the crawling peg system could be abolished only gradually depending i.a. on the inflation rate and the size of the budget deficit (see Reuters and *Világgazdaság*, May 27, 1998). This shift was reinforced subsequently when Fidesz-MPP chairman Orbán stated that the government to be formed would not even consider any change to the crawling peg mechanism until end-1998 (*MTI-Econews*, May 29, 1998). The designated candidate for the position of Finance Minister, László Urbán, has indicated that changes to the exchange rate system would be effected in close cooperation with the central bank and that a major regime shift would only occur as part of a comprehensive disinflation package which would have to include a forward-looking adjustment of regulated utility prices, a consensual moderation of wage increases and significant fiscal adjustment (*Figyelő*, June 11, 1998; *HVG*, June 13, 1998). Putting together such a package will take some time, which appears to imply that there will be no turnaround in Hungary's exchange rate policy in the near future. The Smallholders, in turn, argue in their election program for a scrapping of the crawling peg. The party intends to make it a policy priority to preserve the external and internal value of the forint. The advantages of the crawling peg are said to be minimal, its drawbacks, however, substantial. The continuous (nominal) devaluation under the current exchange rate regime is seen to have fueled inflation, to have stiffened production structures and to have caused a major rise in public debt (due to the exchange rate losses on foreign-currency-denominated debt). This stance has been underscored by a number of policy pronouncements (see e.g. Reuters, April 25, 1998). After the elections, the Smallholders declared that a managed float, which would allow the central bank "to strengthen the forint at any appropriate point in time," would serve Hungary's interests best in the future, while at the same time they stated that the party had never demanded the immediate scrapping of the present exchange rate regime (*Pester Lloyd*, June 10, 1998). László Urbán, in turn, has firmly stated that in the prospective coalition with the Smallholders, exchange rate policies would be shaped exclusively according to Fidesz-MPP concepts (*Figyelő*, June 11, 1998).
- 34 Government of Slovenia (1998).
- 35 This is one of the conclusions the Council of the Bank of Slovenia arrived at in mid-January 1998 when discussing the country's EU and EMU accession strategy (see *STA*, January 14, 1998).
- 36 See European Commission (1997), Volume 2.
- 37 The Hungarian band has been unchanged since December 1994. In contrast, Poland increased its band from $\pm 0.5\%$ to $\pm 2\%$ in March 1995 and to $\pm 7\%$ in May 1995; in February 1998, the band was further widened to $\pm 10\%$. Slovakia extended its band in three steps from $\pm 1.5\%$ to $\pm 7\%$ during the course of

1996. The Czech Republic increased its band of $\pm 0.5\%$ to $\pm 7\%$ in February 1996, the band being in force until May 1997, when the currency peg was abandoned altogether.
- 38 National Bank of Hungary (1998).
- 39 MTI-Econews, February 10 and April 27, 1998; Reuters, April 28, 1998.
- 40 MTI-Econews, June 16, 1998. Neither Fidesz-MPP nor the Smallholders have taken any public stance on the specific issue of intervention bands under a pegged exchange rate regime.
- 41 This compares to a surplus of USD 398 million during the whole of 1997, which reflects a net inflow of direct investment of USD 1,653 million, a portfolio investment outflow of USD 1,047 million net and other investment flows of USD 208 million net. The steep increase in the financial account in the first months of 1998 is also reflected in bulging purchases of foreign currency by the National Bank of Hungary on the interbank foreign exchange market (see Magyar Hírlap, April 14, 1998).
- 42 To some extent, the temporary drop in inflows may have been reinforced by the most recent financial crisis in Russia.
- 43 For the Polish experience with the widening of the fluctuation band see Krzak (1998).
- 44 The restrictions on non-FDI capital inflows to Slovenia are described in some detail below.
- 45 See e.g. Székely (1997), Palánkai (1998), Inotai (Pester Lloyd, March 4, 1998).
- 46 Senjur (1998).
- 47 Hungary has a uniform requirement of 12% for forint- and foreign-exchange-denominated deposits irrespective of their maturity. In Slovenia, the level of the mandatory reserve differs depending on the denomination and the maturity of deposits as well as on whether the depositor is a resident or not. Mandatory reserves for tolar deposits are 12% for sight deposits and term deposits up to 30 days, 6% for term deposits between 1 and 3 months, 2% for deposits between 3 and 6 months and 1% for deposits of 6 to 12 months. In both countries, obligatory reserves are remunerated at below-market interest rates (currently 11% in Hungary and 1% in Slovenia). There are no reserve requirements on foreign currency deposits in Slovenia; instead, there are foreign exchange cover regulations, ranging from 100% on sight deposits of residents to 5% on deposits of over one year. A slightly different scale applies to the accounts of nonresidents. For more details see Bank of Slovenia (1997).
- 48 According to Palánkai (1998), such a development cannot be excluded in the case of Hungary.
- 49 This point was also highlighted by the European Commission (1997), section 3.3 of the Opinions.
- 50 There are a number of reasons why a well-working financial sector is a necessary precondition for liberalized capital movements. First, it enables the central bank to efficiently use indirect monetary policy instruments, thereby increasing its capability to react to disturbances without being forced to resort to the reintroduction of capital controls or other administrative measures. Domestic banks must be strong enough to withstand foreign competition. Eliminating financial sector imperfections in general is also important in order to narrow interest rate differentials which could induce capital inflows.
- 51 Hungarian central bank Vice Governor Szapáry expects that intensified competition after the introduction of the euro could trigger a massive wave of mergers and buyouts in the Hungarian banking sector (MTI-Econews, February 17, 1998).
- 52 In Slovenia, market forces are tangibly constrained by pervasive indexation of financial contracts, interest rate cartels and a fairly restrictive stance towards foreign participation and activity in the sector.
- 53 Hungary, in particular, has already come a long way in this respect. For an in-depth account on this issue, see Horváth and Zsámboki (1998). Slovenia's legal framework in the area of financial services, in turn, is less advanced. A comprehensive overhaul of the legal basis has been in preparation for a long time but has not been adopted yet.
- 54 For a detailed review on central bank independence see Radzyner and Riesinger (1997); for convertibility issues see Backé (1996). See also European Commission (1997) and Horváth et al. (1997).
- 55 This relates e.g. to some aspects of the rules on dismissal and on the terms of office of members of central-bank decision-making bodies and, similarly, to several specific features of the incompatibility provisions applying to central bank managers.
- 56 In their policy pronouncements, the coalition parties of the prospective new Hungarian government have not touched upon the specific issue of sequencing and timing further capital account liberalization in Hungary yet.
- 57 Indeed, the Bank of Slovenia has already started this process by easing the controls somewhat in June 1997. For details on the regulations see Bank of Slovenia (1998).
- 58 Republic of Slovenia (1998).
- 59 For a more detailed discussion of this issue see Backé (1996).
- 60 Accordingly, prospective changes in euro interest rates would have a tangible impact on Hungary's debt service burden (see statement of Hungarian central bank Vice Governor Szapáry, Reuters, December 24, 1996). This assessment is shared by Russo (1998).

- 61 Russo (1998).
- 62 See Tóth (1995), Riecke (1996), Surányi (1997), Szalai and Varró (1997) and Reuters, October 3, 1997.
- 63 See the statement of outgoing Finance Minister Medgyessy to *Le Monde*, April 17, 1998 and, earlier, an interview with the Finance Ministry's Director Tétényi (Reuters, February 27, 1998). For a somewhat less specific statement by Minister Medgyessy on Hungary's EMU perspectives see Reuters, September 25, 1997. See also Medgyessy (1998).
- 64 The outgoing Finance Minister and the central bank Governor have suggested that the fiscal convergence criteria could be within reach by 2002, while it would take a few more years to meet the monetary and the exchange rate criteria. In all likelihood, the change in government will not lead to significant alterations in Hungary's EMU strategy. The designated candidate for the position of Finance Minister, László Urbán, has recently stated that he "could conceive the year 2005 to be an approximate date" for Hungary's joining of the euro zone, the fiscal deficit/GDP ratio should approach the Maastricht threshold of 3% "within a few years" (*Figyelő*, June 11, 1998). The Smallholders have not made any public statements related to Hungary's EMU strategy.
- 65 See e.g. Reuters, April 11, 1995; October 18, 1996; May 7, 1997.
- 66 At the European Council meeting in Dublin in December 1996, Slovenia's Prime Minister Drnovsek said that "Slovenia will do its best to join monetary union as soon as possible, perhaps even before full EU membership" (*Slovenia Weekly*, January 11, 1997).
- 67 Government of Slovenia (1997).
- 68 Republic of Slovenia (1998).
- 69 See Reuters, December 13, 1997, and STA, December 15, 1997. Evidently, joining the EU and Stage Three of EMU at the same time would presuppose the European Union's readiness to change its policy stance on the exchange rate criterion outlined in footnote 3.
- 70 In a statement in March 1998, the Prime Minister continued to put a clear target date on EU accession (2002). He was less specific on the timing for joining the euro zone ("as soon as possible"). See Reuters, March 12, 1998.
- 71 STA, January 14 and 17, 1998.
- 72 Senjur (1998).
- 73 See for example Lavrac (1998) for the case of Slovenia.
- 74 See Fassmann and Hintermann (1997).
- 75 Halpern (1998), Deputy Head of the Economics Institute at the Hungarian Academy of Sciences and collaborator of the Centre for Economic Policy Research in London.
- 76 Inotai (1998), Chairman of Hungary's Strategic Task Force for European Integration and Director General of the Institute for World Economics at the Hungarian Academy of Sciences.p

Currency Boards in Central and Eastern Europe: Past Experience and Future Perspectives

Niina Pautola
and Peter Backé¹⁾

I Introduction

The 1990s have witnessed a revival of currency board arrangements. Central and Eastern Europe has played a major role in this process: Estonia and Lithuania, and more recently also Bulgaria, have adopted this distinctly rule-based monetary framework. What are the experiences of these countries to date, what is the balance of economic advantages and drawbacks flowing from the currency board arrangements and how does the cost-benefit equation of this monetary framework change over time? Turning to the future, what are the implications of the unfolding transition process and the prospective integration into the European Union for the currency board arrangements in Central and Eastern Europe?

The purpose of this study is to take a closer look at these questions. In order to lay the groundwork for the subsequent analysis, chapter 2 reviews the basic principles of a currency board, while chapter 3 discusses its advantages and disadvantages and chapter 4 outlines typical reasons that have made countries exit this monetary framework in the past. The experience with currency boards in Estonia, Lithuania and Bulgaria is examined in chapter 5. Chapter 6 analyzes the future perspectives of currency board arrangements in the candidate countries, with a focus on future EU accession of the Central and Eastern European countries (CEECs). The conclusions of the study are presented in chapter 7.

2 The Functioning of a Currency Board

The idea of currency boards was originally developed for the British colonies. Since these historical precedents, several countries, such as Argentina, Ireland, Singapore, Malaysia, Hong Kong, and more recently, Estonia, Lithuania and Bulgaria have introduced currency boards. A pure currency board arrangement is not only the strictest form of a fixed exchange rate regime; in fact, it is much more than that: Under a strict currency board, there is no monetary policy. Monetary Policy is in essence transferred to a foreign authority and to market forces. The monetary authorities commit to issuing domestic currency only in exchange for a foreign currency at a fixed exchange rate. In principle, the peg can be to a basket of currencies or to a single currency. In practice, all presently operating currency boards have opted for the latter on transparency and simplicity grounds.²⁾ In addition, the reserve currency is often the currency of the country's main trading partner or more generally the currency which is used most for its international transactions. A currency board requires that official foreign exchange reserves are at least equal, at the given rate of exchange, to the domestic currency issued and usually also to the overall amount of the commercial banks' reserves with the currency board. In other words, domestic notes and coins are issued only if and when they are backed by foreign exchange reserves.

Table 1 highlights the main differences between a currency board and a traditional central bank: A currency board's balance sheet consists principally of its holdings of the reserve currency on the assets side. On the liabilities side, there is an equal value of cash held by the public and deposits by commercial banks. Currency boards often aim to hold excess reserves in

order to guard against asset valuation changes.³⁾ These excess reserves correspond to the net worth of the currency board. Unlike a currency board, a traditional central bank holds not only foreign but also domestic assets. In most cases, an important part of these domestic assets consists of government debt.

Table 1

Currency Board versus Central Bank	
Assets	Liabilities
Currency Board	
Liquid reserve currency assets	Cash (deposits of commercial banks) Net worth
Central Bank	
Liquid reserve currency assets Domestic assets (government debt)	Cash and deposits by commercial banks Net worth

Source: Williamson (1995).

A currency board yields seigniorage, as it earns interest from its holdings of reserve currency securities. The net profit of a currency board corresponds to these interest earnings minus the cost of putting and maintaining notes and coins in circulation and other operating expenses of the board.

Currency boards are generally established by law. This is to guarantee that operations are protected from political interference and lobbying by various interest groups. The main characteristics of a currency board, i.e. the adoption of clear and stringent monetary rule and the provision of sufficient foreign exchange reserves to support the system, usually restrain the monetary authorities from extending credit to the government or the banking system. These rigidly upheld principles are practiced under a *pure (strict) currency board arrangement*. However, under a modified currency board arrangement, the law provides for some flexibility: The currency board may, for example, provide financial support to banks from its excess reserves, or it can borrow money from international capital markets to do so. The monetary authorities may also issue certificates of deposit or other securities to provide or withdraw liquidity.⁴⁾

A traditional central bank exercises monetary policy by using various monetary policy instruments to change the monetary base. A currency board, in contrast, has no (or only very limited) room for maneuver in the area of monetary policy. This means that money supply is determined solely (or primarily) by market forces: The monetary base increases only (or, at least, essentially only) when the public sells foreign currency to a currency board at the fixed exchange rate, or when foreign money flows into the country. Conversely, the monetary base decreases when the public sells cash back to a currency board and purchases foreign exchange, or when money flows out of the country.

Under a currency board system, the level of interest rates is also market-determined, either fully under a pure currency board and mostly under a modified currency board, as monetary operations are not permitted (under a pure currency board arrangement) or largely restricted (under a modified

currency board arrangement). Consequently, changes in the board's foreign exchange reserves will automatically be felt in domestic liquidity and interest rates. A fall in reserves, i.e. a deficit in the combined current and capital account, tightens domestic liquidity, which *ceteris paribus* leads to higher interest rates, while a rise in foreign exchange reserves increases domestic liquidity and leads, other things being equal, to lower interest rates.⁵⁾

In principle, it is possible to adjust an exchange rate fixed under a currency board. However, this very rarely occurs.⁶⁾ After all, removing the certainty of the exchange rate, even once, encourages speculation about the prospects for a future realignment. As a result, the credibility gained through establishing a currency board would be severely hurt, which would subvert the underlying rationale of setting up such a monetary framework in the first place.

3 Advantages and Disadvantages of a Currency Board Arrangement

Most advantages and disadvantages of a currency board arrangement⁷⁾ are similar to the pros and cons of fixed exchange rate regimes.⁸⁾ Here, however, we will focus on the specific arguments for and against currency boards, and not reproduce the debate on fixed versus flexible exchange rate regimes. Nevertheless, when arguing either for or against a currency board arrangement, it is important to bear in mind that the experience with different exchange rate regimes – ranging from flexible to fixed and the different variants in between – has shown that there is no single exchange rate system which would be optimal in all circumstances and at all times.

In practice, there have been various reasons for establishing a currency board. Some countries established a currency board in response to an economic crisis: They wished to end a currency crisis resulting from lost credibility and to support a stabilization and reform program. In other cases, a currency board was established because of limited expertise in monetary management.⁹⁾

In general, one of the main motives for installing a currency board is to build up credibility. The system implies the strict prohibition of financing government deficits or of the provision of credits to the banking sector. First, this should encourage sound fiscal policymaking, leaving spending cuts, revenue increases or lending from (domestic or foreign) banks as alternatives to the government. However, it cannot be taken for granted that a currency board arrangement automatically leads to a sound fiscal policy, especially if a country has lacked fiscal discipline in the past. In other words, a currency board arrangement does not necessarily endogenize fiscal policy. A currency board may also limit moral hazard in the banking system. It may be beneficial not to have a lender of last resort, if crises in the banking system result from poor bank management and supervision.

Since the currency board always has enough reserve currency assets to at least cover its liabilities, it should generally be in a position to effect the conversion into foreign exchange, unlike a central bank whose assets have been run down.¹⁰⁾ A currency board also provides an automatic balance-of-

payments adjustment mechanism which essentially functions in the same manner as under the gold standard fixed exchange rate system. If the currency board country's combined current and capital account is in deficit, money supply is reduced and, *ceteris paribus*, interest rates rise, which promotes a capital inflow. At the same time, increased domestic interest rates reduce domestic absorption, thereby improving the current account position. However, it is important to distinguish between "movements along the demand curve for a currency" and "shifts in demand." That is, a currency board (and, more generally, any rigidly fixed exchange rate regime) will not be successful in leading to the automatic correction of external imbalances if currency preferences change.¹¹⁾

One of the main arguments for currency boards is that they tend to deliver low inflation. In fact, there is some empirical evidence that currency boards are indeed associated with better inflation performance than other forms of pegged exchange rate regimes (even allowing for potential endogeneity of the regime choice). This superior inflation record appears to be mainly due to lower inflationary expectations, reflecting, on average, a higher degree of confidence in the currency board regime than in that of standard pegged exchange rate regimes.¹²⁾ Empirical studies also point out that currency board countries exhibit a relatively better growth performance than other economies.¹³⁾

Finally, a currency board may have a specific appeal in economies in which foreign currencies are used in parallel to the country's own legal tender ("dollarization"). In such cases, there is an advantage in stabilizing the domestic currency by linking it tightly to that currency (dollar) via a currency board.¹⁴⁾

All in all, a currency board, if successful, can strengthen the credibility of the monetary authorities, may foster sound fiscal policies and should lead to lower inflation.

Despite the benefits, currency boards do have drawbacks as well. At the outset, it may be difficult for a country to gather sufficient hard currency reserves to back the entire monetary base. This is one of the reasons currency board arrangements are sometimes recommended to small open economies rather than to big countries.

The loss of active monetary policy under a currency board arrangement can have disadvantages: An active monetary policy can be helpful in a variety of situations, for example in the case of significant capital outflows or inflows. More generally, a purely rule-based regime is inflexible, which is particularly problematic in the case of shocks. In addition, the currency board may slow down the learning and reform process in (transition) countries, where both the experience in designing and conducting monetary policy as well as the availability of monetary policy instruments is limited.

Furthermore, a currency board tends to be procyclical: When an economy is doing well, capital flows in, interest rates fall, and this reinforces the economic boom. However, developments can change quickly due to the volatility of capital flows. As soon as capital flows out, interest rates rise, and it will become necessary to tighten fiscal policy.¹⁵⁾ As a consequence, economic growth slows down.

Under a strict currency board regime, the monetary authorities cannot act as a lender of last resort, i.e. banks cannot ask for any rescue loans to avoid a crisis in the banking system. Although this may be beneficial for the banking system in the longer run, it can limit the room for maneuver for dealing with banking sector crises in the shorter term. However, the experience of modified currency boards disposing of a lender-of-last-resort function suggests that in practice a flexible and extensive use of these funds goes at the expense of the credibility that has been earned as a consequence of sticking to the strict rules of the currency board.¹⁶⁾

The prohibition of budgetary financing by the currency board does not necessarily force sufficient prudence on fiscal policymaking. The government may borrow from international financial markets, provided that a country has access to these markets. Eventually, this may lead to over-borrowing. Furthermore, in transition economies with state-owned banks, the government may be tempted to put pressure on such banks to extend credits in crisis situations and to fund this externally. Consequently, the authorities may be tempted to delay privatization of state-owned banks (which may have become the government's "lenders of last resort").

Moreover, there is the problem of real misalignment. If a country's inflation remains higher than that of the country to which the currency is pegged, the currency can become overvalued. However, this is only the case if real appreciation outpaces the trend appreciation of the equilibrium real exchange rate that is associated with above-average efficiency gains (which typically characterize the economic developments in catching-up economies). Furthermore, no exchange-rate-related competitiveness problem occurs as long as real appreciation is in fact the gradual correction of an earlier undervaluation.

Since the exchange rate cannot be altered to help the economy adjust to external shocks, such as a fall in exports or shifts in capital flows, domestic prices and wages must adjust. If, for example, wages are sticky, which they often tend to be, e.g. due to binding wage contracts or wage indexation schemes, the risk of the domestic currency to become overvalued is high. Against this background, measures designed to increase wage flexibility are particularly crucial under a currency board and the strict nominal exchange rate rigidity it entails.¹⁷⁾ If prices and wages are sticky, adjustment to shocks is lengthy and costly in terms of both output and employment.

4 Reasons to Abandon a Currency Board Arrangement

So far, both economic research as well as technical assistance have focused more on how to start up a currency board or how to operate it than how to exit a currency board. The timing of the exit greatly depends on the initial motivations a country had for establishing the currency board.¹⁸⁾ In some cases, a currency board is a transitional arrangement established to support a country's currency until credibility is restored, institutions are strengthened and financial markets are developed. As this process unfolds, the gradual relaxation of the currency board rules and later the abandonment of the system may be viewed as a "natural" development. However, a currency board can also be a more permanent type of arrangement,

particularly for countries that are frequently exposed to speculative attacks, for very small open economies, and for countries with a long history of chronic and high inflation, provided that prices and wages in these economies are relatively flexible.

Given the advantages and disadvantages of currency boards, it is quite obvious that there are various motives that can make a country switch to another monetary regime. Basically, the decision to exit a currency board may result from changes in the external environment or from mounting internal pressures. The success of the transition to a new system largely depends on the economic and political conditions of the country in question. One of the key concerns about the abandonment of a currency board arrangement is to design and implement the exit process in a manner which does not impair the credibility of the policymakers in general and of the monetary authorities in particular.

What were the reasons that led currency board countries to abandon this monetary framework in the past?¹⁹⁾ A changing external environment was the reason Singapore and Malaysia exited their currency board arrangements in 1973. At the time, the currencies of Malaysia and Singapore were pegged to the U.S. dollar, which was weakening. As a result, both countries experienced a depreciation of their national currencies against those of the main trading partners, leading to an increase in inflation. At the same time, there were increasingly firm expectations of a (nominal) appreciation, which resulted in strong capital inflows and excess liquidity. Consequently, the Malaysian and Singaporean authorities gave up the fixed peg and adopted floating exchange rate regimes. Since both countries were in a "position of strength," given the revaluation expectations at the time of abandonment, these exits from currency boards proved not to be disruptive.

Argentina is a good example of both external and domestic shocks being catalysts for abandoning a currency board arrangement. During 1913/14, Argentina, which operated a currency board at the time, experienced an economic recession in the wake of a crop failure. In addition, due to a decline in exports and substantial repayments of foreign bank loans, the currency board's assets fell, leading to monetary tightening. Pressures to devalue the currency and worries about a severe monetary contraction and further asset losses finally led to the abandonment of the currency board system. When the Great Depression brought about a drastic decline in commodity prices, protectionism and a reduction in foreign lending to developing countries, the currency board, which had been reestablished in 1924, was dropped again. It is interesting to note that, in 1991, Argentina once more established a currency board system.²⁰⁾

It has been argued that the credibility of each country's economic policies depends more on the country's track record in fulfilling past commitments than on present institutional arrangements.²¹⁾ After all, implementation of monetary and exchange rate policy today can be particularly difficult if a country has used monetary policies inappropriately in the past. Consequently, new policy rules may well meet with considerable skepticism, and there may be situations where no formal institutions or laws can remove this lack of trust in the government's ability to carry out

commitments. Moreover, whether an exit from a currency board is smooth or fraught with turbulences will depend on how well the country has performed under the currency board arrangement.

The remainder of the study focuses on the three transition countries in which currency boards are in operation, namely Estonia, Lithuania and Bulgaria. Another country in transition, Bosnia-Herzegovina, is currently in the process of establishing a currency board as part of a stabilization and reform program supported by an IMF standby loan granted in late May 1998 and other external financial assistance.²²⁾ The case of Bosnia-Herzegovina is not reviewed in this study, as the currency board is not yet functioning.²³⁾ Chapter 5 reviews the experience in each of the three countries to date. Chapter 6 deals with the future perspectives of the currency board regimes in Central and Eastern Europe, in a context of progressing transition and approaching integration into the EU.

5 Experiences with Currency Boards in Estonia, Lithuania and Bulgaria

5.1 Estonia

In mid-1992, Estonia, broadly in parallel with its two Baltic neighbors, Latvia and Lithuania, adopted a stabilization and reform program. The collapse of the Soviet Union and of central planning in 1990/91 had resulted in difficult economic conditions: a sharp fall in output, high inflation, malfunctioning payments and monetary arrangements, a trade shock leading to shortages of goods and raw materials and a loss of export markets. While all three Baltic countries have been quite successful in their transition to a market economy, the paths of stabilization have been different, which is also true for the monetary policy and exchange rate regime.²⁴⁾ While Estonia and subsequently Lithuania adopted currency boards, Latvia followed a money-based stabilization program before switching to a de facto peg of the lat to the SDR in February 1994.

In Estonia, the main goals for exchange rate policy were stability and credibility. Estonia adopted a currency board in June 1992. At that time, the Foreign Currency Law, the Currency Law and the Law on the Security of the Estonian Kroon went into force. In conjunction with the Law on the Central Bank of the Republic of Estonia passed in May 1993, these laws form the legal basis for the country's currency board arrangement.²⁵⁾ The ruble was replaced by the kroon, which was pegged to the Deutsche mark at the rate of 8 to 1. Base money was fully backed by foreign reserves, initially by gold, and shortly thereafter by DEM-denominated assets.²⁶⁾ The Bank of Estonia was divided into two departments, the Issues Department and the Banking Department.²⁷⁾ The Issues Department became responsible for operating the currency board, and the Banking Department was entrusted with managing excess foreign reserves which, in principle, can be used to provide loans to troubled financial institutions in emergency situations.²⁸⁾ Credit to government by monetary authorities was prohibited, as was lending to banks or state-owned enterprises. Furthermore, it was laid down that seigniorage in the form of interest earned was to be passed to the Banking Department. Finally, the Law on the Security of the Estonian Kroon

gave the central bank the right to revalue the kroon, whereas a devaluation decision can be made only by Parliament.

With the currency-board-based monetary system in place, the main monetary policy activity of the Bank of Estonia has been the participation in the foreign exchange market, i.e. purchase and sale transactions between the central bank and commercial banks. As for monetary instruments, the Bank of Estonia has used central bank bills (certificates of deposit/CDs), reserve requirements and a standing deposit facility. Central bank bills have been issued since May 1993. Initially, these papers were floated mainly for market development purposes: The primary aim was not to withdraw surplus liquidity from the market, but to increase the collateral banks could use in the interbank market. More recently, they have mainly been issued in order to smooth fluctuations in cash demand. All in all, the volumes of CDs issued have remained relatively small compared to overall liquidity in the system.²⁹⁾ In the second half of 1996, the Bank of Estonia introduced a standing deposit facility with the aim of stabilizing banks' base money demand. The role of this facility has remained minor, chiefly due to the very low interest rates attached to it.³⁰⁾ The minimum reserve rate has been at 10% ever since the introduction of the kroon, while some features of the mandatory reserve regime (as e.g. calculation methods and coverage) have been adapted at several instances. Since mid-1997, changes within the mandatory reserve regime have become more substantial.³¹⁾ Other instruments, such as repos and reverse repos, swaps or (re)discounts have not been used under the Estonian currency board arrangement.

Almost immediately after the adoption of the currency board, foreign reserves began to accumulate, indicating the growing confidence in the fixed exchange rate regime (see Table 2). In May 1998, the foreign reserve cover of the Estonian currency board amounted to 125%.

Table 2

Foreign Exchange Reserves of the Bank of Estonia excluding Gold

	USD million (end of period)
1992	
2 nd quarter	51.9
3 rd quarter	134.9
4 th quarter	170.2
1993	386.1
1994	443.4
1995	579.9
1996	636.8
1997	757.7

Source: Bank of Estonia.

The Estonian currency board was established with fully liberalized current account transactions and a system of relatively few capital controls. It was felt that full capital liberalization was premature in the early phases of transition, as the restructuring of the country's banking system had only just started. Virtually full capital account convertibility was achieved in late 1993. In the course of the banking crisis of 1992, many Estonian banks collapsed, mainly as a result of their weak balance sheets and the tight

monetary conditions implied by the currency board arrangement.³²⁾ Although the excess reserves at the disposal of the Banking Department would have been sufficient to rescue troubled banks, the Bank of Estonia refrained from intervention. Consequently, several bank failures occurred up to 1994. Later, in 1994, the Bank of Estonia did grant some loans to surviving and newly merged banks. During the same year, some banks were privatized, and a loan recovery agency was established as well. The reorganization – concentration and privatization – of the banking sector has continued since. By now, the state has divested all its ownership shares in the banking sector, apart from a minority share in one bank, which it plans to sell in the near future. Presently, nine banks are operating in Estonia (plus one branch of a foreign bank), while the respective figure in 1994 was 23. The number of banks is expected to decline further, as the banking sector is improving its competitiveness and effectiveness.

Since the adoption of the currency board, the Estonian kroon has experienced pressure on a few occasions, for example, in the first quarter of 1994 and at the end of 1995. The last time the kroon was under severe pressure was in October 1997, when speculations about a possible realignment heated up. Against the backdrop of very large current account and trade deficits and adverse developments in the global stock markets due to the Asian crisis, the Tallinn Stock Exchange index fell by half within a few days. During this episode, the Estonian authorities reiterated their unequivocal commitment to maintaining the currency board.³³⁾

Developments in the Estonian foreign exchange market have been fairly calm since. However, several matters of concern remain. The economic boom that had set in late in 1996 accelerated to a very fast growth of GDP in 1997 (11.4% in real terms); in parallel, the already high current account deficit grew further to 13% of GDP in 1997; domestic credit expansion has continued at an extremely rapid pace (around 80% in 1997); inflation began to rise again in spring 1997 and reached more than 14% annually in early 1998 as a consequence of surging domestic absorption.³⁴⁾ Finally, the real exchange rate kept on appreciating (see Table 3).³⁵⁾

Table 3

**CPI-Based Real Effective Exchange Rate Index of the Estonian Kroon
against the Currencies of Foreign Trade Partners, March 1998 (June 1992 = 1)**

	December 1992	December 1993	December 1994	December 1995	December 1996	December 1997	March 1998
<i>Real effective exchange rate index</i>							
Average	2.048	1.832	2.374	2.676	2.912	3.065	3.169
Against the currencies of developed industrial countries	2.129	2.930	3.903	4.894	5.483	6.062	6.341
Finland	2.260	3.163	4.037	5.056	5.725	6.403	6.721
Germany	1.884	2.455	3.399	4.303	4.872	5.389	5.645
U.S.A.	1.856	2.265	3.404	4.666	4.810	4.636	4.708
Sweden	2.293	3.339	4.493	5.418	5.949	6.584	6.890
Against the currencies of transition economies	1.909	0.785	0.967	0.871	0.886	0.838	0.846
Russia	2.373	0.858	1.099	0.914	0.957	0.908	0.919
Latvia	1.072	0.679	0.781	0.872	0.848	0.821	0.826
Lithuania	1.331	0.590	0.648	0.673	0.635	0.573	0.574

Source: Bank of Estonia.

The continuing real appreciation of a national currency may weaken a country's export competitiveness, leading to a widening of trade and current account deficits. Indeed, Estonia has experienced a substantial widening of its current account deficit during transition. This has mainly been due to the growing trade deficit, which, in turn, has resulted from the rapid growth of domestic import demand, encouraged by the surge in domestic credit. Consequently, widening deficits have raised questions about Estonian export competitiveness. However, if real appreciation reflects a rise in productivity, the country's competitive position is not harmed. In Estonia, both exports and imports have increased, although the growth of the latter has outweighed that of the former. In addition, part of the trade deficit has been compensated by the surplus of the services balance and by foreign direct investment. Clearly, changes in the real exchange rate of the kroon cannot be used directly as a measure of competitiveness. Nevertheless, the question of Estonia's competitive position and the possibility of realignment will remain as long as the country has a very high current account deficit. In the medium to long run, therefore, attention should be focused on increasing domestic savings, widening the export base and replacing imports with locally produced goods.³⁶⁾

Within the framework of the currency board arrangement, the Bank of Estonia and the Estonian government have taken a number of measures to strengthen the financial system. The focus has been on sound capital adequacy of financial institutions, appropriate risk management and efficient supervision. The regulative environment has been adjusted to EU and BIS standards.

Against the backdrop of the upturn in GDP growth and large capital inflows, a number of steps have been taken to limit commercial bank credit and to protect or even strengthen banks' balance sheets. Recent measures include an extension of reserve requirements to include domestic banks' net liabilities to foreign credit institutions (July 1997),³⁷⁾ an increase in the capital adequacy requirement for credit institutions from 8% to 10% (October 1997) and a tightening of the principles of calculating the capital adequacy of banks (July 1997 and April 1998). In addition, the Bank of Estonia introduced, in November 1997, minimum additional liquidity requirements for credit institutions, which supplement the minimum reserve obligations of banks,³⁸⁾ and lifted the daily minimum requirement.³⁹⁾ Moreover, the minimum capital requirement for banks was lifted from EEK 60 million to EEK 75 million as of January 1998.⁴⁰⁾ Efforts to improve banking supervision have also been enhanced, which is important given the fact that Estonian banks own many nonbank financial institutions that are operating actively in the securities, insurance and leasing markets. Preliminary evaluations indicate that the measures taken by the Bank of Estonia have had positive effects on commercial banks' behavior.⁴¹⁾ Credit expansion has slowed, and the average capital adequacy of the Estonian banking sector has improved, reaching 15.2% at the end of March 1998.⁴²⁾ Still, the central bank is planning to raise the capital adequacy ratio further to 12% this year.⁴³⁾

Table 4

Selected Macroeconomic Indicators of Estonia				
	1994	1995	1996	1997
Real GDP (growth in %)	- 1.8	4.2	4.0	11.4
Average annual consumer price inflation (%)	47.7	28.8	23.1	11.2
Central budget balance (% of GDP)	- 0.6	- 0.5	- 1.6	1.5
Current account balance (USD million)	-170.8	-187.9	- 423.1	- 608.9
Trade balance (USD million)	-353.0	-707.1	-1,141.1	-1,446.0
Unemployment rate (end of period)	4.1	4.0	4.3	3.6

Source: IMF; trade and current account balances: national sources.

All in all, Estonia's currency board arrangement has played an important role in the country's macroeconomic stabilization in general and in lowering inflation in particular. It has contributed to Estonia's economic growth by increasing both the public's and foreign investors' confidence in the soundness of policymaking, with a strict monetary and a sound fiscal policy being pursued. In the case of Estonia, the currency board arrangement has indeed been associated with fiscal discipline: The country has recorded only small central budget deficits until 1996, while last year a surplus of 1.5% of

Chart 1

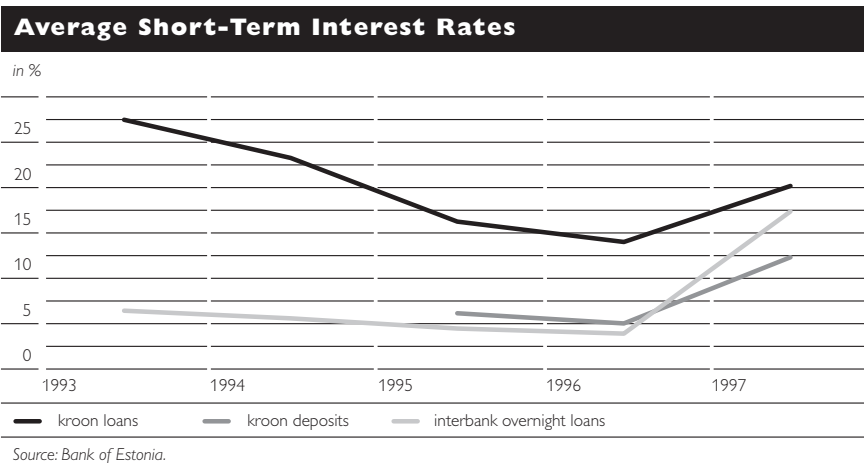


Chart 2

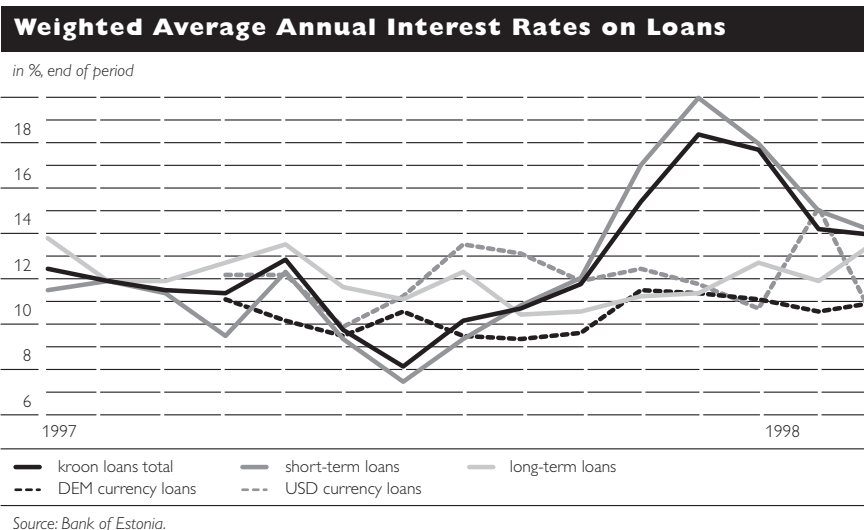
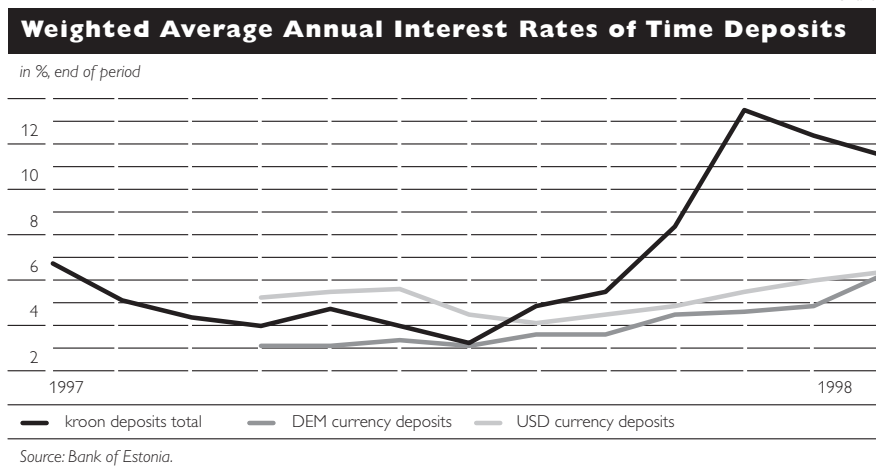


Chart 3



GDP was registered; the record on general government balances has been slightly more favorable over recent years. Since the establishment of the currency board, Estonia has attracted capital inflows that have overcompensated current account deficits and thus expanded money supply, reduced interest rates (at least until recently; see Charts 1, 2 and 3) and that have thereby facilitated structural change and enhanced the business climate. At the same time, capital inflows have been one of the main factors preventing Estonia's inflation rate from converging further to the level prevailing in the anchor country.

Estonia's economic performance over the last one and a half years has also shown some further limitations and drawbacks associated with currency board frameworks. Against the backdrop of an overheating of the economy, it became particularly evident that the set of policy instruments at the disposal of policymakers under such a monetary arrangement is truly limited, which makes it much more difficult to correct, in an effective manner, undesirable (macro)economic and financial developments.

Despite this somewhat more mixed experience in recent times, the Estonian authorities remain committed to the monetary framework in place since June 1992: According to the 1998 economic policy program of the Estonian government and the Bank of Estonia, the fixed exchange rate of the Estonian kroon against the Deutsche mark and the currency board arrangement will continue to be the cornerstones of Estonian monetary policy in the future. With the inception of Stage Three of Economic and Monetary Union (EMU) on January 1, 1999, the euro will most likely replace the Deutsche mark as Estonia's anchor currency, and the peg to the euro will be set according to the conversion rate of the Deutsche mark to the euro.⁴⁴⁾

5.2 Lithuania

Lithuania left the ruble area in October 1992, after an interlude of a few months during which the talonas, the interim coupon currency introduced in May 1992, had circulated in parallel with the ruble. In June 1993, the talonas was replaced by the litas. During the first months of transition, the monetary environment in Lithuania was characterized by relatively lax

monetary policies, which were exacerbated by large ruble inflows. Consequently, the talonas depreciated, under the then prevailing floating exchange rate regime, by over 50% against the U.S. dollar between October 1992 and April 1993, and an increasingly large share of transactions was conducted in foreign currency.⁴⁵⁾ Monetary policy was substantially tightened in May 1993 and, by mid-August 1993, the Lithuanian currency had regained more than half of its earlier losses against the U.S. dollar. Subsequently, the exchange rate of the litas vis-à-vis the U.S. dollar remained stable.

In October 1993, Lithuania's Prime Minister suggested the introduction of a currency board along the lines of the Estonian model, thereby initiating a lively debate over the country's future monetary framework that took place against the background of the successful monetary policy exercised by the Bank of Lithuania on the one hand and the fresh experience of major exchange rate swings on the other. While the government and the IMF supported the idea of introducing the currency board system, the Bank of Lithuania, some commercial banks and many industrialists opposed it.⁴⁶⁾ Finally, in April 1994, Lithuania set up a currency board and the litas was pegged to the U.S. dollar at the rate of 4 to 1. The Law on the Credibility of the Litas, the legal basis for the new monetary arrangement, determined the activities of the Bank of Lithuania and made it responsible for administering the currency board. Unlike in the case of Estonia, the organizational structure of the Lithuanian central bank remained unchanged. The Bank of Lithuania was obligated to provide on request dollars both for currency and for all other liquid liabilities of the Bank, including reserves and other deposits of commercial banks, government deposits, and litas-denominated correspondent balances of other central banks. Initially, the cover of base money with net international reserves (gross reserves minus purchases from the IMF) was below 100%, although it was fully covered by gross reserves.⁴⁷⁾ However, the resources borrowed from the International Monetary Fund were considered a suitable backing for the arrangement due to their long-term character. Like Estonia, Lithuania too experienced rapid growth in reserve money right after the establishment of the currency board (see Table 5). Within a few months, the Bank of Lithuania reached not only full cover with respect to net reserves, but succeeded in building up excess reserves of around 15% of total deposits in the banking system, an order of magnitude which was perceived to be adequate for lender-of-last-resort

Table 5

Foreign Exchange Reserves of the Bank of Lithuania excluding Gold

	USD million (end of period)
1992	45.3
1993	350.3
1994	
March	342.7
December	525.5
1995	757.1
1996	772.3
1997	1,010.0

Source: IMF

purposes in potential future crisis situations.⁴⁸⁾ In April 1998, the foreign reserve cover of the Lithuanian currency board was at 137%.

When the currency board was established, the government was given the power to change the exchange rate after consulting the central bank. However, in June 1994, amendments made to the law granted the central bank the right to change the exchange rate after consulting the government in accordance with the central bank's constitutional right to control money issuing. When the currency board was set up in April 1994, Lithuania had already achieved current account and virtually unrestricted capital account convertibility.

It follows from the preceding analysis that Lithuania, like many other currency board countries, chose a modified currency board arrangement. In other words, certain principles of central bank activities remained in existence: Commercial banks were still obligated to keep minimum reserves at the Bank of Lithuania, and the Bank of Lithuania was reserved the right to extend liquidity loans to commercial banks from excess reserves.⁴⁹⁾ Credit to government was prohibited, as is typically the case in any currency board arrangement. As regards seigniorage, the Bank of Lithuania retains interest earned on foreign exchange.

Up to 1996, the Bank of Lithuania used two types of monetary policy instruments, namely reserve requirements and short-term credit facilities for commercial banks. Lithuania has used mandatory reserve requirements quite actively in order to regulate liquidity in the financial system, whereas short-term facilities, designed to provide funds in the case of transient liquidity shortages, have only played a very limited role in monetary management.⁵⁰⁾ Swap operations or central bank bills have not been used.⁵¹⁾

Towards the end of 1994, some Lithuanian banks began to experience liquidity problems. In response, the Bank of Lithuania took steps which, according to some observers, were not fully in line with the playing rules of a currency board. In particular, the Bank granted the largest commercial bank exemptions from reserve requirements and allowed banks to use Treasury bills to fulfill reserve requirements.⁵²⁾ During the course of 1995, indications of an impending banking crisis increased. The activities of various small banks were suspended for reasons such as the violation of banking practices, insufficient capital adequacy or the inability to fulfill minimum capital requirements.⁵³⁾ In the summer of 1995, the activities of one of the largest Lithuanian private commercial banks were suspended. Problems in the banking sector finally culminated in December 1995, when two medium-sized private commercial banks representing about 25% of total deposits were found to be insolvent. In addition, two of the state-owned major banks with a combined share of 35% of total deposits proved to be in need of new capital in order to meet capital adequacy requirements. To cope with this situation, the two medium-sized banks were closed, and the state-owned banks were recapitalized.

The Bank of Lithuania granted only very moderate financial support in the form of liquidity loans to banks under stress. However, it eased monetary conditions by reducing mandatory reserves from 12% to 10% in April 1995 and further to 5% in May 1996. In addition, in March 1996, the

penalty for shortfalls in fulfilling reserve requirements was suspended. In the summer of 1996, the crisis subsided and the aggregate deposits in the banking system started to grow again, especially in the banks which were perceived to be healthy, indicating that the public had regained confidence in the financial system. In parallel with the beginning relaxation of the situation, penalties for reserve shortfalls were reintroduced (June 1996) and a schedule for a gradual restoration of mandatory reserve requirements to 10% was devised, implemented and completed in 1997.⁵⁴⁾

In the aftermath of the banking crisis, the restructuring of the banking sector has continued to proceed rather slowly. In particular, privatization of state-owned banks has not advanced very far, but is currently being speeded up. In March 1998, 11 commercial banks, the Lithuanian Development Bank and a special management company, established in 1996 to take over nonperforming loans from problem banks, carried out operations. In the regulatory environment, there has been tangible improvement. Over recent years, the Bank of Lithuania has adopted a number of prudential regulations in correspondence with international standards in order to enhance the stability and effectiveness of financial institutions. Among other things, this has included capital adequacy rules, minimum capital requirements, foreign exchange exposure and liquidity limits. The calculation of capital adequacy ratios was broadly put in line with the international methodology as of January 1997. Simultaneously, the capital adequacy ratio was reduced from 13% to 10%. The minimum capital requirement for commercial banks was raised in several steps from LTL 5 million, i.e. ECU 1.13 million in 1993, to ECU 5 million at the beginning of 1998.⁵⁵⁾ In parallel, the central bank stepped up its efforts to ensure that banks meet prudential regulations.

Evaluating the experience of the past years, the Lithuanian currency board has brought about both advantages and problems. As to the latter, the Lithuanian currency board has suffered from shaken credibility and devaluation rumors several times. In December 1994, for example, the opposition in Parliament suggested that, in light of high inflation, the real appreciation of the LTL, and the increasing trade deficit, the currency board arrangement should be abolished, the litas devalued and monetary policy returned to that of a traditional central bank.⁵⁶⁾ In December 1995, the banking crisis, which was accompanied by the central bank's loss of more than a tenth of its reserves in only two months, raised doubts about whether a fixed exchange rate will be maintained.⁵⁷⁾ These devaluation rumors contributed to relatively high interest rates (see Charts 4, 5 and 6).

Table 6

**CPI-Based Real Effective Exchange Rate Index of the Lithuanian Litas
against the Currencies of Foreign Trade Partners (June 1993 = 1)**

	December 1993	April 1994	December 1994	December 1995	December 1996	December 1997	March 1998
<i>Real effective exchange rate index</i>							
Total	0.759	0.791	0.882	0.883	1.025	1.226	1.301
Against the EU	1.648	1.774	2.098	2.562	2.982	3.593	3.744
Against the CEECs	1.401	1.404	1.543	1.651	1.717	1.906	1.881
Against the CIS	0.535	0.535	0.503	0.312	0.342	0.381	0.404

Source: Bank of Lithuania.

Like in Estonia, the relatively high inflation rate as well as the large current account deficit (see Table 7) raise certain concerns, in particular about the medium-term stability of the nominal exchange rate. It is interesting to note that the litas appreciated much less in real effective terms over the last years than the kroon (see Table 6). This appears to be due to different levels of the exchange rates in the respective base periods, distinct

Chart 4

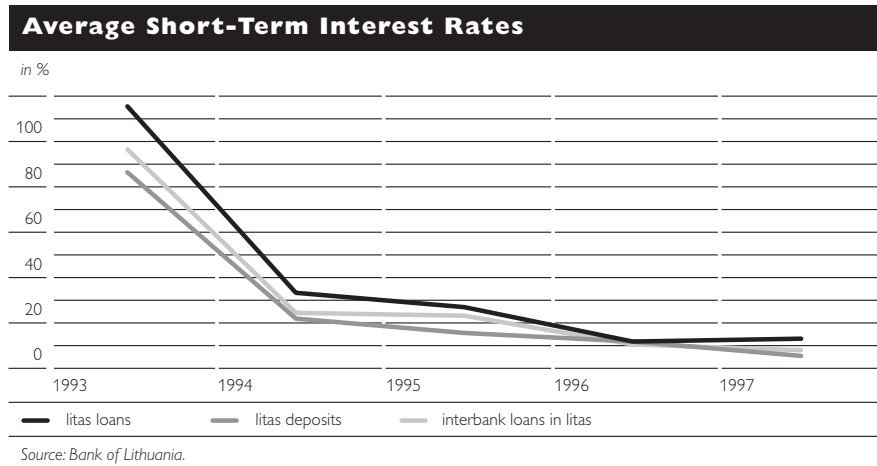


Chart 5

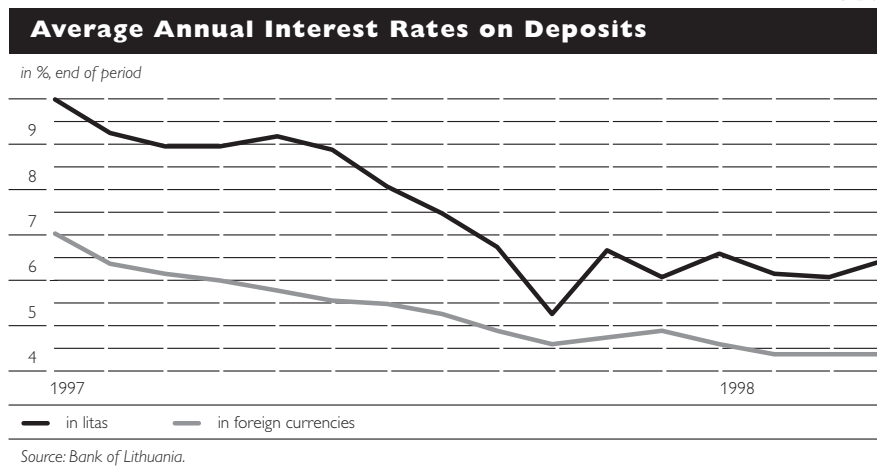
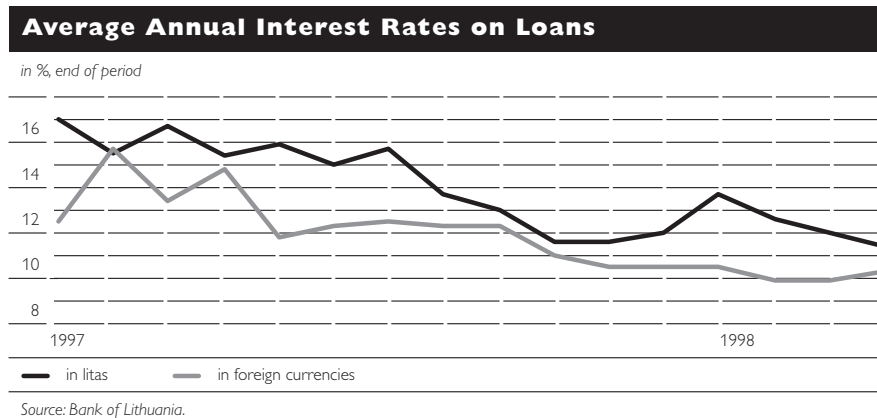


Chart 6



productivity developments and a certain divergence of foreign trade orientations. It goes without saying that the differences in real appreciation trajectories between Estonia and Lithuania per se do not allow any meaningful assessment of the competitive positions of both countries over time.

The greatest benefits of the Lithuanian currency board came in the form of falling inflation, lower interest rates (although not to the levels of developed industrial countries) and economic recovery. Real GDP began to grow in 1995, and growth has accelerated gradually to reach 5.7% in 1997. CPI inflation fell from 72% in 1994 to 9% last year. However, reducing inflation to Western European levels remains difficult, inter alia due to the continuing adjustment of relative prices (in particular the incomplete lifting of administered prices for utilities and social services to cost-recovery levels). Furthermore, the currency board has helped to reduce the degree of dollarization in the economy.⁵⁸) The presumed connection between the currency board and sound fiscal performance has been less pronounced in the case of Lithuania. During the years 1994 to 1996, the central government deficit was steadily around 2% of GDP, whereas in 1997, it diminished to 1% of GDP. However, general government deficit figures were roughly 2 percentage points higher over the period.

Table 7

Selected Macroeconomic Indicators of Lithuania				
	1994	1995	1996	1997
Real GDP (growth in %)	- 1.8	4.2	4.0	11.4
Average annual consumer price inflation (%)	72.1	39.7	24.6	8.9
Central budget balance (% of GDP)	- 1.8	- 1.8	- 2.5	- 1.0
Current account balance (USD billion)	- 93.8	-614.3	-722.6	-944.5
Trade balance (USD billion)	-204.9	-698.0	-878.6	-930.0
Unemployment rate (end of period)	3.8	6.1	7.1	6.7

Source: IMF; trade and current account balances: national sources.

At the end of 1996, Lithuanian policymakers arrived at the conclusion that, (mainly) for integration reasons (i.e. membership in the European Union and eventually participation in the euro zone), Lithuania should gradually exit the currency board. A more active position in the process of harmonization towards EU monetary policy is considered possible only if the country returns to a standard central bank framework. Consequently, a three-stage plan to abandon the currency board was adopted and began to take effect at the beginning of 1997. This exit strategy and its implementation will be discussed in section 6.3.

5.3 Bulgaria

In contrast to Estonia and Lithuania, Bulgaria went through an extended and not particularly successful phase of conventional (money-based) stabilization before introducing a currency board in mid-1997. In the case of Bulgaria, it was the IMF which proposed and, in fact, urged the authorities from early November 1996 onwards to adopt a currency board. In the light of the swift falling-apart of a policy package agreed upon between the Fund and Bulgaria in July 1996 and the rapid deepening of the financial crisis in the country, the Fund came to the conclusion that orthodox stabilization would not work at

that stage of Bulgarian transformation and that a major shift in strategy was warranted in order to break the macroeconomic deadlock and to establish lasting monetary confidence. After having been debated fairly intensely for some time, the currency board idea, which had met with some skepticism initially, received broad acceptance by the Bulgarian public and by the country's policymakers at the turn of 1996/97. However, a political stalemate between government and the opposition delayed the formulation of a currency-board-based program for a few months. Simultaneously, the crisis escalated further: Economic activity slumped, the lev plunged, the budget deficit soared, inflation skyrocketed and real wages collapsed. Only after a wave of public protest that led to a change in government in February 1997 did the efforts at stabilization and reform gain momentum, and a comprehensive policy package was worked out within a few weeks.⁵⁹⁾

At the heart of the stabilization and reform program of April 1997 was a currency board which was to be introduced after a preparatory phase of a few months. The specific institutional features of the currency board were not laid down in detail in the original program, but it was envisaged that the board would in principle be modeled on the Estonian example.

The program was based on tight fiscal policies and, during the preparatory phase for the currency board, firm monetary policies.⁶⁰⁾ Furthermore, the program envisaged a replenishing of official foreign exchange reserves in order to arrive at a full backing of the monetary base. Incomes policies for the state enterprise sector were intended to be both restrictive and performance-oriented. Sound macroeconomic policies were to be complemented by a range of structural reforms – with a specific focus on financial sector reform and enterprise restructuring as well as by liberalization measures in the areas of prices, trade and the exchange system.⁶¹⁾

What were the main preparatory steps for the establishment of the currency board in Bulgaria? At the center of the public debate about the new monetary arrangement was the issue of the exchange rate rule. At the end, the result of the discussion on the most suitable anchor currency and the appropriate level of the peg was an exchange rate peg of the lev to the Deutsche mark at a rate of 1,000:1.⁶²⁾ This was incorporated in a thoroughly overhauled Law on the Bulgarian National Bank (BNB), which was adopted by Parliament in June 1997. The law obliges the BNB “to sell and purchase Deutsche marks against levs on demand up to any amount within the territory (of Bulgaria) on the basis of spot exchange rates, which shall not depart from the official exchange rate by more than 0.5 percent, inclusive of any fees, commissions and other charges to the customer.”⁶³⁾

The law also revamped the organizational setup of the central bank, thereby realigning it with the requirements of a currency board. The new structure is built on three basic departments:⁶⁴⁾ The Issue Department has the function to run the currency board. It shall “maintain full cover for the total amount of monetary liabilities of the Bulgarian National Bank,⁶⁵⁾ by taking actions needed for the efficient management of the Bank's international foreign exchange assets.” The role of the Banking Department is to act as a lender of last resort “in case any systemic risk for the stability of the banking system arises.” The BNB may extend lender-of-last-resort credits

only to solvent banks with a maturity of up to three months “provided they are fully collateralized by gold, foreign currency or other such high-liquid assets.” These credits must be lev-denominated. The maximum aggregate amount of such credits must not surpass the lev equivalent of gross foreign exchange reserves. Apart from this case, the BNB may not extend credits to banks.⁶⁶⁾ The third department is the Banking Supervision Department, which is headed by a Deputy Governor, who exercises the supervision of the banking system “separately and at his own discretion.” Bank licenses are granted and revoked by the Governor on proposal of the Deputy Governor responsible for banking supervision.

The BNB law contains some further regulations which are of particular relevance for a currency-board-based monetary framework: “In the performance of its functions, the BNB shall be independent from any directions of the Council of Ministers and from other state bodies.” The BNB shall be the official depository of the state, but it may not extend credits to the state or any state agency. The Bank “shall determine ... the minimum reserve requirements” for banks with the BNB. In fact, minimum reserve requirements are the only monetary instrument the Bank retains at its disposal under the currency board regime.⁶⁷⁾ Moreover, the BNB shall compile Bulgaria’s balance of payments and it “may organize and operate payments systems and clearing offices.”⁶⁸⁾ Finally, the law contains clear rules on accountancy and reporting requirements.⁶⁹⁾

Also in June 1997, Parliament passed a new banking law which i.a. incorporates a tightening of most prudential regulations (e.g. in the areas of capital requirements, the withdrawal of bank licenses, reporting requirements), a strengthening of banking supervision and an easing of procedures for banks in collecting overdue claims.

Alongside these legal and institutional measures, monetary operations were successively phased out during the preparatory phase of the currency board. First, budgetary lending as well as the refinancing of banks was stopped, and the Bank refrained from using the minimum reserve instrument actively. The exchange rate was steered and subsequently maintained close to the envisaged rate under the currency board by unsterilized intervention. Finally, shortly before the introduction of the currency board, open market operations were discontinued.⁷⁰⁾ In the fiscal policy realm the focus was on the 1997 budget law, which was approved by Parliament at the end of June. After all these preparatory steps, the currency board went into operation on July 1, 1997.⁷¹⁾

How has the Bulgarian economy performed under the currency-board-based program? Apart from some initial pitfalls in the area of incomes policy, macroeconomic policies were carried out along the lines of the program,⁷²⁾ and the currency board has operated according to the rules.⁷³⁾ The implementation record in the field of structural reforms has been satisfactory, with some slippages in specific areas, typically due to insufficient administrative capacity – and thus limited potential to implement policies – rather than to a lack of political will.

A comprehensive tax reform was adopted in December 1997. The main focus of the reform is on further strengthening tax collection, on unifying

the (formerly fragmented) incomes tax regime and on lowering, to some extent, the overall corporate tax level (primarily by allowing for a long-delayed revaluation of fixed assets and thus reasonable depreciation schedules).

In the area of enterprise sector reform, the envisaged closure of large lossmakers was completed in late 1997. The financial isolation and restructuring of another group of enterprises (public utilities and “strategic” commercial firms) has proceeded, but this is clearly a policy field where additional, sustained action is needed. Losses have been contained; however, much needs to be done to ensure enterprise viability in a number of cases and to avoid the (re)emergence of quasi-fiscal liabilities. Privatization of state-owned enterprises was speeded up under the program: The first wave of mass privatization was completed last summer,⁷⁴⁾ a number of large enterprises has been sold to foreign investors and many small and medium-sized companies have been denationalized, primarily via management and employee buyouts. An ambitious privatization strategy for 1998/99, adopted last October, foresees i.a. an accelerated privatization of large enterprises through the involvement of international consultancy firms and investment banks. Moreover, in March 1998, Parliament adopted the legal basis for a second round of mass privatization.

In October 1997, Parliament passed a new foreign investment law aimed at improving the business environment for foreign direct investors by granting them equal treatment with Bulgarian-owned businesses and by providing adequate protection of foreign investment. The law also grants generous tax and customs exemptions or reductions for so-called priority investments, which has been criticized i.a. by the IMF.⁷⁵⁾

The soundness of the banking system, which is dominated by six large and originally state-owned banks controlling 80% of overall assets, has considerably improved after the financial crisis of 1996 and early 1997, which had led to a shakeout in the sector.⁷⁶⁾ At the end of the third quarter of 1997, the banks’ risk-weighted capital adequacy ratios reached an estimated 9% on average. Bank privatization, one of the cornerstones of financial sector reform, has proceeded, although somewhat more slowly than expected. In July 1997, the first of the six large banks, the United Bulgarian Bank, was privatized. The privatization process of Post Bank, another large bank, is at an advanced stage, while the sale of a third bank did not come through in the fall of 1997, when the offers of the two bidders were rejected. One of the six banks, Biochim, has very weak balance sheets and is envisaged to be restructured under a management contract with a foreign bank before being privatized. In order to accelerate the process, the government has recently adopted a bank privatization strategy incorporating an action plan listing concrete steps to be taken over the next months.

In mid-April 1998, Parliament passed a deposit insurance law which revamped the system established two years ago: The burden of compensating the depositors of failed banks was transferred from the budget to the banking sector – the banks are to set up and to fund a Deposit Guarantee Fund with the BNB – and protection was limited.⁷⁷⁾ Also in mid-April, Parliament approved a law that corporatizes the State Savings Bank.⁷⁸⁾

Agricultural sector reform has remained one of the problem areas of Bulgarian reforms. Incomplete land restitution and the degree of state intervention have been of particular concern.

The results of the stabilization and reform program have clearly been beyond expectations.⁷⁹⁾ In fact, as early as March 1997, there was a distinct improvement and further advances could be registered in subsequent months, especially with regard to inflation, interest rates, exchange rate stabilization, budgetary developments and the external position of the economy.⁸⁰⁾ The transition to the currency board arrangement was smooth.

Positive trends have continued after the introduction of the new monetary regime. The contraction of economic activity has bottomed out and, for 1998, most observers expect GDP growth in real terms on the order of 2% to 4%. After being in the range of 3.5% to 5.5% during the third quarter of 1997, monthly (consumer price) inflation subsequently fell to the low single-digit level.⁸¹⁾ Interest rates have fallen to very low nominal (and negative real) levels.⁸²⁾

The current account reached a surplus of approximately 5% of GDP in 1997, largely due to a trade surplus of a similar order of magnitude (primarily reflecting low imports during the first crisis-ridden months of 1997). The capital account was also in surplus, essentially driven by significantly increased (and mainly privatization-related) FDI inflows and substantial (net) disbursements of IMF loans. The crisis in Southeast Asia has not had tangible spillover effects on Bulgaria.

Table 8

Development of the Balance Sheet of the BNB Issue Department

since July 1997

	July 1, 1997	July 31, 1997	December 31, 1997	May 29, 1998
Total assets BGL billion	2,820	3,461	4,412	5,131
Forex cash and nostro accounts	701	1,745	2,264	1,333
Monetary gold	641	641	644	647
Foreign securities	1,466	1,067	1,495	3,142
Accrued interest receivable	12	8	9	9
Total liabilities BGL billion	2,820	3,461	4,412	5,131
Currency in circulation	599	834	1,42	1,394
Bank deposits and accounts	529	656	858	537
Government deposits and accounts	1,153	1,166	1,601	2,283
Other deposits	34	13	25	17
Accrued interest payable	10	0	2	3
Banking Department deposit	494	792	506	897

Source: Bulgarian National Bank.

The evolution of the balance sheet of the BNB Issue Department illustrates the country's successful performance. On the assets side, the significant increase of official foreign exchange reserves reflects last year's favorable balance-of-payments developments.⁸³⁾ On the liabilities side, currency in circulation expanded substantially until end-1997 (reflecting increased demand for lev-denominated cash). Bank deposits went up during the first months of the currency board due to surging deposits by the public and by enterprises with the commercial banks coupled with a very conservative credit policy of the banks. More recently, bank deposits at the Issue Department have decreased, apparently mirroring the lower growth of

deposits with commercial banks due to the distinct decline in interest rates and some credit expansion by the banking sector. Government deposits have also grown substantially, reflecting the country's strongly improved fiscal performance: After having recorded a general government budget deficit of 13.4% of GDP in 1996 (a high proportion of which was directly financed by the BNB), the deficit was contained to 2.6% of GDP last year, thereby remaining clearly below the original target of 6.2% of GDP. This outcome was primarily due to expenditure restraint, lower-than-projected interest rates and improved tax collection. For 1998, the budget plan contains a general government deficit of 1.7% of GDP; for 1999, a balanced budget is envisaged. During the first months of 1998, fiscal developments were clearly stronger than expected, and the central budget recorded a considerable surplus.⁸⁴⁾ Finally, the funds at the disposal of the Banking Department have also been on an overall increasing trend since the inception of the currency board.⁸⁵⁾ So far, there has been no need for the Banking Department to act as a lender of last resort.⁸⁶⁾

Overall, the currency board has played an instrumental role in achieving the turnaround Bulgaria has experienced since the spring of 1997. It has provided "the much-needed anchor for macroeconomic and financial stabilization."⁸⁷⁾ Not only has the currency board effected a "fundamental change in the attitude of the majority of the Bulgarian population towards the course of the reform process,"⁸⁸⁾ it has also created an environment which has been conducive to appropriate fiscal and incomes policies as well as to structural change and financial discipline. Thus, judging from its short record so far, the currency board has been a success story.

6 Future Perspectives

6.1 General considerations

What are the future perspectives of the currency boards that are presently in operation in Central and Eastern Europe? Will the currency boards constitute viable monetary frameworks in the long run, or will they rather turn out to be temporary arrangements that will give way to alternative policy regimes in the foreseeable future? In order to answer these questions, one has to look into two main subsets of issues. On the one hand, it must be examined whether the balance of *economic* advantages and drawbacks flowing from the currency board arrangements in Central and Eastern Europe has shifted over time and how it will presumably change in the future. To put it differently, is there a need to recalculate the economic side of the original cost-benefit equation? On the other hand, the question arises of what relevance the prospects of *EU integration* have and will have for the candidate countries with a currency board. Will a currency board be an appropriate monetary framework for joining the European Union and, eventually, for participation in the euro zone?⁸⁹⁾ Obviously, both sets of questions are partly interrelated. This is particularly true in the sense that the candidate countries' macroeconomic policies should center, as the European Council in Madrid in December 1995 put it, around "the creation of a stable economic and monetary environment" as one of "the conditions for the gradual, harmonious integration" of these countries into the EU.

The three country cases reviewed in the preceding chapter raise a number of questions related to the overall balance of economic advantages and drawbacks that are associated with currency board arrangements, questions which may tend to become ever more pressing the longer such a monetary arrangement is in place.

There is the danger of real misalignments caused by prolonged inflation differentials which are not associated with corresponding productivity differentials or by asymmetric real shocks. If the nominal exchange rate cannot be changed, prices and wages must be flexible in order to avoid a lengthy adjustment process characterized by low economic activity and high unemployment. This raises the question of to what extent goods and labor markets are sufficiently flexible in the three countries under review. Moreover, as monetary policy is severely restricted under a currency board, most of the macroeconomic adjustment burden will fall on fiscal policy. Here the issue is whether the budgetary authorities of transition economies have sufficient room for maneuver, both in the short and in the medium term, and whether they are in the position to prevent contingent fiscal liabilities from emerging. Fiscal flexibility is all the more needed as interest rates in the currency board country may often be out of line with what the state of the economy would call for due to diverging economic cycles between currency board and anchor country, both in terms of amplitude and synchronicity, to “vagaries” in capital flows and to structural differences.

Exchange rate misalignments carry particularly pronounced risks in economies which have embarked on a catching-up process typically associated with an extended period of current account deficits. If such deficits are perceived as becoming too high, market sentiment may shift suddenly. Under a currency board, the resulting change in capital flows will immediately and fully translate to a corresponding monetary contraction.

With increasing capital mobility, capital flows may prove to be ever more challenging to the macroeconomic management in currency board countries for other reasons as well. Capital inflows may impede disinflation, as they lead to an automatic rise in the money supply (as sterilization is ruled out under a currency board arrangement). Moreover, if inflows are not fully channeled into real investments, they may cause asset price bubbles. A further problem relates to short-term capital flows, which at times exhibit erratic fluctuations. If these flows are used to finance long-term projects, this volatility will bring to light such maturity mismatches and strain the balance sheets of companies (in case of direct financing from abroad) and/or the banking system (if flows have been channeled through the banks).

At the same time, the benefits associated with currency board arrangements may lose importance over time: The currency board may have played its role as a credibility-enhancing device and policymakers, while in a standard currency board context being barred from gaining direct experience in using monetary policy instruments in a standard currency board context, may still have acquired expertise over time in making appropriate assessments of economic developments and, by following the events in other countries, they may have become better prepared for

conducting monetary policy. All this will probably tend to reduce the advantages rule-based arrangements carried at the outset.

All these issues will be discussed country by country in subsequent sections of this chapter. Obviously, most of these questions may be more relevant for Estonia and Lithuania, where a currency board has been in operation for a number of years. Bulgaria, in turn, is at a much earlier stage in the process, so that the balance of advantages and drawbacks of a currency board has probably not changed so far.

Integration issues form the second major category of factors that are relevant for assessing the future perspectives of currency boards in Central and Eastern Europe. In judging whether a currency board is an appropriate monetary framework for joining the EU and, ultimately, the euro zone, one has to look into two main issues.

First, Economic and Monetary Union embodies a set of institutional and legal provisions that pertain, in principle, to all EU Member States no matter whether they are members of the euro zone or not. These rules relate, *inter alia*, to central bank independence, the maintenance of price stability as the primary statutory objective of central bank policy and the prohibition of budgetary financing by central banks.⁹⁰⁾ Is a currency board compatible with these provisions? The two critical areas here are central bank independence and the goal of price stability, as monetary financing of budget deficits is ruled out under a currency board arrangement.

There is no obvious reason why a central bank which runs a currency board should not be in a position to fulfill all the requirements the Treaty on European Union lays down in the area of central bank independence. In other words, provided that a currency board is operated by (and embedded in) an independent central bank, the issue of central bank independence should not constitute any legal obstacle to EU membership. Can a currency board country make price stability the primary statutory objective of central bank policy? There is, in principle, no obstacle either, although clearly a currency board has (next to) no policy tools at its disposal to directly fight inflation. Nevertheless, due to its systemic and operational features, a currency board tends to deliver low inflation or even price stability.

Second, can a currency board country participate in close and institutionalized monetary and exchange rate policy cooperation within the European Union? Here the answer is much more ambiguous. First, monetary policy cooperation among EU countries is based on the existence of market-based monetary policy instruments and, in fact, on their active and effective use, if the need arises. It is hard to see how a currency board country could take part fully in such a cooperation. This also implies that a currency board country cannot fully participate in an institutionalized exchange rate cooperation of a standard EU type, an important feature of which would be “the flexible use of interest rates.”⁹¹⁾ This has two implications. First, currency board countries would find it very difficult to live up to the fact that all applicants “are expected to participate in an exchange rate mechanism”⁹²⁾ upon their joining of EU. Moreover, formal participation in an exchange rate mechanism for a defined period of time is one of the preconditions for the eventual joining of the euro zone.

If a country cannot join such a mechanism due to the characteristics of its domestic monetary framework, it will not be able to accede to the euro zone eventually. This would also make it difficult to make its commitment “to adhere to the aims of ... economic and monetary union” fully credible, which is, after all, one of the criteria for EU membership.⁹³⁾ Likewise, a currency board does not allow for any direct control of price level and interest rate developments, which can complicate meeting the monetary convergence criteria. Finally, on a more practical plane, it should be kept in mind that the eventual participation in the euro zone requires that any national central bank be in the position to fully implement monetary policy decisions taken by the European Central Bank. Experience shows that preparations for doing so both within the national central bank itself but also vis-à-vis the domestic commercial banks take time even for countries that have long operated a set of sophisticated monetary policy instruments.

What positions have the European Commission and the EU Member States taken on these issues? In the Commission’s July 1997 opinion on Estonia’s application for EU membership, the currency board is depicted in a positive manner, both from a legal perspective and from a monetary policy viewpoint. Estonia is lauded for having one of the most, if not the most, independent central bank of all applicant countries. This would seem to suggest that the Commission shares the opinion that a central bank which operates a currency board can, in principle, fulfill the Treaty’s provisions on central bank independence.⁹⁴⁾ The *avis* on Estonia states that price stability will have to be the primary objective of central bank policy and that monetary policy will have “to be conducted with market-based instruments and ... be ‘efficient’ in transmitting its impulses to the real economy.” Moreover, it is said that the country is expected, upon EU accession, to cooperate within an exchange rate mechanism. However, the *avis* leaves open what this implies for Estonia’s currency board arrangement in the preaccession and accession context. In fact, the opinion concludes that Estonia’s participation in EMU as a non-euro area country “should pose few problems in the medium term” while, in this context, “[t]he successful implementation of the currency board to date” is found to be “encouraging.”

It should be added that the continuous appreciation of the real effective exchange rate, associated with nominal exchange rate stability, is the only critical remark the Commission’s *avis* has on Estonia’s monetary regime. This suggests that the Commission shares some of the economic worries we have mentioned, but none (or next to none) of our EU-integration-specific concerns. It is interesting to note that the Council, in its thorough discussion of the opinions during the fall of 1997, has not questioned the Commission’s assessment on currency-board-related issues. Nor do the accession partnerships of the EU with Estonia, Lithuania and Bulgaria, adopted by the EU Council in March 1998, take a position on these questions.

In conclusion, currency boards appear to be increasingly controversial monetary frameworks for advanced transition economies which strive for EU membership in the medium run, for both economic and integration reasons. This raises the question of devising appropriate exit strategies from currency board arrangements. Such strategies must lay down when, how and

to what alternative monetary arrangement the countries under consideration should leave the currency board regime. Clearly, it must be the overarching goal of any exit strategy to design and implement the regime change without losing hard-won credibility. Retaining credibility may be a particular challenge, as the credibility earned under a currency board regime derives from following and sticking to a set of rules while, during the transition to a standard central bank, the public has to be convinced that the authorities are in a position and have the expertise to make correct assessments, to design an adequate monetary policy strategy and implement it properly, which implies, in particular, that they have a set of monetary policy instruments at hand that can be applied in an effective manner. Moreover, the authorities have to be perceived as being capable of reacting in a suitable manner to unforeseen developments and of taking the necessary corrective actions.⁹⁵⁾

6.2 Estonia

The exit question poses itself most clearly for Estonia, which is the most advanced among the three economies under consideration here. Estonia is also the country that has moved farthest with regard to EU integration, being one of the five CEECs which began accession negotiations with the European Union in March 1998. According to the authorities, the currency board will not only remain in place for the foreseeable future without tangible changes, it is also considered to provide a good starting point for Estonia's integration into EMU.⁹⁶⁾

Undoubtedly, the fixed exchange rate in the form of a currency board arrangement, under which Estonia has already been operating for six years, has some merits, such as experience with a fixed exchange rate regime, relatively low inflation, strong structural policies, and fiscal discipline. Given the authorities' commitment to maintaining the currency board, the credibility attached to the system and the economic and political complexities associated with a change of the monetary framework, there would seem to be no urgent reason to leave the currency board now.

However, as was already mentioned in section 5.1, very fast economic growth has created a set of new risks, which puts the currency board arrangement under increasing pressure. In particular, there is a risk that the current account deficit will become unsustainable. Although this deficit has so far been financed to a large (but since 1996 declining) extent by FDI inflows, it makes Estonia's financial system increasingly dependent on foreign capital and vulnerable to shifts of sentiment in the international capital markets. As the currency board arrangement tightly restricts the use of monetary policy to limit domestic demand growth, fiscal policy is, apart from incomes policy, the main instrument left to dampen domestic absorption. In light of growth, current account, inflation and interest rate developments since 1997, it seems appropriate to adopt an even stricter budgetary stance than that aiming at a general budget surplus of 1.8% of GDP for 1998 embraced so far.⁹⁷⁾ Apparently, the Estonian authorities have most recently come around to sharing this assessment.⁹⁸⁾ At this stage, one may conclude that the Estonian currency board can be maintained if fiscal policy, including the envisaged further tightening, is implemented as

planned, if it succeeds in curbing GDP growth and the current account deficit, and if limited monetary measures are sufficient to keep bank lending under control and to address potential complications resulting from capital flow volatility.

Accession to the European Union is the prime policy objective for Estonia. In this perspective, it may become necessary to abandon the currency board arrangement in order to develop experience with monetary policy formulation and implementation, as participation in the European System of Central Banks (and eventually in the euro area) will require the active use of monetary policy instruments. Another integration-related reason which may lead to a future exit from the currency board system has to do with inflation. If Estonia wants to maintain its currency peg against the Deutsche mark and later against the euro, it will have to bring down inflation from currently 13% to 14% to a level much closer to that in the anchor country or area. High interest rates, which presently prevail in Estonia, help to bring inflation down. However, under a fixed exchange rate regime, high nominal interest rates create incentives for large capital inflows. Inter alia, these inflows may contribute to a further increase in domestic absorption, which may lead to higher imports and, other things being equal, to a further widening of the current account deficit. In the Estonian case, this could cause serious pressures to devalue the kroon and abandon the currency board. High inflation differentials versus the anchor country or area also give rise to an appreciation of the real exchange rate, which can weaken Estonia's competitive position. This in turn could increase the pressure for devaluation.

There are also other open questions related to the exit issue, in addition to "why," namely the timing of the exit and the way to abandon the regime. In general, it would seem wise to exit before it is "too late," i.e. before a major crisis actually occurs. This might also help to preserve hard-gained credibility. In Estonia, this could imply, for example, that the exit from the currency board arrangement may take place if the current account deficit begins to expand further, or as soon as there is a substantial change in the composition of capital inflows, which finance the current account deficit, towards less long-term and more short-term capital. Concerning the question of "how," a program like the one currently being implemented in Lithuania could be one option: A gradual abandonment could smooth the transition to a new monetary arrangement. In practice, a gradual approach would imply that the monetary authorities subsequently retreat from covering the monetary base entirely with foreign currency and move step-by-step to a mixture of foreign currency and domestic assets. As the kroon is increasingly backed by domestic assets, the central bank can engage in open market operations to influence interest rates. Finally, there is the question of which system a country should exit to. Possibilities vary from a new fixed peg to a floating system. Given Estonia's aspirations to become an EU member, a peg to the euro with relatively wide fluctuation bands could be one of the options which suggest themselves.

6.3 Lithuania

Lithuania has made substantial progress with transformation and has a fair chance to enter EU accession negotiations in one or two years, provided that macroeconomic policies remain sound and that structural reform proceeds. Lithuania is the one country under review here which has revised its assessment on the benefits and the drawbacks of the currency board. In 1996, policymakers came to the conclusion that, (mainly) for integration reasons, the country should gradually exit the currency board while, for the time being, it should retain a fixed peg regime.⁹⁹⁾

In the coming years, one of Lithuania's strategic goals is membership in the European Union and eventually participation in Stage Three of European Economic and Monetary Union. According to the Bank of Lithuania, an active position in the process of monetary integration is possible only by returning to a standard central bank model, i.e. by eventually abandoning the currency board. This would give the authorities more freedom in setting monetary policy as well as fiscal and exchange rate policies.

The Bank of Lithuania has adopted a gradual exit approach according to which the currency board will be abandoned in three stages. The remainder of the section reviews the main elements of the exit strategy set in the Monetary Policy Programme of the Bank of Lithuania for 1997–1999, as well as progress in implementing the strategy. This is followed by a short assessment.

The first stage started at the beginning of 1997. According to the program, the Bank of Lithuania launched new monetary instruments while maintaining the requirement that base money be fully backed by net foreign reserves. Once the Bank of Lithuania is able to conduct monetary policy through new instruments, the second stage will begin. So far, the new instruments have included repurchase and deposit auctions for government securities between the Bank of Lithuania and commercial banks. All together, there were four repo auctions and five time deposit auctions in 1997. This year so far, there have been three repo auctions and one deposit auction. However, the volumes traded have remained small.¹⁰⁰⁾ In principle, the repo transactions enable the Bank of Lithuania to make short-term (up to one month) loans to credit institutions and thereby smooth temporary fluctuations in liquidity. In other words, the Bank of Lithuania up to now has held interest-rate tenders, where it determines the maximum volume for which commercial banks compete by bidding interest rates. From these interest-rate tenders, the Bank of Lithuania will later move to volume tenders, where a fixed interest rate is set and banks make their bids by indicating the amounts they want to borrow. Consequently, the Bank of Lithuania could then be able to influence base interest rates. The mandatory reserve instrument, which has proved to be an effective monetary policy tool, is maintained and developed further. As of April 1998, the base for reserve requirement calculation was widened.¹⁰¹⁾

In addition, short-term lombard loans for which commercial banks will have to pledge specific securities as collateral (bills of exchange, or government securities) to the central bank will be introduced. The Bank of Lithuania will set the interest rates on lombard loans above interbank market

and repo rates. This will allow the central bank to establish an interest rate ceiling in the money market and will force banks to use lombard loans only on special occasions.

The introduction of overnight loan operations was planned for the first half of 1998.¹⁰²⁾ Indeed, on April 16, Lithuania's central bank announced that it will set a 13% interest rate for overnight loans when it starts extending them to commercial banks.¹⁰³⁾ These overnight loans will be available for banks that face a shortage of funds in their central bank correspondent accounts.

In addition, the Bank of Lithuania is planning to conduct reverse repos, giving commercial banks the opportunity to perform more operations with government securities. This will increase demand for such paper and also develop the primary and secondary markets.

In the second stage, a number of amendments will be introduced into the Law on the Credibility of the Litas. These amendments will aim at providing legal conditions to the Bank of Lithuania to perform operations of a traditional central bank through a more active control of money supply and interest rates. Full backing will remain in place, but the asset base eligible for backing the money supply will be broadened.

However, in order to avoid public misperceptions, the Bank of Lithuania will need to tightly monitor money supply and will need to carefully watch over the stability of the litas. On the other hand, during the transition to a fully-fledged central bank framework, the fixed rate of the litas with regard to the U.S. dollar should, according to the program, remain unchanged. This should have a positive impact on public confidence in monetary policy. Finally, the second stage is to include measures to be used only in the case of crisis, in particular if the foreign currency reserves of the Bank of Lithuania diminish by more than 20% and/or if this declining tendency is evident for more than three consecutive months. For example, in such a situation, the rules on mandatory reserves could be changed so that required reserves made against foreign currency liabilities would have to be kept in litas. This would force banks to convert required reserves into litas and would increase demand for reserve money accordingly.

In the third stage, but not before 1999, the litas will be linked more closely to EU currencies and eventually – at the latest at the end of the year 2000 – pegged to the euro. It could prove suitable to link the litas, during a transitional period, to a currency basket consisting of the U.S. dollar and the euro. The weight of the U.S. dollar and the euro in the basket will be established in accordance with the currency structure of the balance of payments and the public debt at the time of decision taking. If, however, during the coming years transactions in euros increase swiftly, the Bank of Lithuania may peg the litas to the euro without the transitional link to a currency basket.

The third stage will begin, however, only after specific monetary conditions have been fulfilled. These include stability in financial and monetary markets, constant growth in deposits with banks and a monthly inflation rate within 0.5% to 0.8% for at least six consecutive months. If there is a need for some exchange rate flexibility, this should be achieved by

introducing a relatively narrow fluctuation band against the currency basket or the anchor currency, which would contribute to discouraging speculative capital flows. Such a step would, however, not be taken before the end of 1999.

Achieving a successful exit will greatly depend on the authorities' ability and readiness to use the newly-found freedom in economic and monetary policymaking in a prudent manner. Various factors point in favor of the gradual exit strategy the Lithuanian authorities have chosen. First, Lithuania is a small open economy rapidly integrating into the EU, which makes it very sensitive to external shocks. Second, the country has had a rather positive experience with the currency board, meaning that at least some credibility has been gained from the currency board. Third, Lithuania's transition to a market economy, especially in the financial sector, is still underway.

Alternative approaches to the exit issue seem to be less promising: A quick abandonment of the currency board coupled with devaluation would increase the prices of imports and result in higher inflation and interest rates, without reducing the current account deficit substantially.¹⁰⁴⁾ This also implies that a devaluation would further raise the social costs of transition. A floating exchange rate, if chosen now as a new regime, would lessen the predictability of exchange rate developments, impede corporate planning and discourage (foreign and domestic) investment.

6.4 Bulgaria

For Bulgaria, the question of exiting the currency board is not on the political agenda at this stage. The authorities intend to stick to the currency board for the foreseeable future. One of the ways in which they underlined their commitment is the provision enshrined in the 1997 BNB Law to replace the lev link to the DEM by a euro peg "when the euro becomes legal tender in the Federal Republic of Germany."¹⁰⁵⁾

What is at stake in the current phase is strengthening the medium-term viability of the currency board. Currently, Bulgaria is negotiating a three-year Extended Fund Facility agreement with the IMF which aims at consolidating and further improving the achievements reached under the current standby arrangement by maintaining sound macroeconomic policies and by accelerating and deepening structural reforms and liberalization measures. The focus of this package is exactly to improve the medium-run sustainability of the currency board arrangement.

The main challenge in this context is to avoid a future exchange rate misalignment that would be difficult to correct under a currency board regime. At the current stage, the exchange rate to the DEM appears to be at a broadly appropriate level.¹⁰⁶⁾ However, as in other transition economies, inflation in Bulgaria will, in all likelihood, be higher than in Germany (or the euro zone respectively) for an extended period of time.¹⁰⁷⁾ Average annual consumer price inflation for 1998 is expected to be at 26% to 28% (with a December to December inflation of 11% to 12%);¹⁰⁸⁾ inflation is envisaged to fall to 10% on average (and 8% to 9% end-of-period) in 1999 and to 5% to 6% (both on average and end-of-period) by 2001. As the nominal exchange rate is locked in through the currency board arrangement, the

country will face a prolonged real appreciation of the lev. In order to preserve its competitive position in such a situation, Bulgaria will have to meet a number of policy challenges.

In the macroeconomic area, maintaining a sound fiscal stance and following productivity-oriented incomes policies, including for the time being administratively regulated wage restraint in the state enterprise sector, seem to be most important. In parallel, the authorities will have to broaden and deepen structural reforms. There is a particular need to persevere with enterprise sector reforms, with a focus on privatization and, as regards public utilities and selected strategic enterprises, on restructuring and rehabilitation.¹⁰⁹) It will be equally important to continue to reform the Bulgarian financial sector, in a comprehensive and steadfast manner, in order to increase the efficiency of financial intermediation. Moving ahead with bank privatization and a further strengthening of financial sector supervision will be particularly crucial. There are good reasons to maintain a cautious approach towards rapidly liberalizing short-term capital flows before solid macroeconomic and financial consolidation has been achieved.¹¹⁰) Finally, in order to preserve social cohesion and facilitate structural change, social policy has to be developed further and funded adequately (taking into account the overall fiscal constraint).

A policy package along these broad lines would contribute to containing inflation and simultaneously create framework conditions which are conducive to the unfolding of productivity advances. Consequently, real appreciation would, by and large, not outstrip the appreciation of the equilibrium real exchange rate, competitiveness would be maintained or even improved, and this would bode well for the medium-term sustainability of the currency board regime.¹¹¹)

At the current stage, impediments to growth in Bulgaria are primarily structural in nature, and the nominal exchange rate stability which comes along with the currency board is not an obstacle to recovery, provided the country is not hit by a major adverse shock, macroeconomic policies remain sound and the dynamics of structural change are kept up. In fact, there appears to be a continuing need for the currency board to fulfill its anchoring function for economic and financial developments in the country. The Bulgarian transformation experience, in particular, has shown how detrimental the lack of such a stability-enhancing device can be: While real GDP in the advanced transition economies has already come close to or even surpassed the pretransition level, Bulgaria's 1997 gross domestic product was no less than 38% below that of 1989.

Over the next few years, the currency board appears to be a monetary framework conducive to macroeconomic consolidation and deep structural change. In the longer run, when these challenges have been met and Bulgaria has started to get closer to EU accession, the time may come to revisit the currency board arrangement. However, it should be noted that the potential option of a future regime shift does not feature in the statements of the Bulgarian authorities at this stage.

In fact, different representatives of the Bulgarian government have recently announced that Bulgaria aims to fulfill the Maastricht convergence

criteria by 2001 and that the currency board is to be instrumental in this process. In the policymakers view, meeting the Maastricht benchmarks is to help underscore Bulgaria's quest for EU membership.¹¹²⁾

When assessing these pronouncements, a number of issues have to be taken into account. First, a currency board, if managed well and shored up with the necessary fiscal policies and structural reforms, is a framework that is generally conducive to achieving stable macroeconomic conditions. Nevertheless, it should be borne in mind that, under a currency board regime, there is no policy tool to combat inflation directly. The same holds true, in principle, for the direct control of interest rates. Moreover, a non-EU Member State cannot fulfill the Maastricht exchange rate criterion, which presupposes, *inter alia*, formal membership in the Exchange Rate Mechanism of the European Union for two years, a mechanism which only EU Member States can enter.

If Bulgaria embarks on a dynamic catching-up process characterized by major and sustained productivity increases while holding the nominal exchange rate stable, inflation will be tangibly above the reference value for the Maastricht criterion, which has been below 3% during recent years.¹¹³⁾ More generally, there are a number of sensible arguments why transition economies in a catching-up process should not head for low single-digit inflation prematurely.¹¹⁴⁾ Overambition with respect to the Maastricht criteria and, in particular, with respect to the monetary benchmarks facilitates neither the transition process nor EU accession.

Given the broad range of unknowns about the longer-term outlook, it may not be perfectly sensible for policymakers to go too far, at this stage, in defining the prospective role the current monetary arrangement may have with respect to integrating Bulgaria into the European Union and eventually into the euro zone. In particular, it would presumably be somewhat problematic if the currency board were to be depicted as a shortcut for Bulgaria's prospective inclusion into the monetary dimension of EU integration. Apart from the institutional and policy-coordination-related considerations raised above, it should be noted that it is very unlikely that the current exchange rate will still be the appropriate rate for joining the euro zone in the distant future, even if the economy is not hit by major adverse shocks and its adjustment capabilities prove to be substantial during the whole intermediate period.

As regards the longer-term perspectives of the currency board, in particular against the backdrop of EU accession, Bulgaria will have a "latecomer advantage." It will be in a position to follow the developments in Estonia and Lithuania and draw the lessons from the developments in these two economies. In case it turns out that currency boards are not the most suitable arrangements for long-term economic development and full integration into European Union structures, Bulgaria will face the challenge of effecting the monetary regime change in a timely and smooth manner, benefiting from the experience of the other countries.

7 Conclusions

In the 1990s, there has been a revival of currency board arrangements, which has been propelled to a large extent by Central and Eastern European countries: Estonia, Lithuania and Bulgaria have introduced this particular monetary framework. A currency board represents the strictest version of a fixed exchange rate regime where the monetary authorities commit to issuing domestic currency only in exchange for a foreign currency at a fixed exchange rate. The exchange rate peg usually is to a single reserve currency (rather than to a basket) and it is enshrined in law. Unlike a traditional central bank, which can exercise an active monetary policy by using various monetary policy instruments, a pure currency board has no monetary policy: It is quasi transferred to a foreign authority and to market forces.

One of the main advantages of establishing a currency board is that it is a suitable framework for building up credibility. The pure currency board system implies the strict prohibition of financing government deficits or extending credits to the banking sector. In addition, experience shows that currency boards deliver relatively low inflation and interest rates, provided that the exchange rate is fixed to the presumably low inflation reserve currency (which has usually been the case). Like any fixed exchange rate system, a currency board also offers predictability and the prospect of a stable nominal exchange rate.

One of the main challenges currency board countries tend to face are exchange rate misalignments. If a country's inflation remains higher than that of the country to which the currency is pegged, the national currency can become overvalued. Since the nominal exchange rate cannot be altered to ease adjustment to external shocks, domestic prices and wages must adjust. However, they often tend to be sticky. Moreover, a currency board is inconducive to financial market development and may slow down the learning and reform process in countries where the experience in designing and conducting monetary policy is limited.

In a modified currency board, some of the disadvantages of a pure regime are mitigated by the introduction of rudimentary monetary policy instruments and a lender-of-last-resort function. Nevertheless, the main drawbacks associated with a currency board regime remain also under a modified arrangement.

Among the Central and Eastern European countries, Estonia has had the longest experience with the currency board arrangement. As a part of its stabilization and reform program, Estonia adopted a modified currency board arrangement in June 1992 when the ruble was replaced by the kroon, which was pegged to the Deutsche mark. Estonia's currency board arrangement has played a crucial role in macroeconomic stabilization, lowering inflation and interest rates, stimulating economic growth, and enhancing the credibility of the monetary authorities. Nevertheless, the appreciation of the real exchange rate and very fast economic growth combined with a growing current account deficit remain matters of concern.

Lithuania also established a modified currency board regime in April 1994, and the litas was pegged to the U.S. dollar. Like in Estonia, the Lithuanian currency board has contributed to reducing inflation and interest

rates and stimulating economic recovery. However, the monetary authorities' credibility has been perceived to be less solid than in Estonia due to the Bank of Lithuania's more flexible interpretation of the main principles of a currency board.

In contrast to Estonia and Lithuania, Bulgaria went through an extended and not particularly successful phase of conventional stabilization before introducing a currency board in mid-1997. At the turn of 1996/97, the country was in a deep economic and financial crisis. To redress the situation, a comprehensive currency-board-based stabilization and reform package was launched. In the meantime, the contraction of economic activity has bottomed out, inflation has substantially fallen, and official foreign exchange reserves have increased significantly, reflecting favorable balance-of-payments developments. The currency board has played an instrumental role in achieving this turnaround. Thus, judging from its short record so far, the currency board has been a success story.

The currency board arrangements of Estonia and Lithuania are presently experiencing increasing challenges which mainly stem from persistent real appreciation, high current account deficits and increasing capital mobility. EU integration aspirations may raise further questions about whether a currency board constitutes the best monetary framework for both countries in the medium run.

At the moment there are no urgent reasons to abandon the currency board in Estonia. However, in the light of future EU membership and eventual participation in the euro zone, one of the most essential issues for Estonia is to bring inflation closer to the European rates. Higher interest rates help to bring inflation down, but they also encourage capital inflows, which, in turn, bring their own problems, like increased volatility and – as they cannot be sterilized under a currency board arrangement – higher money supply and increased inflation. This, together with the appreciation of the real exchange rate, may in the future create serious pressures either to realign or to fully abandon the currency board. Furthermore, monetary policy cooperation among EU countries is based on the existence of market-based monetary policy instruments and their effective use, if necessary. Full participation in institutionalized exchange rate cooperation of a standard EU type requires the flexible use of interest rates. The need to develop skilled monetary policy decision making and implementation could be a reason to abandon the currency board already before accession to the European Union.

Lithuania has revised its assessment on the benefits and the drawbacks of the currency board. In 1996, policymakers came to the conclusion that, for integration reasons – participation in the monetary and exchange rate policy cooperation in the EU and the adoption of the *acquis communautaire* – the country should gradually, in three stages, exit the currency board while, for the time being, retaining a fixed peg regime. Achieving a successful exit will greatly depend on the authorities' ability and readiness to use the increasing freedom for monetary policymaking wisely.

Finally, for Bulgaria, where the currency board was established only last year, the question of drawing up an exit strategy is clearly not on the agenda

at this stage. Instead, the authorities' efforts rightly focus on strengthening the medium-term viability of the currency board. In order to underline their commitment to this regime, the DEM link of the lev is to be replaced by a euro peg when the euro becomes legal tender in Germany.

The specific analysis of currency board arrangements illustrates the broader challenges policymakers in Central and Eastern Europe have to face. The appropriateness and long-term viability of monetary regimes in Central and Eastern Europe, especially in view of integration into the European Union and the unfolding transition process, will require continuous monitoring and reassessment in the years to come.

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- 1 Niina Pautola is an economist at the Institute for Economies in Transition of the Bank of Finland and spent a three-month research visit at the Foreign Research Division of the Oesterreichische Nationalbank in spring 1998. She is the author of chapters 2 to 4 and of the country cases of Estonia and Lithuania. Peter Backé is an analyst in the Foreign Research Division of the Oesterreichische Nationalbank. He wrote section 6.1 and the country case of Bulgaria; the remainder of the study was drawn up jointly. The standard disclaimer applies. The authors gratefully acknowledge valuable comments by Zdravko Balyozov, Olga Radzyner and Sheila Tschinkel.
- 2 See Balino, Enoch et al. (1997).
- 3 The value of a currency board's assets can shrink, for example, if interest rates in the reserve currency country rise.
- 4 Monetary operations under a modified currency board are usually strictly limited in several ways. Their main aim is to smooth short-term interest rate volatility in the money market. If the scope for monetary operations is expanded beyond fairly narrow boundaries, the question arises of whether such a revised monetary framework could still be labeled modified currency board arrangement.
- 5 In this study, we take the current account, the capital account (excluding reserves) and the change in reserves as the three standard components of the balance of payments.
- 6 In Hong Kong, for example, there have been periodic discussions over the possibility of realigning the Hong Kong dollar. However, the proposal has always been rejected.
- 7 See e.g. Williamson (1995); Balino, Enoch et al. (1997).
- 8 For reviews of the literature see e.g. Wickham (1985), Aghevli et al. (1991); Isard (1995), Chapter 11; International Monetary Fund Institute (1992).
- 9 Santiprabhob (1997).
- 10 However, as the foreign reserves of a currency board usually cover only the monetary base and not broad money, this conversion cannot be guaranteed if there is a large-scale bank run during which a major share of deposits in domestic currency is withdrawn and simultaneously converted into foreign exchange.
- 11 Tschinkel (1998).
- 12 See Ghosh et al. (1998), who quantify the inflation differential between currency board and other fixed peg countries as being on the order of 4 percentage points per year.
- 13 See Ghosh et al. (1998), who conclude that "average annual per capita growth was almost twice as high under currency boards than under floating or pegged exchange rates" and that this finding holds across the various per capita income categories.
- 14 See Liviatan (1993).
- 15 See Williamson (1995).
- 16 See Santiprabhob (1997).
- 17 See Calvo et al. (1997).
- 18 See e.g. Balino, Enoch et al. (1997).
- 19 In presenting these reasons, the author draws on Balino, Enoch et al. (1997).
- 20 On April 1, 1991, Argentina's Congress approved the Convertibility Law, which obligates the central bank to issue domestic currency almost exclusively against the U.S. dollar value of foreign reserves at the fixed rate of one peso per U.S. dollar received by the central bank. See Zarazaga (1995).
- 21 See e.g. Zarazaga (1995).
- 22 In fact, the Dayton agreement of November 1995 laid down that a central bank should be established in Bosnia-Herzegovina, and that it should operate as a currency board for the first six years of its existence. After some delays, the central bank was set up in August 1997. It will become fully operational with the establishment of the currency board, which was underway when this study was finalized and is to be completed during the second half of June 1998 with the introduction of a new Bosnian currency, the convertible mark to be pegged to the DEM at par value.
- 23 There was some discussion also in Slovenia in 1991 about whether a currency board constitutes an appropriate monetary framework for a country which was, at that time, about to achieve monetary sovereignty. In the event, the currency board option was dismissed and Slovenia opted for a regime of managed floating for the newly introduced tolar. More recently, the question of whether a currency board could be of help to Romania in overcoming its recurrent slippages with stabilization and reform has been asked. However, at least for the time being, the authorities have a clear preference for sticking to orthodox stabilization.
- 24 See Krzak (1997).
- 25 Eesti Pank (1992).
- 26 Saavalainen (1995). When the currency board was set up, the Bank of Estonia disposed of substantial quantities of gold that had been deposited in foreign central banks before World War II, so that it could meet backing requirements with its own net international reserves.

- 27 Bennett (1993).
- 28 See Article 14 of the Law on the Central Bank of the Republic of Estonia. The assistance is normally available on a case-by-case basis. Since such assistance is limited to surplus foreign exchange reserves, it cannot come in conflict with the cover rule of the currency board.
- 29 In practice, commercial banks have the possibility to redeem central bank CDs with the Bank of Estonia before they mature or to conclude repurchase agreements with the Bank of Estonia using the central bank CDs they have as collateral (see Bank of Estonia 1997a).
- 30 The interest the Bank of Estonia pays the commercial banks on deposits exceeding the reserve requirement was one percentage point below the prevailing discount rate of the Deutsche Bundesbank until November 1997, when it was lifted to the level of the discount rate of the German central bank.
- 31 Recent changes in the minimum reserve regime are depicted in some detail below.
- 32 Eesti Pank (1992).
- 33 See e.g. Eesti Pank Press Release, October 23, 1997.
- 34 In April 1998, the annual inflation rate fell slightly to 12.6%. For details see Statistical Annex.
- 35 The slowdown in the real appreciation of the kroon during 1997 was due to the depreciation of the nominal exchange rate of the kroon against the USD, which partly compensated persisting inflation differentials.
- 36 For a more detailed analysis see Pautola and Sutela (1998).
- 37 This step was taken to reduce incentives for capital inflows channeled through the banking system.
- 38 Minimum additional liquidity requirements were set at 2% of the reserve requirement of the reporting month in November 1997 and raised to 3% a month later.
- 39 The mandatory reserve requirement is averaged on a monthly basis. The measure by which the daily requirement was doubled to 4% aimed at stabilizing the banks' kroon liquidity during the course of the minimum reserve period.
- 40 Reuters, December 19, 1997.
- 41 Hagelberg (1997).
- 42 Reuters, April 20, 1998.
- 43 Eesti Pank (1997d).
- 44 Eesti Pank (1997d).
- 45 Saavalainen (1995); Korhonen (1996).
- 46 Dubauskas (1996); Camard (1996).
- 47 Of the three Baltic states' monetary authorities, the Lithuanian central bank had to enter transition with the smallest amount of foreign reserves relative to the size of the economy. Lithuania bolstered its foreign exchange reserves under an IMF standby arrangement with a duration of 17 months, which was supplemented by a Systemic Transformation Facility (STF) arrangement, both approved by the Fund's Executive Board in October 1993. The funds borrowed from the IMF have maturities of up to ten years.
- 48 Camard (1996). This was achieved by fresh purchases from the IMF and by gradually reducing the stock of credit outstanding at the time the currency board was set up.
- 49 The central bank can provide credits of up to LTL 20 million to banks which experience liquidity problems, provided there is sufficient excess reserve cover. The Bank of Lithuania has indicated that it would grant such credits, if at all, primarily to large banks whose bankruptcy would carry a systemic risk for the financial sector. See Dubauskas (1996).
- 50 A more detailed account is presented below in the short review on banking sector developments.
- 51 From the beginning of 1997, Lithuania started to gradually exit from the currency board arrangement, which has implied the introduction of new monetary policy instruments (see chapter 6.3).
- 52 At the same time, official foreign exchange reserves were used as collateral for government borrowing, a step that was also considered to be a "compromise of the spirit of the (currency board) arrangement" (Camard, 1996).
- 53 Rudgalvis (1996).
- 54 See Knight et al. (1997).
- 55 Rudgalvis (1996).
- 56 Rudgalvis (1996); Camard (1996).
- 57 Rudgalvis (1996).
- 58 See Korhonen (1996).
- 59 This policy package was accorded with the IMF, the World Bank and the European Union. Inter alia, it has been supported by an IMF standby arrangement which was approved on April 11, 1997. The standby credit has a volume of SDR 371.9 million and a duration of 14 months. In addition, the IMF granted Bulgaria SDR 107.6 million from the Compensatory and Contingency Financing Facility.
- 60 The program and, in particular, the up-front measures and policies in the first phase of the program were reviewed in Backé (1997) and are thus not presented in detail here again.

- 61 *In the currency-board context, it is interesting to note that the program contains only relatively minor steps in the field of exchange deregulation (e.g. removing limitations to profit repatriation for small joint ventures). Bulgaria still has not accepted the obligations of Article VIII of the IMF's Articles of Agreement yet, although current account transactions have been freed de facto. Most capital movements (except for inward FDI and related flows) still require BNB permission or are subject to specific conditions, like the observance of holding periods before any resale or the registration and implementation of transactions by local custodian banks in the case of foreign investment in Bulgarian Treasury bills. In practice, most existing regulations on capital movements have been applied relatively flexibly. Moreover, the central bank's exchange obligation under the currency board regime (see below) makes it difficult to enforce some of the remaining restrictions on capital movements.*
- 62 *Article 29 of the 1997 BNB Law. The choice of the anchor currency was between the USD and the DEM. While foreign exchange market considerations would have favored a link to the USD, the foreign trade orientation was seen to support a DEM peg. Eventually, Bulgaria's aspirations to join the EU tipped the balance in favor of the Deutsche mark; intermediate solutions pegging the lev to a trade-weighted basket (see Mihov, 1998) did not get tangible support in this debate. (Linking the lev to the DEM implied that the BNB had to shift from USD-denominated assets, which had dominated in the composition of its foreign exchange assets, to DEM-denominated assets during the months preceding the introduction of the currency board arrangement.) As regards the appropriate level of the peg, the authorities opted for a relatively strong exchange rate (and were supported on this by the Fund) for price stability reasons, while some argued for a more depreciated rate to preserve export competitiveness (e.g. the Economic Institute at the Bulgarian Academy of Sciences, see Reuters, June 5, 1997, and Dietz 1997).*
- 63 *See article 30 of the 1997 BNB Law.*
- 64 *See articles 19 and 20 of the 1997 BNB Law.*
- 65 *According to article 28 of the 1997 BNB Law, the monetary liabilities of the BNB consist of all banknotes and coins in circulation issued by the BNB and of any balances on accounts held by other parties with the BNB (with the exception of accounts held by the IMF).*
- 66 *See article 33 of the 1997 BNB Law. This means that "there exist no more leaks to monetize the fiscal and quasi-fiscal debt, which was one of the main causes for macroeconomic instability in the past" (Dobrinsky, 1997b).*
- 67 *The fulfillment of minimum reserve requirements is overseen by the Banking Department.*
- 68 *See articles 40 to 45 of the 1997 BNB Law. The law contains an exception to the prohibition of direct lending to government: The onlending of IMF credits to the government is permitted.*
- 69 *See articles 46 to 51 of the 1997 BNB Law. The balance sheet of the Issue Department has to be published weekly. The basic BNB assets and liabilities must be published monthly, with separate balance sheets of the Issue and the Banking Department to be presented. The BNB shall report twice a year to Parliament and to the public on its activities. The annual report and the annual financial statement (which has to be certified by an international auditor) shall be submitted to Parliament.*
- 70 *See Dobrinsky (1997b).*
- 71 *Full backing of base money by official foreign exchange reserves had already been achieved in January 1997 as a consequence of the collapse of the lev (see Balyozov, 1997).*
- 72 *In fact, macroeconomic policies had already been tightened right after the change in government in February 1997.*
- 73 *The Bank continued to abstain from actively using the minimum reserve requirement, which has remained unchanged at 11% since January 1997. However, the direct impact of the reserve requirement has been limited since spring 1997, as commercial banks have usually held considerable excess reserves with the BNB (due to high liquidity in the system and very cautious credit policies).*
- 74 *Mass privatization was launched in early 1996 and included 1,040 preselected state-owned enterprises. In the first round of mass privatization, 666 enterprises sold two thirds of their assets, 81 companies sold between half and two thirds, the rest less than 50% of their assets. Overall, 16% of the state property was privatized through this scheme in the phase up to summer 1997.*
- 75 *There are three types of priority investments, namely investments with a volume of USD 5 million or more, investments that create more than 100 jobs and investments in distressed regions. An amendment to the law adopted in March 1998 eliminates a few specific FDI-related tax and customs preferences without, however, changing the regime in general. Recently, a working group with IMF and World Bank participation was set up and assigned the task to propose a further and more substantive reduction of the scope of preferential treatment under the act.*
- 76 *17 banks accounting for half of total deposits in the sector (excluding the State Savings Bank) had their licenses revoked by the BNB, and most of them were declared bankrupt by the courts. Liquidation of these banks has been slow, though. The strengthening of the banking sector since last spring is due to several*

- reasons, primarily to some rehabilitation and partial recapitalization measures, the erosion of the banks' liabilities during the hyperinflation episode, and markedly more cautious credit policy stances of banks.
- 77 Under the new law, individual and enterprise deposits denominated either in lev or foreign currencies of up to (an equivalent of) BGL 2 million (DEM 2,000) will be compensated to 95%. Deposits of up to BGL 5 million will be covered to 80%. Amounts above BGL 5 million are not insured.
- 78 This law has a bearing on the future design of deposit insurance in Bulgaria, as it envisages that the presently effective full and unlimited state guarantee for deposits at the State Savings Bank give way to standard protection after a transition period of two years.
- 79 This has also been acknowledged by international organizations, see e.g. OECD (1998), European Commission (1998) and IMF (1998).
- 80 For a review of the early results of the program, see Dobrinsky (1997b) and also Backé (1997), furthermore the data series contained in the Statistical Annex of this publication.
- 81 In October and November monthly inflation decreased to 0.5%. In the period December 1997 to February 1998, it hovered between 1.5% and 2%. In March 1998, the consumer price level fell by 0.1%; in April, monthly inflation was at 0.1%.
- 82 For government debt, they have come fairly close to German rates: The average yield of three-month Treasury bills is currently (end of May 1998) at 5.1%, that of six-month Treasury bills at 5.6%, that of twelve-month bills at 6.8%. On the interbank market, interest rates have recently oscillated between 1% to 2% annually for overnights and around 7% to 8% for one-year deposits.
- 83 The upturn in foreign assets was particularly pronounced during the first weeks of the currency board's operation, reflecting, to a considerable extent, a resident capital inflow (that had already set in during the second quarter) flowing from a perceptible boost of confidence in the monetary regime and the policies put in place in its support.
- 84 In the first three-and-a-half months of 1998, the surplus was at BGL 413 billion, which corresponds to almost 2% of the GDP expected for 1998.
- 85 When the currency board was set up, the funds allotted to the Banking Department amounted to more than 30% of the overall (both lev- and foreign-exchange-denominated) deposits in the banking sector not covered by liquid foreign exchange assets of the banks.
- 86 In fact, the BNB could not have effected any such lending until recently, as it promulgated the implementing regulations for lender-of-last resort lending (see article 33 of the BNB Law) only in the spring of this year.
- 87 Dobrinsky (1997b).
- 88 Mihailov (1998).
- 89 For both economic and legal reasons, the EU candidate countries from Central and Eastern Europe will, in all likelihood, first accede to the European Union and only later to the euro zone.
- 90 In addition, any EU Member State has to stick to the Treaty provisions on the coordination of economic policies (including adherence to those regulations of the Stability and Growth Pact that are binding for all EU Member States), the interdiction of privileged access of public authorities to financial institutions and the liberalization of capital movements.
- 91 The flexible use of interest rates is a main feature of the Exchange Rate Mechanism II (ERM II), which will govern the exchange rate relations between the euro area and nonparticipating EU countries from the inception of Stage Three of EMU. The principles, objectives and main features are laid down in a Resolution of the European Council adopted at the European Council meeting in Amsterdam in June 1997; see European Council of Amsterdam (1997), Conclusions of the Presidency, Annex II.
- 92 European Commission (1997), Agenda 2000, Volume 1.
- 93 European Council of Copenhagen (1993), Conclusions of the Presidency.
- 94 It is very interesting to note, though, that the Commission's opinions on Bulgaria and Lithuania are less clear on this issue: The avis on Lithuania states that "the issue of the central bank's independence... will become relevant" only with the gradual abandonment of the currency board. The opinion on Bulgaria suggests that only "after the eventual cessation of the currency board arrangement will [Bulgaria] be able to have an independent Central Bank."
- 95 See also Tschinkel (1998).
- 96 See Eesti Pank (1997d).
- 97 See Eesti Pank (1997d). Policy developments so far have apparently been in line with program targets. Parliament has passed a 1998 central budget that corresponds to the overall goal of a general government surplus of 1.8% of GDP. During the first five months of 1998, revenues were at 37.4% and expenditures at 36.6% of the target for the whole year (Reuters, June 1, 1998).
- 98 In early June 1998, the government and the Bank of Estonia agreed on an additional economic program for the remainder of 1998. Further fiscal tightening is the main component of this package: The new target for this year's public sector surplus is 2.5% of GDP (see e.g. Reuters, June 3, 1998).

- 99 *Bank of Lithuania (1997).*
- 100 *The total volume of accepted tenders in the repo auctions held this year corresponds to only 1.3% of all litas-denominated loans of operating commercial banks and foreign banks branches. The average interest rates at time deposit auctions have been between 3.2% and 6% (information provided by the Bank of Lithuania).*
- 101 *In concrete terms, bank liabilities vis-à-vis foreign banks and other credit institutions were subjected to reserve requirements. This is to create equal conditions for attracting the funds of residents, local enterprises and foreign banks (Reuters, March 1, 1998).*
- 102 *European Commission (1998).*
- 103 *Reuters, April 16, 1998.*
- 104 *This is due to the fact that a significant share of Lithuanian imports is inflexible to price changes (Bank of Lithuania, 1997), although a devaluation would have, at least temporarily, a positive effect on Lithuanian exports.*
- 105 *See article 29 BNB of the Law.*
- 106 *The substantial current account surplus of 1997 does not imply that the lev is significantly undervalued. In fact, most of the surplus is due to last year's trade surplus which, in turn, resulted from low imports during the first crisis-ridden months of 1997. Most observers expect the moderate current account deficits for 1998 and subsequent years to be financed by foreign direct investment inflows. On the other hand, the low level of Bulgarian average wages and salaries expressed in U.S. dollars (monthly wages and salaries were at approximately USD 50 to 60 in 1997) and the high and increasing level of foreign exchange reserves provide robust evidence that the lev is not overvalued at the present stage.*
- 107 *For a detailed analysis of the phenomenon of persistent moderate inflation in transition economies, see Krzak (1996).*
- 108 *Originally, average annual consumer price inflation for 1998 was expected to come to 35% (with a December to December inflation of 16%), but Bulgaria's better-than-awaited inflation performance in recent months (see section 5.3) made the authorities modify their forecast.*
- 109 *Privatization should be directed primarily by efficiency considerations. Management and employee buyouts and mass privatization, both of which have played a significant role in denationalization so far, should not be a main method of privatization in the future so as to avoid potential corporate governance problems and related impediments to structural change.*
- 110 *Due to the currently low yields, surges in (non-FDI) capital inflows which could complicate policymaking are unlikely for the time being. However, this may change over time. Sound macroeconomic policies and financial sector reform will be instrumental in reducing potential adverse effects associated with future capital flows. As these policies take hold, a phased liberalization of the remaining capital account restrictions would seem to be appropriate.*
- 111 *It should be noted that the real effective exchange rate of the lev is not only dependent on developments in the domestic economy and on the DEM/euro-lev link but also on exchange rate movements between the anchor currency and third currencies, in particular the U.S. dollar. Given that a significant share of Bulgarian foreign trade is denominated in U.S. dollars, major exchange rate changes between the Deutsche mark and, in the future, between the euro and the U.S. dollar would affect Bulgaria's competitive position.*
- 112 *See the statement of Bulgarian Foreign Minister Mikhaylova after the launching of the EU enlargement process by a meeting of the Ministers for Foreign Affairs of the fifteen Member States of the European Union, the ten Central and Eastern European applicant states and Cyprus on March 30, 1998 (BTA, March 31, 1998), the speech Prime Minister Kostov held at a meeting of the Group of the European People's Party in the European Parliament (BTA, May 5, 1998), and the announcement of Deputy Prime Minister Bozhkov at the annual meeting of the EBRD in Kiev (BTA, May 12, 1998).*
- 113 *This is due to the Balassa-Samuelson effect, which rests upon faster productivity growth in the traded than in the nontraded sectors. Money wages, which increase in line with productivity advances in the traded sectors, are equalized across sectors. Thus, factor prices in nontradable sectors rise faster than productivity, which pushes up prices of nontradables.*
- 114 *For a concise set of arguments see Wyplosz (1997).*

O E N B A C T I V I T I E S

Lectures Organized by the Oesterreichische Nationalbank

Continuing its series of lectures dealing with topics of particular relevance to transition economies, the OeNB again hosted several lectures, notably by *Roumen Avramov*, member of the managing board of the Bulgarian National Bank, who provided up-to-date information about Bulgaria's initial experience after the introduction of the currency board in July 1997, *Christof Rühl*, principal economist at the European Bank for Reconstruction and Development, who presented the EBRD transition report, *Eva Thiel*, senior economist in the OECD's Financial Affairs Division, who illustrated the experience to date with the creation and functioning of securities markets in the more advanced CEECs and Russia, and finally *Stephan Barisitz*, an OECD economist in the Central and Eastern Europe Division of the Economics Department of the OECD, who treated the development of, problems with and the prospects for Russian fiscal federalism. The brief overviews below are intended to give the reader the benefit of the insight drawn from lectures by renowned economists and experts about specific developments in transition countries.

Lecture by Roumen Avramov

The Current Economic Situation in Bulgaria – First Experiences after the Introduction of the Currency Board

On November 25, 1997, Roumen Avramov, member of the managing board of the Bulgarian National Bank, gave a lecture at the OeNB on Bulgaria's first experiences with the Currency Board Arrangement (CBA) adopted on July 1, 1997, to stabilize the economy and foster noninflationary growth. The CBA is perceived as a kind of "culture shock," and by imposing financial discipline, it is expected to trigger true reforms throughout the economy. The newly founded institution is to build credibility by introducing a new strategy based upon a fixed exchange rate.

In a CBA, Mr. Avramov explained, a country cedes its control over monetary policy to a foreign institution and the automatism of the market; domestic currency is issued exclusively in exchange for foreign assets. The monetary authority ceases to intervene in financial markets and relinquishes control over interest rates.

The Bulgarian CBA was launched in the aftermath of a deep financial and political crisis which peaked in hyperinflation in January and February 1997. The IMF provided timely and calibrated financing through a standby arrangement, and the Bulgarian National Bank (BNB) withdrew from a number of its previous functions. In early May the Deutsche mark was publicly presented as the future reserve currency, and in June a new stringent law on commercial banks was adopted.

Next, Mr. Avramov briefly described the functions and responsibilities of his institution's three main departments, as laid down in the new BNB Act. The Issue Department holds and manages the currency board's foreign reserves, and safeguards the unrestricted exchange of lev liabilities (M0) with the peg currency, at the fixed exchange rate. The Banking Department

safeguards trust in the liquidity of the banking system and ensures the efficient functioning of key financial markets. Its lender-of-last-resort facility is severely restricted: Neither the extension of credit to the Government (except on the basis of purchases from the IMF) nor refinancing for commercial banks is permitted. The Supervisory Department's role, above all in prudential supervision, has been strongly enhanced.

Mr. Avramov cited a number of criteria by which the currency board's performance can be gauged. The remonetization of the economy is under way; money demand is, however, still below target levels after the massive demonetization in the first half of 1997. The BNB's foreign assets have steadily risen, and Bulgaria's external position has been improving since March 1997. Supported by FDI and a contraction in final demand, capital and current account balances are positive. After a surge in mid-1997 inflation dropped to a monthly rate of 0.5%. Paradoxically, the Bulgarian CBA's main problem was the extremely low level of interest rates. With liquidity injected into the economy from abroad, interest rates fell; the growth of net foreign assets considerably outperformed that of net domestic assets. In the real sector there is as yet little statistical evidence of revival; in Mr. Avramov's view there can be no doubt, however, that a turnaround is forthcoming.

The speaker then referred to the hyperinflationary episode and the CBA's role in altering financial flows in the Bulgarian economy: Inflation evaporated lev debt stocks and eroded the real value of banks' lev liabilities. In the meantime, the substitution of domestic with foreign debt is under way. Ample foreign financing and a strong primary budget surplus considerably lowered the cost of financing the budget deficit, and the government's fiscal account improved markedly. Much of the responsibility for monetary stability shifted from the BNB to the Ministry of Finance.

Mr. Avramov further pointed out that the stance of the banking sector is crucial for the CBA's success.

Drawing conclusions, Mr. Avramov stated that the successful launching of the CBA brightened the prospects for the Bulgarian economy in 1998, with structural challenges remaining in the fields of privatization, tax and budget reform, restructuring the banking sector and bringing the real sector up to par. As the economy is highly exposed under a CBA, one of the main challenges in the medium term for Bulgaria and the currency board lies in mastering external shocks, such as the fluctuations of the Deutsche mark against the dollar and the turbulences in global markets caused by the Asian crisis. Since the euro is to replace the Deutsche mark as the CBA's reserve currency, the start of Stage Three of EMU in January 1999 marks an important date for Bulgaria and the lev's exchange rate.

Lecture by Christof Rühl

The EBRD Transition Report

On December 5, 1997, Christof Rühl, principal economist at the European Bank for Reconstruction and Development, presented the EBRD's Transition Report 1997 at the OeNB. He began by stating that, after strong progress in the initial period of liberalization, privatization and the establishment of macroeconomic stability in the transition economies, the key challenges in the next phase would be to build and consolidate institutions and policies for a functioning market economy. Good governance, transparency and measures to cut bureaucracy and combat corruption need to be established, Mr. Rühl observed. Only then can the private sector and civil society begin to thrive, and only then will economic growth become sustainable.

Mr. Rühl went on to say that market reforms continued in most transition economies, however with differing progress; while some, including Azerbaijan, Bulgaria and Turkmenistan, advanced significantly in 1997 after years of slow progress, others such as Belarus and Uzbekistan took steps backwards from already low levels of reform. On the upside, Albania, Bulgaria, the Czech Republic, Romania and Russia deepened reforms in 1997, even in the face of political and economic crisis. While the privatization of very large enterprises and banking reform made headway in many of the transition economies, institutional reforms in the financial sector lagged behind, and progress in governance and enterprise restructuring was slow. The problems of income inequality, haphazard tax systems and corruption remained unresolved.

The speaker then highlighted the fact that, after years of falling output, most transition economies showed the beginnings of market-driven growth. Sustainability would, however, depend largely upon how well markets, governments and institutions function and interact to provide the incentives for businesses and individuals to participate effectively in the market economy. Much would depend on how competition among producers can be translated into innovation and new methods of doing business.

Turning to the progress of restructuring efforts, Mr. Rühl reported that new market forces brought about significant structural change in the transition economies, with industrial sectors contracting and services sectors expanding in terms of shares of total employment. The EBRD warns that the growth of employment in government services exceeds comparable market economy levels.

Especially in the CIS, Mr. Rühl noted, the weakness of state structures was an impediment to new private businesses, while competition from imports boosted productivity and concentrated outside ownership contributed to strong performance.

Mr. Rühl cited two main aspects of improving enterprise performance: adapting the relationship between government and enterprises, and managing privatization effectively. In many of the transition economies, the sharp reduction in budgetary subsidies was offset by other forms of (usually off-budget) government support. The EBRD principal economist

emphasized that eliminating obstacles to business startups could create private sector jobs, which would in turn ease the pressure for continued support for weak enterprises. Also, financial sectors would have to be developed to provide investment and a market in which changes in ownership and control can take place.

Mr. Rühl offered two perspectives on the outlook for long-term growth in the region: The potential for productivity gains from structural change and the large pool of highly skilled labor warrant optimism, whereas the weakness of institutions and policies needed to underpin a market economy gives rise to pessimism. Governments must improve the business climate, as growth is by no means inevitable or automatic given the widespread resistance to change and the prevalence of vested interests.

In 1997, Mr. Rühl continued, the region as a whole for the first time marked close to 2% GDP growth after seven years of continuous decline. 11 out of the 26 transition economies are now growing at 4% or more annually. While growth in Eastern Europe slowed for the third consecutive year, with Albania, Bulgaria and Romania experiencing serious setbacks, economic contraction finally came to an end in the CIS. With domestic demand replacing exports as the main motor of growth in the advanced economies, prospects for 1998 are for higher growth in Eastern Europe and a more solid recovery in Russia.

Moving to inflation, Mr. Rühl acknowledged that the annual rates were pushed below 20% in 18 and below 10% in nine of the 26 countries; however, price stability remains fragile in the CIS. Furthermore, external accounts deteriorated sharply; in 1996 more than half of the transition economies recorded current account deficits in excess of 5% of GDP. These deficits were financed by growing sums of foreign investment; the foreign capital inflow into the region quadrupled over the past three years, heightening volatility risks. To tackle the multitude of challenges, prudent macroeconomic management is called for, remarked Mr. Rühl. The transition economies need to strengthen their financial institutions and establish efficient financial intermediation. Concluding his lecture, the EBRD's principal economist warned that the growth of some countries' foreign debt would have to be handled carefully.

Lecture by Eva Thiel

Capital Market Development in Transition Economies

Eva Thiel, senior economist at the Financial Affairs Division, DAFPE, OECD, presented a lecture on capital market development in transition economies at the Oesterreichische Nationalbank on January 19, 1998, and structured this contribution as a review of the experience to date with the creation and functioning of securities markets in the more advanced transition economies in Central and Eastern Europe as well as Russia. In several of these countries, notably in the Czech Republic, Hungary, Poland, the Slovak Republic, Slovenia and Russia, equity markets were created or reestablished already at the beginning of the 1990s; government securities markets have been actively developed; and, in some cases, corporate bond markets have begun to flourish. Yet many problems remain in achieving desired levels of market efficiency and transparency, and the policy choices to promote these objectives as well as the further integration of the fledgling markets into international capital markets are not always straightforward and free of controversy.

Ms. Thiel identified three major problem areas as meriting further study and an exchange of views among experts and policymakers, namely: (a) The threat posed to transparency and standards of disclosure in equity markets, in general, and minority shareholder rights, in particular, by the emergence of insider systems and “closed shop” practices; (b) the need for further growth of institutional and retail sectors in securities markets in transition economies and its implications for market development; and (c) the conflict between trends toward spontaneous market fragmentation and ambitions to centralize trading in the interest of promoting transparency.

It was pointed out that several of these problems and challenges are in many respects the same for emerging markets as for OECD markets, but the special angle brought by the transition stage was emphasized, particularly with reference to the interlinkages between the privatization process and equity market development. In some countries, notably the Czech Republic and Russia, mass privatization via voucher schemes took place early in transition, well ahead of the emergence of well-functioning secondary markets within a tried and tested system of regulation and oversight. Market infrastructure and regulation were thus developed *ex post* in response to demands from market participants for improvements in services and supervision. In other countries, such as Poland and, somewhat later, Romania, the creation of capital market infrastructure and gradual privatization through initial public offerings was seen as an integrated process. The regulation of the public offerings and trading on the secondary market was drawn up according to the highest standards of major OECD markets. In this government-led *ex ante* approach, with its emphasis on very ambitious disclosure and fiduciary standards, combined with the slow pace of privatization, capitalization and turnover have grown more slowly, with market activity initially dominated by short-term speculation. Other countries which are following more “mixed” privatization paths – the Baltic Republics

constitute an example – have achieved progress with institution-building and regulation more in parallel with the development of capitalization and trading activities.

Another important factor singled out for transition economies was the stimulus to the wider securities markets that can be derived from the development of active secondary markets in government securities. As cases in point, Ms. Thiel mentioned government debt managers' option to take a direct role such as establishing or sponsoring dealer firms, possibly as a direct shareholder, acting as a market-maker through a separate window to promote secondary market liquidity or acting as an interdealer broker who brokers market participants' transactions and displays price information. Price stabilization measures are also an option, as are indirect support arrangements, e.g. through credit lines. Over the longer term, achieving a balanced maturity structure for the government debt portfolio will be an important contribution to better market conditions, as it will provide benchmarks across the yield spectrum.

After a comparison of the development to date in terms of a number of quantitative, concrete criteria and a discussion of recent experience in the three major areas singled out above, Ms. Thiel offered the following remarks as a conclusion:

- A sound banking system is an important prerequisite for the development of modern, efficient securities markets.
- Privatization and capital market development are closely linked. First, there is the need to achieve a balance between institution building and trading activities. Second, the institutional framework for privatization has important consequences for the establishment of public confidence and trust in the fairness and transparency of capital market trading practices. Although the countries discussed above have already made the fundamental choices with respect to privatization, there are still many remaining individual privatization cases where these aspects should be carefully considered.
- The development of a modern government securities sector has a positive impact on the development of the wider securities market structure.
- Failure to safeguard transparency and disclosure aspects in market activity leading to inadequate protection for minority and larger (foreign) shareholders through the emergence of "crony capitalism" can have extremely negative consequences for overall market development, so that ultimately the market cannot fulfill its essential intended functions, as smaller investors "vote with their feet."
- Governments in transition economies must actively facilitate the development of the institutional investor sector, i.e. pension funds (as part of the reform of the public pension system), insurance companies and investment funds. This should also include, where appropriate, facilitating the conversion of privatization investment funds to unit funds or similar types of collective investment institutions. Above all, an effective regulatory and supervisory framework for all these types of institutions should be put in place.

- The choice between allowing spontaneous fragmentation of trading or centralizing trading to one regulated exchange is not a real one, as developments in communication and information technology have brought a new, increasingly competitive and internationalized trading environment. The issue for the authorities is rather to enforce transparency and disclosure rules for trading, wherever it takes place, paying close attention to the respective degree of sophistication and thus the required need for protection of participants.

Lecture by Stephan Barisitz

Fiscal Federalism in Russia: Evolution, Problems and Prospects

Stephan Barisitz, an economist at the Economics Department, Central and Eastern Europe Division, OECD, explained the development of Russian fiscal federalism at a lecture he held at the Oesterreichische Nationalbank on May 14, 1998.

After the collapse of the USSR, persistent centrifugal tendencies contributed to the substantial fiscal decentralization of the Russian Federation. A sprawling geography, historical factors, a strong position of ethnic minorities in certain territories and the unequal distribution of natural resources have enhanced a multifaceted “asymmetrical federalism,” giving some constituent territories more powers than others and opening intragovernmental fiscal relations to bilaterally negotiated agreements between subnational jurisdictions and Moscow.

General guidelines for expenditure responsibilities among the levels of government have been established by the March 1992 Federation Treaty and, most notably, the December 1993 Constitution. The Constitution spells out three levels of task assignment: federal, joint federal and regional, and purely regional. Joint jurisdiction pertains to many areas, some of which are very similar to those of the federal government’s exclusive agenda and therefore obviously the subject of overlapping federal and joint assignments. This ambiguous state of affairs can set the stage for arbitrary decisions, leaving the choice of involving regional governments in policymaking on a specific subject up to the discretion of federal authorities. The Constitution states that the principles of taxation in Russia are established by federal law. This represents a rather strong degree of formal centralization of tax jurisdiction.

Despite repeated attempts at introducing a new tax code in recent years, the basic formal division of tax authority between federal, regional and local governments is still defined by an early federal law of December 1991. Neither the regional nor the local authorities are allowed to introduce additional taxes to those stipulated in that law. Somewhat at odds with the tax law, a number of taxes have in practice been made subject to revenue sharing between federal and regional levels as determined by negotiations and specified in the annual federal budget laws. The major shared taxes are VAT, personal income tax, profit tax and excises. After a strong initial

decentralization, a trend toward a stabilization of sharing rates has been observable since 1994. In September 1997 the local self-government finance law was signed, which for the first time explicitly defined local shares of some major shared taxes. All taxes are collected by the State Tax Service, a federal body.

With the collapse of the Soviet Union and of the centrally planned economy, the federal government came under a strong fiscal strain. In order to attenuate its budgetary problems, the center simply “pushed down” to the regional and local levels a number of expenditure items, notably in the spheres of social and welfare policy, housing, education and health, but also expenditures pertaining to industrial subsidies. Regional authorities subsequently (partly) succeeded in redressing the situation by claiming higher revenue shares and transfers from Moscow. While the early years of transition witnessed a rapid increase in the share of total outlays and revenues accruing to lower levels of government, the situation then stabilized, but gave way to further decentralizing tendencies in 1996 and 1997. Thus, over the whole period, the federal share in total spending of the consolidated budget fell from 61% in 1992 to 45% in 1997 and its share in revenues contracted from 56% to 47%.

Secondary measures of fiscal redistribution carried out by the federal level are made up of two main pillars: The first consists in general purpose transfers, including equalization payments that are aimed at alleviating inter-regional fiscal disparities. The second is made up of specific purpose transfers aimed at differently defined targeted goals. 1994 witnessed the creation of the Fund for Financial Support of Subjects of the Federation, designated for explicit transfers to regions with relatively low per capita revenue and high fiscal needs. While the overwhelming majority of regions now receive at least some transfers from the Fund, respective allocations lack real transparency, being based on complicated and continuously updated rules.

The “asymmetrical” dimension of Russian fiscal federalism witnesses privileges (special treatment) conceded to selected regions on a case-by-case basis, privileges which go beyond the formal framework of the intergovernmental fiscal relations described above. Its logic appears to be largely founded in political considerations aimed at appeasing powerful regions and holding the federation together. Privileges can be granted in various ways. Bilateral “power sharing treaties” between the federal government and administrations of the subjects of the federation have multiplied since February 1994, when the first such treaty was concluded with the Republic of Tatarstan. They constitute framework contracts, within which specific functional agreements delimit contractual powers in many areas, typically including budgetary relations and state property, the regulation of various branches of the economy, in particular the agro-industrial complex and the defense industry, the ownership and use of natural resources, environmental protection and policies governing regional migration. Initially, the treaties were used to clarify relations between the central government and some republics, but since 1996 they have spread to other subjects, including oblasts. As of May 1998, 45 regions (half of the

total number) have signed power sharing treaties with Moscow, and more are reportedly in the pipeline.

Most of the contracts, especially the more recently signed ones, appear to be within the bounds of federal law. There are, however, some notable exceptions pertaining to the Republics of Tatarstan, Bashkortostan and Sakha/Yakutia. The essence of the contracts allows for the republican authorities to establish (and in the case of Tatarstan to collect) republican taxes. Further, certain revenue sources that are legally federal and constitute a sizeable share of receipts (e.g. excises on liquor, oil and gas, land duties, privatization revenues) accrue instead to respective regional budgets for carrying out ecological measures and environmental programs. The republican authorities claim that their bilateral agreements take precedence over or constitute exceptions to the Constitution and federal legislation.

Among other types of special treatment, a number of particular regions or parts of regions have been designated as “special economic zones,” “free enterprise zones,” “international business centers” or similar zones in recent years in Russia. This has been connected with a large amount of – often very confusing – federal and regional legislation. As of May 1998, each existing such arrangement corresponded to separate legislative acts establishing the authority to create special arrangements with regard to taxation, customs duties, foreign trade operations or foreign currency regulations within a particular geographic area. Most of the numerous zones are currently believed not to function at all.

The “East Jour Fixe” of the Oesterreichische Nationalbank – A Forum for Discussion

The history and purpose of this series of meetings initiated in 1991 is described in detail in “Focus on Transition 1/1996.” The series was continued with presentations held in November 1997 and twice in April 1998. As always, the East Jour Fixe meetings were opened with speeches held by specialists about topical issues related to transition economies. The talks are subsequently commented by invited discussants. Policymakers, analysts and researchers have the opportunity to exchange views during the general discussion, which is a very important item on the agenda.

Albrecht Rothacher, Principal Administrator at the Enlargement Team of the European Commission (DG I A), presented the main speech at the 29th East Jour Fixe, which was entitled “The Commission’s View – Preparation of EU Eastern Enlargement.” The invited discussants were Sándor Richter of The Vienna Institute for Comparative Economic Studies (WIIW) and Wolfgang Nitsche of the Federal Ministry of Finance. Subsequently, the general picture of Eastern enlargement was amplified by topical survey information on Austrians’ attitudes toward EU accession presented by *Christian Haerpfer* of the Paul Lazarsfeld Society. A presentation of the main conclusions of the OeNB’s conference on “Current Account Imbalances in East and West: Do They Matter?” by *Maciej Krzak*, OeNB and WIIW, concluded the 29th East Jour Fixe. *Wilhelm Kohler* was the invited speaker at the 30th East Jour Fixe on April 1, 1998. He gave a lecture on the impact of future Eastern enlargement of the EU on Austria, with a special emphasis on the implications of such an expansion for policymaking and for Austria’s economy. Professor Kohler’s paper was then discussed by Jarko Fidrmuc (of the Institute for Advanced Studies) and Wilfried Altzinger (of the Vienna University of Economics). Next, *Stefan Lehne* (of Austria’s Federal Ministry for Foreign Affairs) commented on “Eastern Enlargement: Implications for Austrian Policymaking.” At the 31st East Jour Fixe, *Andries Brandsma*, Acting Head of Unit at the European Commission, DG II, presented the spring 1998 forecast of DG II for Central and Eastern European Countries. The invited discussants were *Andreas Wörgötter* (Institute for Advanced Studies), *János Gács* (IIASA) and *Josef Pöschl* (The Vienna Institute for International Economic Studies, WIIW). The main findings of the three meetings are reported below.

Contribution by Albrecht Rothacher, European Commission

Preparation of EU Enlargement – The Commission’s View Held at the 29th East Jour Fixe on November 28, 1997

Albrecht Rothacher, Principal Administrator at the Enlargement Team of the European Commission (DG I A) decided to touch upon four issues. First, he summarized the main findings of the Opinions on membership applications published in July 1997. Second, he drew a picture of the necessary EU policy reforms as described in the Agenda 2000 documents prepared by the Commission. Third, Mr. Rothacher elucidated the issue of planned financial accession assistance. Fourth, he touched upon some sequencing issues in connection with enlargement prospects.

Mr. Rothacher stressed the *need to differentiate* between the Central and Eastern European candidate countries. He argued that the differences between the aspirants have grown considerably, so that the challenge of accession is different for every candidate. Presenting the Opinions of the Commission and analyzing the fulfillment of the *Copenhagen criteria*, he underlined that the Commission’s examination of the economic and *acquis* criteria extends to the medium term. As nine out of ten applicants fulfill the *political criteria*, the distortion fears proved to be unjustified. The Commissioner also stressed that the door remains open for Slovakia, the only country which does not meet the political criteria. Under the topic fulfillment of the *economic criteria*, Mr. Rothacher outlined the following country ranking: Hungary is the “tiger” among the candidates, followed by Poland, Slovenia and the Czech Republic (all at the same level) and Estonia. That is why these countries have been proposed by the Commission for starting accession negotiations. Lithuania and Latvia could undergo a quick catching-up process, according to Mr. Rothacher, while Bulgaria and Romania have serious structural issues to resolve.

All of the candidate countries lack the necessary *administrative capacity* to manage their accession according to the Commission. This means not only quantitative, but also qualitative reforms for the authorities in the associated countries. It was a burden to adopt EU legislation for the existing members, therefore it is not surprising that to fulfill the *acquis* represents an even a more difficult task for the applicants. Nevertheless, in Mr. Rothacher’s opinion the five recommended countries could adopt and implement most of the necessary EU legislation in the medium term. As a huge amount of investment is needed to adjust the national legislation to European standards in the medium term, it appears fair to support the adjustment from the EU side.

Internal reforms of the European Union should take place in parallel with the accession talks, and should not be an excuse for delaying Eastern enlargement: A short, effective IGC in the year 2000 could solve the existing problems. *Institutional reform* is inevitable, because some rebalancing will be needed as the future new members will, with the exception of Poland, be “*small countries*”; the maintenance of the current voting system in the Council would put the net recipients into a “privileged vote position.” Moreover, it must not be forgotten that the number of Commissioners is limited to the

areas of responsibility covered and that the enormous rise in the number of representatives to the *European Parliament* implicated by new EU members raises doubts about an efficient working of this body. *Common policies* will have to be reformed as well, in particular the Common Agricultural Policy and structural operations. Restructuring and reallocating the existing financial resources could account for some *budgetary savings*. These resources could then be used to support the EU aspirant reform countries. Mr. Rothacher also stressed the need for the completion of the *internal market*.

The financial *Accession Assistance* has to keep in mind the absorption capacity of the future Member States and the payment capacity of the existing members: He mentioned a *maximum amount of receivable funds* of 4% of the individual country's GDP. The associated countries will also be supported by the PHARE programs.

Mr. Rothacher went on to relate that the *Luxembourg Summit* on December 12, 1997, was to take the final decision on which applicants could start accession negotiations with the European Union. In his view, the accession talks for the first runners will not take as long as the Spanish and Portuguese negotiations, which took eight years. The ensuing discussion concentrated on financial issues, especially the future of the structural funds, on international reforms, on the problem of transition periods and on the appropriate preaccession strategy.

Contribution by Christian Haerpfer, Paul Lazarsfeld Society

“Attitudes toward EU Accession in the Czech Republic, Hungary, Poland, Slovakia, Slovenia and Austria” – The New Democracies Barometer Held at the 29th East Jour Fixe on November 28, 1997

The crossnational annual survey of the Paul Lazarsfeld Society is known as the New Democracies Barometer (NDB). The purpose of these surveys is a “regular monitoring of mass public reactions in post-Communist Central and Eastern European countries to the economic, social and political transformations since the demise of Communism.” Mr. Haerpfer presented the main findings of the 1993/94 NDB surveys focusing on five Central European countries (the Czech Republic, Hungary, Poland, Slovakia, Slovenia) and the Austrian attitude towards EU accession.

The *overall image of the EU* is very positive in the abovementioned Central European countries, especially in Slovenia, the Czech Republic and Poland. The majority of the Central European countries is keen on joining the EU in the first wave of enlargement. Strong support for membership is especially visible in Hungary, Slovakia and the Czech Republic.

Mr. Haerpfer surveyed the impact of gender, age, education, income levels, profession and the role of the urban-rural dimension on Eastern Europeans' attitudes toward EU membership.

Mr. Haerpfer also presented the latest opinion poll results on Austrian's views on EU enlargement, which show a rather mixed picture. *Austrians* are

most in favor of Hungary as a new member (52% in favor), but they also support the membership of Slovenia (43%), the Czech Republic (40%) and Poland (33%). The effects of Eastern enlargement are viewed very sceptically: Austrian citizens see more disadvantages (41%) than advantages (26%) in enlargement. It is interesting to note that the younger the examined groups are and also the higher the educational levels are, the more advantageous the enlargement seems to those surveyed. The overall judgment of the potential effects of EU enlargement on Austria was rather negative among respondents.

Contribution by Wilhelm Kohler, University of Linz

Eastern Enlargement of the EU: How Much Is It Worth for Austria? Held at the 30th East Jour Fixe on April 1, 1998

At the 30th East Jour Fixe of the OeNB, Wilhelm Kohler, professor at the University of Linz, gave a lecture on the impact of future Eastern enlargement of the EU on Austria with a special emphasis on the implications of such an expansion for policymaking and for Austria's economy. Mr. Kohler's presentation was based on a study he had written with Christian Keuschnigg of the University of the Saarland "Eastern Enlargement of the EU: How Much is it Worth for Austria?"¹) In his lecture Professor Kohler presented the following results:

The enlargement of the EU by the five countries with whom the EU entered into accession talks at the end of March 1998 (Estonia, Poland, Slovenia, the Czech Republic and Hungary) would intensify Austria's trade with these countries. Trade creation effects would especially be felt for agricultural products, food products, textiles and chemicals, while at the same time the agricultural, textile, metal and chemical sectors would have to face trade diversion effects. Production would rise in all but the agricultural sectors, with growth particularly strong in the paper and chemical industries. Correspondingly, the effects on employment could be expected to be beneficial above all in the paper and chemical industries, markedly negative in agriculture, and mildly detrimental in a number of services subsectors. Overall, labor-intensive sectors with above-average levels of unskilled employees would benefit more from eastward expansion than would other sectors. As a consequence, EU enlargement would not exacerbate the differences in income between unskilled and skilled employees. In the long term, Austria could improve its economic growth patterns with the help of EU enlargement. In the wake of the EU's expansion to the East, Austria could reap additional cumulative GDP growth of 1.4 percentage points, and annualized aggregate welfare gains could amount to 0.8% of GDP.

Professor Kohler's paper was then discussed by Jarko Fidrmuc (of the Institute for Advanced Studies) and Wilfried Altzinger (of the Vienna University of Economics). Mr. Fidrmuc suggested including the effects of migration in the next stage of research. Mr. Altzinger highlighted the

¹ An abridged version of this paper was published in January 1998 as CEPR Discussion Paper 1786.

distribution effects of EU enlargement and their potential threat as a source of conflict.

Next, Stefan Lehne (of Austria's Federal Ministry for Foreign Affairs) commented on "Eastern Enlargement: Implications for Austrian Policy-making." He stated that EU enlargement would not only benefit the Austrian economy, but that it would also strengthen Austria's security policy. Nevertheless the population was still very skeptical about Eastern enlargement. Mr. Lehne saw no contradiction: He argued that EU enlargement would inevitably require stringent reforms. The Austrian government, Mr. Lehne pointed out, was in favor of EU expansion; however, the process of enlargement would require great care and caution. Continued efforts in the candidate countries, effective EU support measures for the applicants, EU internal reform and "intelligent transition arrangements" were to become the main issues in this process. During Austria's term of EU presidency, the government plans to enter into substantive negotiations on several chapters of the *acquis* with the candidate countries.

Contribution by Andries Brandsma

Presentation of the DG II Spring 1998 Forecast for the Central and Eastern European Countries Held at the 31st East Jour Fixe on April 24, 1998

On April 24, 1998, Andries Brandsma, Acting Head of Unit of Directorate General II, Economic and Financial Affairs, European Commission, presented the Commission's spring economic forecast for ten Central and Eastern European countries (CEECs),¹ namely Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.

The average economic growth of the CEECs slowed to 3.4% in 1997. However, the overall figure masks substantial differences between countries: While Estonia's economy grew by almost 10%, Bulgaria's economy contracted by 7.4%. Although Bulgaria started to emerge from its economic crisis, the recession in 1996 and the first months of 1997 was still so strong that the country suffered another large fall in GDP in 1997. In Romania, growth was much weaker than expected on account of continuing political, legal and economic uncertainty. The exchange rate crisis in the Czech Republic brought to light other structural economic weaknesses, which forced the government to take restrictive measures. Together with the impact of the severe flooding experienced in 1997, this checked growth in the Czech Republic. Poland and Slovakia, however, continued to post robust growth rates, and growth accelerated considerably in Hungary and the three Baltic states. The European Commission expects growth to quicken to 4.1% and 4.5% for the 10 countries in 1998 and 1999 respectively.

With Bulgaria and Romania as notable exceptions, the gradual disinflation process in the CEECs is continuing. Most countries now post annual inflation rates of less than 15%, and half of the countries have reached

¹ *Results of the Commission's "Spring 1998 Economic Forecast for the Central European Applicant Countries." In European Economy, Supplement C, Economic Reform Monitor 2 (April 1998).*

single-digit inflation. In particular the countries that still had relatively high inflation rates (the Baltic countries and Poland) cut inflation substantially in 1997. Lower real wage increases and improved productivity were the major factors behind the inflation slowdown. Nevertheless, experience in the countries with the lowest inflation rates shows that any reduction of inflation below the 5% mark remains a difficult task, mainly because too many administered prices still need to be adjusted and liberalized. It is expected that disinflation will progress only slowly in most countries.

While real imports declined in Bulgaria, Romania and Slovakia, they advanced by more than 20% in Estonia, Lithuania, Hungary and Poland. The positive factors that supported exports in 1997 should continue to be effective in 1998 and 1999. However, domestic demand is expected to strengthen in almost all countries, which should entail a surge in imports. Therefore, external balances are not likely to improve. Increased FDI provides for sustainable current account deficits in most countries, although some countries that do not benefit from large FDI flows do have persistent large imbalances that are a cause for concern.

The discussion centered around problems with forecasting economic developments in general and in Central and Eastern Europe in particular. Furthermore, the issues of real appreciation in the transition countries and appropriate disinflation strategies were debated. Finally, some aspects of the preaccession process of the CEECs to the EU and the role the Commission plays in this process were discussed.

Conference on Current Account Imbalances in East and West: Do They Matter?

From November 16 to November 18, 1997, the OeNB held the third conference in a series on topics relevant for market and transition economies begun in 1995. The theme of the conference was current account deficits in East and West and their relevance for policymaking. The conference was structured in the following way: First, theoretical aspects of current account sustainability and their relevance for policymaking were discussed. Then, international empirical evidence was examined; case studies of a number of surplus and deficit countries gave ground for discussions. The relevance of current account deficits of different countries participating in EMU was also debated during the conference.

Some 150 representatives of central banks, international organizations, universities, research institutes, commercial banks and government bodies attended the conference in Vienna. The consensus response by speakers and discussants to the question of whether current accounts matter or not was: It depends. As Adolf Wala, the Chief Executive Director of the OeNB, stated in his introduction, to assess a current account as being out of balance is a very delicate thing to do. A current account deficit can be a dangerous threat to the economic stability of one country while being a positive sign of strong consumer or investor confidence in another country. A current account surplus, by contrast, might reflect the welcome accumulation of foreign exchange reserves, but it might just as well indicate the poor purchasing power of residents, or a lack of investment opportunities. No hard-and-fast rule can be applied here, nor are there any exact limits that help economists or politicians define when a current account in or out of balance becomes problematic. Such is the outcome of theory and of empirical evidence.

In the theoretical sessions, it was emphasized that current account balances are neither a policy variable nor an ultimate policy goal. However, shortfalls are closely observed, as they convey information about the actions and expectations of the agents in an open economy. Economic theory helps identify the possible factors which shape the current account position and helps spot situations in which countries can become vulnerable to currency crises, but it is unable to pinpoint their exact timing. Empirical evidence shows that current account deficits can be run for long periods of time. The current account position does not provide clear information in itself; it must be examined in combination with a number of other indicators such as the degree of openness of an economy, the level of foreign currency reserves, the real appreciation of the exchange rate, the savings-investment gap and the fiscal policy that is linked to it, the level and structure of foreign currency debt, the condition of the banking sector, moreover, the growth prospects of an economy, its vulnerability to external shocks, the diversity of its export base, the dynamics of the terms of trade and the soundness of its financial system. Economic theory offers no standardized answers about whether a deficit is appropriate.

The extensive discussion of diverse country studies of countries all over the world exemplified the elements of indeterminacy in the theory. This has certain implications above all for countries in transition with large or rising current account deficits. The cases of the Czech Republic, Estonia, Hungary,

Poland and Russia were illustrated along with those of other developed or emerging economies to get a broad perspective. The Czech Republic, Estonia and Hungary had accumulated large current account deficits recently. The Polish current account was characterized by a rapid swing from a considerable surplus to a considerable deficit. Russia was one of the few transition economies with a current account surplus.

Running large current account deficits may be appropriate for economies undergoing rapid and profound structural change, as such deficits offer new opportunities for investment (because there is a high rate of return relative to risk, and/or because there are new markets) due to these economies' growth potential. This happened in the past in the case of rapidly changing and growing economies, such as Canada or countries in East Asia. However, there are limits to current account sustainability, and numerous variables may signal increasing vulnerability to a balance-of-payments crisis. For example, a real appreciation of the exchange rate due to capital inflows is justified if it is offset by labor productivity gains, but otherwise would tend to lead to a deterioration of the trade balance instead due to the loss of competitiveness.

A fiscal contraction is usually prescribed by economic theory as a remedy to curtail a large current account deficit in the situation of so-called twin deficits, which is the case e.g. in Hungary. However, a move to a sustainable fiscal position does not entail an improvement of the current account imbalance. The Thai and Czech experience shows that a currency crisis can indeed occur when fiscal policy is sound. The Czech crisis unfolded when the current account deficit was substantial, but the fiscal position was strong though deteriorating, the banking sector shaky due to bad loans, fundamentals reassessed as poor and political friction within the ruling coalition on the rise. At the same time Estonia ran a much larger current account deficit in terms of GDP than the Czech Republic, but it did not experience a currency crisis. It also had a solid fiscal position, but in contrast to the Czech Republic, it developed a comparatively sound banking sector and had a track record of bold structural reforms in corporate governance, to name a few differences.

Russia was one of the examples of countries which have run current account surpluses for a long period of time. From the normative point of view, temporary surpluses are appropriate for countries exporting nonrenewable resources; this is the case for Russia.

The OeNB will publish the proceedings of the conference in 1998.

Technical Cooperation of the Oesterreichische Nationalbank with Central and Eastern European Transition Countries

In the first half of 1998, the OeNB staged a number of cooperation activities with Central and Eastern European countries and CIS republics both on a bilateral and on a multilateral level.

The bilateral technical cooperation activities the OeNB organized included hosting various study and information visits to the OeNB as well as specific consultations for Central and East European central banks. In March 1998, the OeNB held consultations with the representatives from the Bank of Slovenia on the topic of human resource management. Within the PHARE framework, the OeNB organized a study visit for experts from the Czech National Bank in March 1998 (on the topic of harmonizing the Czech legislation with EU legislation). Moreover, two study visits for experts from the National Bank of Poland on the topics "Portfolio Management" and "Foreign Exchange Management" were hosted by the OeNB. In January 1998, OeNB experts were invited to the National Bank of Hungary to give lectures on payment systems and monetary policy instruments in EMU. In May 1998 the OeNB held a two-day workshop with the National Bank of Slovakia on the topic of payment systems and liquidity management. Furthermore, under the OeNB's program of one-year traineeships for employees of Central or Eastern European central banks, the OeNB hosted a traineeship for an employee of the National Bank of Hungary that expired in May 1998.

In 1997 the OeNB started a seminar program under which it organized a series of four highly specialized one-week seminars exclusively designed for central bankers. These seminars are held within the organizational framework of the Joint Vienna Institute (JVI) and are exclusively presented in English. As the seminars have met with highly positive reactions on the part of participants, the OeNB continued with another series of four one-week seminars in 1998 on the following topics: EU Selected Issues Part One (February 1998), Financial and Balance of Payment Statistics (April 1998), EU Selected Issues Part Two (June 1998) and Selected Macroeconomic Issues from a Central Bank Viewpoint (September 1998).

At a multilateral level, the OeNB takes part in the EU-financed technical assistance program for the Central Bank of Russia (CBR). Under this program, the OeNB contributed a one-week seminar on human resource management held at the CBR in June 1998. Moreover, the OeNB hosted a three-day study tour of the CBR's internal audit department to Vienna in May 1998. Another study tour of CBR staff to the OeNB, on the topic of financial statistics, is planned for November 1998. Since the beginning of 1997, the OeNB has also participated in the EU-financed technical assistance program for the National Bank of Ukraine (NBU). Within this framework, the OeNB hosted a one-week study tour for eight employees of the NBU on the management of resources in January 1998.

As in the previous years, the cooperation between the Joint Vienna Institute and the OeNB was very intense also in the first half of 1998. Besides the OeNB's financial contribution to the JVI, the OeNB was invited to provide lecturers for a number of seminars held at the JVI by different sponsoring organizations. Moreover, the OeNB and the Ministry of Finance jointly organized and financed a one-week study tour of Austria for the participants of the JVI comprehensive course in April 1998. From 1999, Austria's contribution to the JVI's academic program will be expanded further.

S T A T I S T I C A L A N N E X

Gross Domestic Product

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Poland	Romania	Russia	Slovakia	Slovenia
<i>Annual change in %</i>											
1989	- 1.9	4.5	x	0.7	x	x	0.2	- 5.8	x	1.0	-1.8
1990	- 9.1	- 1.2	x	- 3.5	x	x	-11.6	- 5.6	- 3.0	- 2.5	-4.7
1991	-11.7	-14.2	x	-11.9	x	x	- 7.0	-12.9	- 5.0	-14.5	-8.9
1992	- 7.3	- 6.4	-12.4	- 3.1	x	x	2.6	- 8.7	-14.5	- 6.5	-5.5
1993	- 1.5	- 0.9	- 8.5	- 0.6	x	x	3.8	1.5	- 8.7	- 3.9	2.8
1994	1.8	2.6	- 1.8	2.9	0.6	-9.8	5.2	3.9	-12.7	5.0	5.3
1995	2.1	4.8	4.2	1.5	-0.8	3.3	7.0	7.1	- 4.1	7.3	4.1
1996	-10.9	3.9	4.0	1.3	2.8	4.7	6.1	4.1	- 4.9	6.6	3.1
1997	- 6.9	1.0	11.4	4.4	6.5	5.7	6.9	- 6.6	0.4	6.5	3.8
1996											
3rd quarter	..	3.6	4.5	1.0	3.8	x	7.3	x	- 7.3	6.9	3.4
4th quarter	..	4.7	7.3	3.0	3.2	x	7.7	x	- 5.7	6.7	4.0
1997											
1st quarter	-11.7	1.5	10.8	2.1	2.6	5.2	7.0	x	0.3	6.3	3.2
2nd quarter	- 8.3	0.5	12.4	4.3	7.1	9.0	7.6	x	- 0.6	6.2	5.4
3rd quarter	-10.0	- 0.1	11.5	5.1	8.5	6.4	6.8	x	1.0	6.6	3.0
4th quarter	2.4	2.2	13.5	5.3	7.4	2.2	6.5	x	0.9	6.9	3.5
1998											
1st quarter	..	..	8.0	..	..	6.0	..	x	0.7	..	..

Source: WIIW (Vienna Institute for Comparative Economic Studies); Estonia, Latvia, Lithuania: IMF; Estonia: national source from 1997. Quarterly data: national sources.

Industrial Production

	Bulgaria	Czech Republic	Estonia ¹⁾	Hungary	Latvia	Lithuania ¹⁾	Poland	Romania	Russia	Slovakia	Slovenia
<i>Annual change in %</i>											
1989	- 1.1	1.7	x	- 2.1	x	x	- 0.5	- 2.1	1.4	- 0.7	1.1
1990	-16.7	- 3.3	x	-10.2	x	x	-24.2	-19.0	- 0.1	- 4.0	-10.5
1991	-22.2	-21.2	x	-16.6	x	- 4.9	- 8.0	-22.8	- 8.0	-19.4	-12.4
1992	-15.9	- 7.9	x	- 9.7	-34.6	-51.6	2.8	-21.9	-18.0	- 9.3	-13.2
1993	-10.9	- 5.3	x	4.0	-38.1	-34.7	6.4	1.3	-14.1	- 3.8	- 2.8
1994	8.5	2.1	- 2.1	9.5	- 9.5	-29.8	12.1	3.3	-20.9	4.8	6.4
1995	5.0	8.7	- 1.4	4.6	- 6.3	0.9	9.7	9.4	- 3.3	8.3	2.0
1996	0.1	2.0	0.0	3.4	0.0	3.5	8.3	9.9	-4.0	2.5	1.0
1997	-10.0	4.5	12.0	11.1	7.6	5.0	10.8	-5.9	1.9	2.7	1.0
1997											
January	-27.3	- 2.2	10.8	6.9	- 2.0	..	8.9	12.3	0.3	0.4	- 3.8
February	-24.2	- 6.1	5.9	5.9	- 0.6	..	8.9	20.6	1.5	2.6	- 0.7
March	-24.6	0.3	7.3	3.6	1.1	..	4.7	9.2	0.4	2.1	- 2.8
April	-19.0	8.6	20.3	12.4	9.5	..	15.9	- 4.0	0.5	8.6	7.1
May	-11.0	- 2.1	7.3	2.0	7.7	- 3.0	6.7	- 6.6	0.2	0.2	- 0.4
June	-20.0	10.4	16.9	16.6	5.2	16.8	19.9	- 7.5	2.0	7.4	5.8
July	-15.2	3.9	9.1	8.7	8.1	2.9	10.2	-10.7	3.4	3.6	1.6
August	- 6.3	4.1	6.6	11.3	2.2	- 3.6	8.5	-16.3	3.0	- 1.7	- 0.8
September	-22.0	8.5	13.4	18.7	10.9	0.7	16.1	-18.7	2.4	- 0.7	1.4
October	-26.4	9.8	12.5	14.3	13.6	- 4.4	10.7	-11.6	2.3	2.4	0.9
November	-27.7	8.3	14.1	14.1	12.3	13.9	11.3	- 8.2	3.7	3.3	0.1
December	-24.5	10.9	16.3	16.1	22.5	20.7	13.3	-14.3	4.2	5.2	2.7
1998											
January	-12.0	5.9	8.8	8.0	14.7	1.6	7.7	-17.2	1.5	0.8	9.5
February	21.0	8.7	10.3	11.2	12.5	12.4	10.4	-14.6	1.4	2.9	..
March	6.8	10.5	11.1	20.7	17.0	22.0	14.9	..	1.2	10.6	..
April	..	..	..	..	..	..	3.9	..	..	..	..

Source: Annual data: WIIW; Estonia, Latvia, Lithuania: national sources. Monthly data: national sources; Hungary: OECD, national sources from March 1998.

¹⁾ Industrial sales.

Unemployment Rate

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Poland	Romania	Russia	Slovakia	Slovenia
End of period (in %)											
1989	x	x	x	0.4	x	x	x	x	x	x	3.5
1990	1.7	0.8	x	1.9	x	x	6.3	x	x	1.6	5.8
1991	11.1	4.1	x	7.8	x	x	11.8	3.0	x	11.8	10.1
1992	15.2	2.6	x	13.2	2.3	x	13.6	8.2	4.8	10.4	13.4
1993	16.4	3.5	4.1	13.3	5.8	3.4	16.4	10.4	5.7	14.4	15.4
1994	12.8	3.2	4.1	11.4	6.5	3.8	16.0	10.9	7.5	14.8	14.2
1995	11.1	2.9	4.0	11.1	6.6	6.1	14.9	9.5	8.8	13.1	14.5
1996	12.5	3.5	4.3	10.7	7.0	7.1	13.2	6.3	9.3	12.8	14.4
1997	13.7	5.2	3.6	10.4	6.7	6.7	10.5	8.8	9.0	12.5	14.8
1997											
April	15.3	3.8	4.5	10.8	7.6	5.9	12.1	7.3	9.6	13.0	14.3
May	14.8	3.8	4.2	10.6	7.7	5.6	11.7	7.1	9.6	12.3	14.1
June	14.2	4.0	3.7	10.3	7.6	5.3	11.6	7.3	9.5	12.3	14.1
July	14.2	4.3	3.7	10.5	7.5	5.3	11.3	7.2	9.3	12.8	14.4
August	14.0	4.5	3.5	10.4	7.3	5.4	11.0	7.1	9.1	12.8	14.4
September	13.6	4.8	3.5	10.3	7.1	5.6	10.6	7.2	9.1	13.0	14.4
October	13.4	4.9	3.6	10.1	6.8	5.9	10.3	7.6	8.9	12.9	14.5
November	13.5	4.9	3.6	10.3	6.7	6.3	10.3	8.1	8.9	12.6	14.5
December	13.7	5.2	3.6	10.4	7.0	6.7	10.5	8.8	8.9	12.5	14.8
1998											
January	14.2	5.6	3.9	10.8	7.0	7.4	10.8	9.2	9.0	13.4	15.0
February	14.3	5.6	3.9	10.6	7.0	7.5	10.8	9.6	9.1	13.6	14.9
March	13.7	5.5	4.1	10.3	7.1	7.5	10.6	9.5	9.1	13.4	14.3
April	..	..	4.0	9.8	7.1	6.9	10.2	..	..	..	..
May	..	..	..	9.4	..	6.7	..	..	..	..	..

Source: annual data: IMF; monthly data: national sources.

Consumer Price Index

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Poland	Romania	Russia	Slovakia	Slovenia
Period average (annual change in %)											
1989	x	1.4	x	17.0	x	x	251.1	1.1	x	x	x
1990	23.8	9.7	x	28.9	x	x	585.8	5.1	5.3	10.6	x
1991	338.5	56.6	x	35.0	x	x	70.3	170.2	92.6	61.2	x
1992	91.2	11.1	x	23.0	243.6	x	43.0	210.4	1,526.6	10.0	201.3
1993	72.8	20.8	89.8	22.5	108.8	409.6	35.3	256.1	873.5	23.2	32.3
1994	96.0	10.0	47.7	18.8	35.9	72.1	32.2	136.8	307.6	13.4	19.8
1995	62.1	9.1	28.8	28.2	25.0	39.7	27.8	32.3	197.5	9.9	12.6
1996	123.0	8.8	23.1	23.6	17.6	24.6	19.9	38.8	47.6	5.8	9.7
1997	1,082.2	8.5	11.2	18.3	8.4	8.9	14.9	154.7	14.6	6.1	9.1
1997											
January	476.6	7.4	12.6	18.9	11.4	12.7	17.8	76.2	19.6	5.8	8.9
February	1,839.1	7.3	10.0	18.8	9.9	10.7	17.3	105.5	18.2	6.0	8.3
March	2,040.4	6.8	9.1	18.8	8.7	8.3	16.6	164.0	16.6	6.3	7.3
April	1,965.1	6.7	9.2	18.6	8.8	7.3	15.3	176.8	15.1	6.5	6.9
May	1,840.1	6.3	10.8	17.7	9.0	7.9	14.6	174.0	14.3	6.1	8.1
June	1,526.6	6.8	10.8	18.7	7.5	7.6	15.3	177.4	14.4	6.2	7.8
July	1,267.2	9.4	10.8	18.1	7.6	8.7	14.9	159.8	14.5	6.0	8.2
August	1,132.2	9.9	11.9	18.0	8.6	8.7	14.5	159.1	14.7	6.5	9.0
September	974.6	10.3	11.9	18.0	8.2	8.6	13.6	161.4	13.9	5.7	9.2
October	825.8	10.2	12.2	17.7	7.6	9.0	13.1	169.2	12.8	5.9	8.7
November	748.6	10.1	12.4	18.2	7.3	9.0	13.2	165.3	11.4	6.2	9.1
December	578.5	10.0	12.5	18.4	7.0	8.3	13.2	151.3	10.9	6.4	8.8
1998											
January	382.2	13.1	14.2	17.7	6.3	6.5	13.6	132.0	10.0	7.2	8.9
February	43.1	13.4	14.2	17.1	6.2	6.4	14.2	109.3	9.2	7.5	9.1
March	27.3	13.4	14.2	16.4	6.0	6.7	13.9	66.2	8.4	7.2	9.4
April	..	13.1	12.6	16.0	6.0	6.9	13.7	..	..	7.0	9.1

Source: WIIW; Estonia, Lithuania, Latvia: IMF; Estonia, Latvia: national sources from April 1998; Lithuania: national sources from March 1998.

Trade Balance

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Poland	Romania	Russia	Slovakia	Slovenia
USD million											
1989	-1,199.0	454.6	x	537.0	x	x	240.0	2,559.0	x	x	x
1990	- 757.0	- 252.3	x	348.0	x	x	2,214.0	-1,743.0	x	x	x
1991	- 32.0	339.7	x	189.0	x	x	51.0	-1,254.0	x	x	x
1992	- 212.4	-1,901.6	x	-48.0	x	x	512.0	-1,420.0	x	x	791.1
1993	- 885.4	- 525.3	- 91.0	-3,247.0	37.0	-154.7	- 2,293.0	-1,128.0	x	- 932.0	-154.2
1994	- 16.9	-1,381.2	- 353.0	-3,635.0	-252.0	-204.9	- 836.0	- 411.0	19,380.0	58.5	-337.5
1995	121.0	-3,677.9	- 707.1	-2,442.0	-458.2	-698.0	- 1,827.0	-1,577.0	21,947.0	- 227.5	-954.3
1996	187.6	-5,877.3	-1,141.1	-2,645.0	-789.5	-878.6	- 8,154.0	-2,470.0	22,825.0	-2,292.5	-881.7
1997	396.0	-4,589.6	-1,446.0	-1,734.0	-935.0	-930.0	-11,268.0	-1,978.0	19,600.0	-1,471.0	-766.9
1997											
January	x	- 458.8	- 89.8	- 210.0	- 49.2	- 87.5	- 1,476.0	- 167.0	2,700.0	- 213.2	- 33.2
February	x	- 419.8	- 82.1	- 229.0	- 61.7	-127.3	- 706.0	- 52.0	2,000.0	- 108.1	- 78.3
March	305.7	- 446.8	- 113.8	37.0	- 59.5	-173.5	- 885.0	10.0	2,000.0	- 148.0	-134.4
April	x	- 509.4	- 135.6	- 204.0	- 79.8	-199.9	- 935.0	- 101.0	1,600.0	- 301.9	-127.5
May	x	- 363.2	- 113.5	- 53.0	- 65.5	-118.1	- 824.0	- 171.0	1,200.0	- 125.0	- 93.2
June	46.0	- 282.1	- 137.0	- 301.0	- 80.9	-127.4	- 898.0	- 153.0	1,100.0	- 90.6	- 75.9
July	x	- 427.0	- 121.4	- 201.0	- 68.1	-137.8	- 1,011.0	- 243.0	1,900.0	- 85.5	- 37.7
August	x	- 242.9	- 107.2	- 111.0	- 65.3	-105.5	- 717.0	- 60.0	900.0	- 37.5	- 69.7
September	98.9	- 153.4	- 95.9	- 34.0	- 78.9	-128.0	- 961.0	- 74.0	700.0	- 50.1	12.1
October	x	- 277.5	- 149.5	- 95.0	-101.6	-146.3	- 860.0	- 222.0	2,000.0	- 105.2	- 54.5
November	x	- 375.3	- 140.2	- 47.0	-106.7	-188.6	- 893.0	- 273.0	2,100.0	- 29.9	- 36.2
December	- 54.6	- 527.8	-160.0	- 287.0	-117.3	-241.0	- 1,103.0	- 472.0	1,400.0	- 185.6	- 43.1
1998											
January	x	- 129.0	- 117.4	- 210.0	- 52.9	-110.1	- 1,443.0	- 78.0	600.0	- 156.9	- 84.1
February	x	- 105.0	- 117.7	- 16.0	- 64.4	-133.0	- 814.0	- 78.0	600.0	..	- 78.0
March	..	..	..	- 112.0	-115.0	..	- 942.0	..	1,100.0	..	- 98.5

Source: national sources.

Current Account

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Poland	Romania	Russia	Slovakia	Slovenia
USD million											
1989	-1,306.0	x	x	-1,437.0	x	x	-1,419.0	2,864.0	x	x	x
1990	-1,152.0	x	x	127.0	x	x	716.0	-1,656.0	x	x	x
1991	- 76.9	x	x	267.0	x	x	-1,359.0	-1,187.0	x	x	x
1992	- 360.5	x	36.1	324.0	191.0	x	- 269.0	-1,564.0	x	x	926.2
1993	-1,098.0	455.8	23.3	-3,455.0	417.0	- 85.7	-2,329.0	-1,174.0	x	- 601.2	191.9
1994	- 31.9	- 786.8	-170.8	-3,911.0	201.0	- 93.8	- 944.0	- 428.0	11,328.0	664.9	600.1
1995	- 25.6	-1,369.1	-187.9	-2,480.0	- 16.3	-614.3	5,455.0	-1,639.0	9,499.0	391.4	- 22.9
1996	15.9	-4,292.2	-423.1	-1,678.0	-454.0	-722.6	-1,352.0	-2,612.0	10,576.0	-2,098.1	39.0
1997	445.7	-3,155.8	-608.9	- 981.0	-442.5	- 944.5	-4,268.0	-2,486.0	5,200.0	-1,300.0	70.1
1997											
January	x	x	x	- 300.0	x	x	- 899.0	- 151.0	x	- 221.9	38.2
February	x	x	x	- 198.0	x	x	- 233.0	- 31.0	x	- 118.8	- 14.2
March	234.7	-1,069.2	-160.2	21.0	- 87.3	-215.7	- 408.0	45.0	4,900.0	- 144.6	- 55.8
April	x	x	x	- 110.0	x	x	- 742.0	- 145.0	x	- 306.1	- 46.0
May	x	x	x	142.0	x	x	- 135.0	- 168.0	x	- 102.5	- 2.5
June	119.2	- 835.4	-155.8	- 317.0	-149.8	-234.2	- 287.0	- 396.0	400.0	- 112.4	- 13.5
July	x	x	x	- 11.0	x	x	- 339.0	- 248.0	x	- 56.0	10.6
August	x	x	x	97.0	x	x	- 136.0	- 104.0	x	10.4	- 13.6
September	143.0	- 650.7	-114.6	- 10.0	-101.5	-139.3	- 507.0	- 66.0	- 1,000.0	- 49.8	80.9
October	x	x	x	1.0	x	x	- 60.0	- 300.0	x	- 89.5	18.6
November	x	x	x	71.0	x	x	- 224.0	- 222.0	x	- 10.7	45.8
December	66.8	- 601.7	-210.7	- 367.0	-155.0	-407.5	- 298.0	- 699.0	900.0	..	- 11.8
1998											
January	x	x	x	- 175.0	x	x	- 962.0	- 81.0	x	..	- 6.4
February	x	x	x	- 16.0	x	x	- 292.0	- 81.0	x	..	- 12.9
March	..	..	..	- 155.0	..	..	- 754.0	..	..	..	- 20.3

Source: national sources; sum of monthly data need not correspond to the annual result.

Total Reserves minus Gold

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Poland	Romania	Russia	Slovakia	Slovenia
End of period (USD million)											
1989	x	x	x	1,246.0	x	x	2,314.3	1,859	x	x	x
1990	x	x	x	1,070	x	x	4,492.1	524	x	x	x
1991	320	x	x	3,936	x	x	3,632.6	695	x	x	112.1
1992	902	755.0	170.2	4,428	x	45.3	4,099.1	826	x	x	715.5
1993	655	3,789.4	386.1	6,771	431.6	350.3	4,091.9	995	5,835.0	415.7	787.8
1994	1,002	6,144.5	443.4	6,810	545.2	525.5	5,841.8	2,086	3,980.4	1,691.2	1,499.0
1995	1,236	13,843.0	579.9	12,052	504.0	757.1	14,774.1	1,579	14,382.8	3,363.9	1,820.8
1996	483	12,352.0	636.8	9,795	654.1	772.3	17,844.0	2,103	11,276.4	3,418.9	2,297.4
1997	2,121	9,733.7	757.7	8,476	704.0	1,010.0	20,407.0	3,803	13,018.0	3,230.3	3,314.7
1997											
January	381	11,846	565.7	9,092	646.4	731.2	17,894.8	1,783	9,929.5	3,379.9	2,257.4
February	408	11,635	557.9	8,681	641.2	733.0	17,950.6	1,766	11,126.8	3,417.3	2,449.7
March	517	11,626	606.6	8,556	637.7	749.6	17,663.1	1,889	12,428.7	3,398.7	2,473.6
April	1,146	11,434	587.9	7,948	622.4	779.9	18,141.6	2,199	14,067.7	3,292.4	2,493.8
May	1,241	9,952	606.5	8,407	668.8	821.3	18,599.8	2,277	15,884.1	2,919.5	2,699.9
June	1,344	10,680	620.1	8,334	668.5	870.5	19,384.9	2,753	20,395.7	2,964.2	2,863.0
July	1,877	10,787	604.3	8,285	672.5	1,091.3	19,065.7	3,062	20,186.1	2,955.0	2,942.3
August	2,074	11,191	655.7	8,384	688.1	1,023.1	19,627.3	3,156	19,603.9	3,126.5	3,107.6
September	2,233	10,936	691.4	8,283	698.5	967.8	19,752.4	3,659	18,737.0	3,096.4	3,281.6
October	2,373	11,003	725.6	8,780	698.3	973.6	20,845.8	3,652	18,447.7	3,356.4	3,371.0
November	2,387	10,139	680.4	8,813	691.0	1,025.6	20,691.9	3,813	12,201.4	3,391.5	3,359.2
December	2,474	9,778	757.7	8,476	704.0	1,010.0	20,407.2	3,803	13,018.3	3,230.3	3,314.7
1998											
January	2,306	9,866	677.9	8,679	699.2	997.5	20,680.0	3,584	10,479.7	3,106.6	3,261.4
February	2,505	10,300	714.0	9,093	708.2	1,021.7	22,420.0	3,587	10,212.1	3,147.6	3,299.3
March	2,570	10,600	659.1	9,487	743.0	1,096.2	23,060.0	..	..	3,070.0	3,286.1

Source: IMF; Czech Republic, Slovakia: national sources from March 1998.

Central Government Surplus/Deficit

	Bulgaria	Czech Republic	Estonia ¹⁾	Hungary	Latvia	Lithuania ²⁾	Poland ³⁾	Romania ⁴⁾	Russia	Slovakia	Slovenia ⁵⁾
% of GDP											
1989	x	-1.2	x	-3.1	x	x	-3.0	7.5	0.7	-0.5	x
1990	x	-0.2	x	-0.1	x	x	0.4	-0.4	1.3	-0.2	x
1991	x	-2.0	x	-4.6	x	x	-3.8	-1.9	-2.7	-3.4	2.6
1992	-5.8	-0.2	x	-6.7	-3.0	x	-6.0	-4.4	-3.4	-2.8	0.2
1993	-11.0	0.1	-0.4	-5.6	-0.2	x	-2.8	-1.7	-4.6	-6.2	0.3
1994	-6.2	0.9	-0.6	-5.5	-1.9	-1.8	-2.7	-4.2	-11.4	-5.2	-0.2
1995	-6.6	0.5	-0.5	-5.5	-3.8	-1.8	-2.6	-4.1	-5.3	-1.6	-0.0
1996	-10.9	-0.1	-1.6	-1.9	-0.8	-2.5	-2.5	-4.9	-7.5	-4.4	0.3
1997	-3.7	-1.0	1.5	-4.1	1.2	-1.0	-1.4	-3.6	-6.8	-5.7	-1.1
1996											
3rd quarter	-8.3	0.3	-0.6	0.4	-0.3	-4.1	-0.8	-5.8	..	-4.8	x
4th quarter	-16.0	-0.5	-2.3	-0.9	0.2	-1.7	-0.3	-9.4	-2.1	-8.1	x
1997											
1st quarter	-7.4	-2.2	-0.7	-5.8	1.4	-0.6	-3.5	-4.8	-7.2	-2.9	x
2nd quarter	-3.8	-1.5	-0.4	-2.6	2.1	-0.3	-3.7	-2.1	-8.1	-6.0	x
3rd quarter	-0.9	1.1	4.6	-3.8	1.4	0.5	1.7	-4.2	-6.4	-8.7	x
4th quarter	-2.6	-1.1	2.3	-4.2	0.0	-3.5	0.1	-3.5	-5.5	-5.2	x
1998											
1st quarter	6.2	1.9	..	-7.6	3.1	..	..	-2.9	..	0.6	x

Source: WIIW; Latvia, Lithuania: national sources; Estonia: national sources from 1996. Quarterly data: national sources.

¹⁾ Including social budget in 1993 and 1994.

²⁾ Not comparable with the figures used in the study "current account deficit."

³⁾ Up to 1990: general government surplus/deficit.

⁴⁾ 1990: including social insurance budget.

⁵⁾ General government deficit.

Gross Debt in Convertible Currencies

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Poland	Romania ¹⁾	Russia	Slovakia	Slovenia
	USD million										
1989	9,201.0	x	x	20,751.0	x	x	40,800.0	x	52,400.0	x	x
1990	10,007.0	x	x	21,505.0	x	x	48,475.0	1,140.0	56,200.0	x	1,954.0
1991	12,301.1	x	x	22,812.0	x	x	48,412.0	2,131.0	70,100.0	x	1,866.0
1992	13,857.7	7,762.3	58.4	21,644.0	64.6	56.0	47,044.0	3,240.0	80,200.0	2,981.0	1,741.0
1993	13,889.4	9,604.9	153.9	24,566.0	235.8	328.0	47,246.0	4,249.0	112,784.0	3,626.0	1,873.0
1994	11,411.4	12,209.7	186.0	28,526.0	373.8	494.0	42,174.0	5,528.6	121,600.0	4,310.0	2,258.0
1995	10,229.2	17,190.3	286.4	31,660.0	462.6	763.0	43,957.0	6,458.5	120,500.0	5,827.0	2,970.0
1996	9,571.0	21,180.5	405.3	27,646.0	472.2	1,286.0	40,423.0	8,334.3	125,000.0	7,810.0	4,010.0
1997	8,803.0	21,616.5	..	23,747.0	..	..	38,500.0	..	130,800.0	10,700.0	4,176.0

Source: WIIW; Estonia, Latvia, Lithuania: World Bank; Czech Republic: national sources from 1997.

¹⁾ Medium- and long-term gross debt.

Exchange Rate

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Poland	Romania	Russia	Slovak Republic	Slovenia
	Period average (ATS per 100 units of national currency)										
1989	1,575.08	x	x	22.40	x	x	9,194.37	88.68	x	x	x
1990	519.17	x	x	17.99	x	x	1,196.82	50.69	x	x	x
1991	65.63	x	x	15.62	x	x	1,104.00	15.28	x	x	42.35
1992	47.08	x	x	13.91	1,492.10	620.86	806.49	3.57	x	x	13.52
1993	42.16	39.90	87.97	12.65	1,722.52	268.02	642.13	1.53	1.17	37.80	10.27
1994	21.10	39.67	87.92	10.86	2,040.70	286.98	502.65	0.69	0.52	35.65	8.87
1995	15.01	37.99	87.93	8.02	1,910.82	252.04	415.73	0.50	0.22	33.93	8.51
1996	5.95	39.01	87.97	6.94	1,922.39	264.67	392.66	0.34	0.21	34.54	7.82
1997	0.73	38.50	87.91	6.53	2,100.91	305.11	372.16	0.17	0.21	36.30	7.64
1997											
January	1.62	41.07	86.91	6.80	2,007.41	282.54	386.08	0.23	0.20	35.05	7.76
February	0.49	41.83	88.02	6.80	2,038.89	294.62	389.21	0.17	0.21	35.97	7.74
March	0.72	40.91	87.98	6.75	2,059.43	298.62	387.90	0.17	0.21	35.95	7.72
April	0.78	40.33	88.04	6.70	2,065.57	301.06	385.82	0.17	0.21	36.21	7.72
May	0.78	38.63	87.99	6.61	2,073.17	299.57	377.85	0.17	0.21	36.03	7.72
June	0.73	37.54	88.01	6.57	2,114.19	303.92	375.38	0.17	0.21	36.33	7.76
July	0.71	37.54	88.08	6.57	2,173.48	315.16	371.15	0.18	0.22	36.93	7.75
August	0.70	37.88	88.00	6.55	2,194.42	324.23	372.49	0.17	0.22	37.24	7.65
September	0.70	37.45	87.98	6.43	2,141.94	314.87	364.36	0.17	0.22	36.58	7.55
October	0.70	37.58	87.99	6.33	2,118.60	309.32	361.53	0.16	0.21	36.69	7.47
November	0.70	36.81	88.03	6.22	2,099.47	304.95	348.18	0.16	0.21	36.38	7.46
December	0.70	35.98	87.89	6.20	2,118.22	312.44	354.48	0.16	0.21	36.19	7.45
1998											
January	0.70	36.13	87.95	6.19	2,147.23	319.40	361.72	0.15	0.21	36.36	7.46
February	0.70	36.95	87.90	6.14	2,155.84	319.07	379.73	0.16	0.21	36.13	7.45
March	0.70	37.80	87.97	6.10	2,163.67	321.31	375.66	0.16	0.21	36.68	7.46
April ¹⁾	0.70	38.18	111.07	5.98	2,125.76	315.68	371.71	0.15	0.21	36.51	7.52

Source: IMF; Poland: end of period from march 1998.

¹⁾ End of period.

Discount Rate¹⁾

	Bulgaria	Czech Republic	Estonia	Hungary ²⁾	Latvia	Lithuania	Poland	Romania	Russia ³⁾	Slovakia	Slovenia
<i>End of period</i>											
1989	x	x		17.0	x	x	104.0	x	x	x	x
1990	4.5	x		22.0	x	x	48.0	3.0	x	x	x
1991	54.0	x		22.0	x	x	36.0	12.8	x	x	x
1992	41.0	9.5		21.0	120.0	x	32.0	61.8	80.0	9.5	25.0
1993	52.0	8.0		22.0	27.0	x	29.0	70.0	210.0	12.0	18.0
1994	72.0	8.5		25.0	25.0	x	28.0	66.1	180.0	12.0	16.0
1995	34.0	9.5		28.0	24.0	x	25.0	39.9	160.0	9.8	10.0
1996	180.0	10.5		23.0	9.5	x	22.0	35.0	48.0	8.8	10.0
1997	6.7	13.0		20.5	4.0	13.0	24.5	40.0	28.0	8.8	10.0
1997											
January	198.0	10.5		23.0	8.0	x	22.0	50.0	48.0	8.8	10.0
February	198.0	10.5		22.5	6.0	x	22.0	50.0	42.0	8.8	10.0
March	216.0	10.5		21.5	5.0	x	22.0	50.0	42.0	8.8	10.0
April	74.4	10.5		21.5	4.0	x	22.0	50.0	36.0	8.8	10.0
May	43.1	13.0		21.5	4.0	x	22.0	50.0	36.0	8.8	10.0
June	10.1	13.0		21.0	4.0	x	22.0	50.0	24.0	8.8	10.0
July	5.4	13.0		21.0	4.0	x	22.0	40.0	24.0	8.8	10.0
August	5.9	13.0		21.0	4.0	x	24.5	40.0	24.0	8.8	10.0
September	6.0	13.0		20.5	4.0	x	24.5	40.0	24.0	8.8	10.0
October	4.9	13.0		20.5	4.0	13.0	24.5	40.0	21.0	8.8	10.0
November	5.9	13.0		20.5	4.0	13.0	24.5	40.0	28.0	8.8	10.0
December	6.7	13.0		20.5	4.0	13.0	24.5	40.0	28.0	8.8	10.0
1998											
January	6.1	13.0		20.5	4.0	13.0	24.5	40.0	28.0	8.8	10.0
February	5.5	13.0		20.0	4.0	13.0	24.5	40.0	39.0	8.8	10.0
March	5.3	13.0		20.0	4.0	13.0	24.5	40.0	30.0	8.8	10.0
April	..	13.0		19.5	..	..	24.5	..	..	8.8	10.0
May	..	..		19.5	..	..	..	..	..	..	..

Source: IMF; Poland, Russia: national sources; Lithuania, Romania: OECD; Romania: national sources from July 1997.

¹⁾ Due to currency board arrangements, the Bank of Estonia and the Bank of Lithuania do not lend to the government or enterprises. Therefore these two countries do not define or publish discount rates.

On October 9, 1997, the Bank of Lithuania introduced an "official lending rate": weighted average rate on domestic currency lending to residents.

²⁾ Base rate.

³⁾ Refinancing rate.