



Are the Balance of Payments Deficits in the Baltic Countries Sustainable?

Jorgen Drud Hansen and Morten Hansen

Abstract

For almost a decade all three Baltic countries have witnessed substantial deficits on the current accounts of the balance of payments. This paper discusses whether this situation should be a matter of concern. Recent literature on the sustainability of balance of payments deficits is reviewed and put into a Baltic context. The main conclusion is that the recurrent large deficits in the Baltic countries pose a risk for the fixed exchange-rate policies until the countries adopt the euro. In the longer term, large deficits will influence the time path of convergence of living standards between the Baltic countries and the EU as a whole.

Jorgen Drud Hansen is a EuroFaculty Visiting Professor at Vilnius University (jorgen-drud.hansen@ef.vu.lt) and Morten Hansen is a EuroFaculty Visiting Lecturer at University of Latvia (mhansen@eurofaculty.lv).

Unless otherwise indicated, the views expressed are attributable only to the authors in a personal capacity and not to any institution with which they are associated.

ISBN 92-9079-510-7

Available for free downloading from the CEPS website (<http://www.ceps.be>)

© Copyright 2004, Jorgen Drud Hansen and Morten Hansen

Contents

1. Introduction	1
2. Balance of payments deficits and intertemporal optimisation of consumption and saving ..	3
3. The dynamics of the long-term debt burden.....	4
4. Economic policy vulnerability for a given level of long-term debt burden	5
4.1 The structure of capital flows and the role of FDI	6
4.2 The public sector deficit	7
4.3 The problem of original sin	7
4.4 Exchange-rate regime	7
4.5 Other aspects	8
5. Scrutinising economic development in the Baltics in the past decade.....	8
5.1 Prospects for the debt burden: Composition and sources of the deficit	8
<i>Unemployment rate</i>	13
<i>Share of employment in agriculture</i>	13
<i>Degree of openness²</i>	13
<i>Inward stock of FDI, \$ per capita</i>	13
<i>GNI/GDP</i>	13
5.2 Vulnerability of the economic policy	14
<i>The stability of capital flows</i>	14
<i>Public finances</i>	15
<i>Foreign debt, foreign-owned assets and original sin</i>	16
<i>Exchange-rate regime and other aspects</i>	17
6. Concluding remarks.....	18
References	20

ARE THE BALANCE OF PAYMENTS DEFICITS IN THE BALTIC COUNTRIES SUSTAINABLE?

CEPS WORKING DOCUMENT No. 207/JULY 2004

JORGEN DRUD HANSEN AND MORTEN HANSEN

1. Introduction

After the huge initial output declines and high inflation rates in the Baltic states following the breakaway from the Soviet Union and the establishment of open-market economies, the three Baltic states appear as success stories. Since 1995, real GDP has grown at an average annual rate of 5.7% in each of the countries, inflation has been in single digits since 1998 and is now at EU levels, budget deficits are below 3% of GDP, debt-to-GDP ratios would make most EU countries envious, trade has increased and seen a major reorientation towards the West and FDI inflows have been substantial.

Nevertheless, in this flattering list of excellent marks for economic performance at least one possible sign of weakness may be identified. For most of the past decade the current accounts of the balance of payments have been severely in deficit for all three Baltic countries and there is no apparent sign of a reversal of this general pattern. Lawrence Summers, writing in an article in *The Economist* warned that “close attention should be paid to any current account deficit in excess of 5% of GDP if it is financed in a way that could lead to rapid reversals” (Summers, 1995). If this statement is to be taken at face value, warning signs should be flashing for the Baltic countries – average annual current account deficits for the period 1995–2002 have been 8.1% for Estonia, 7.1% for Latvia and a whopping 8.6% for Lithuania. The purpose of this working paper is to consider this problem and discuss whether the present trend of current account deficits in the Baltic countries is sustainable.

The sustainability of the balance of payments position of a country is not a concept easily dealt with. Basically, it is associated with the long-term solvency of a country (see for example Roubini & Wachtel, 1998; Edwards, 2001). A more policy-oriented definition of sustainability is suggested by Milesi-Ferretti & Razin (1996) who characterise a given balance of payments deficit as sustainable if the balance of payments position is consistent with a continuation of present economic policy, i.e. no dramatic changes in the economic policy are deemed necessary. Attention is paid in particular to the question of whether the balance of payments deficit endangers the exchange-rate policy of a country and thus exposes the country to the risk of a currency crisis. A currency crisis is defined, in case of a flexible exchange-rate regime as a sharp depreciation, or, in case of a fixed exchange-rate regime, a depletion of central bank foreign reserves and ultimately a forced devaluation (see Edwards, 2001 for a more thorough discussion).

All three Baltic countries have adopted fixed exchange-rate systems as the main pillar for their economic policy. In June 1992 Estonia established a currency board arrangement based on a peg of the Estonian kroon to the Deutschmark and from 1 January 1999 the Estonian kroon was automatically re-pegged to the euro.

Similarly, in April 1994, Lithuania established a currency board arrangement although the Lithuanian currency, the litas, was initially pegged to the US dollar. In February 2002 the litas

was smoothly re-pegged to the euro. Latvia introduced a hard peg to the IMF Special Drawing Right (SDR) in February 1994 and since then the exchange rate of the Latvian lat has been linked to this basket with the dollar and the euro as its most important currencies.

All three Baltic countries voted overwhelmingly in 2003 in favour of joining the EU (Lithuania on 10–11 May, Estonia on 14 September and Latvia on 20 September). With membership of the European Union from 1 May 2004, the new member states are committed to aim at joining the economic and monetary union (EMU) and thus adopt the euro when they fulfil the Maastricht convergence criteria. One of the criteria demands that the countries should subordinate their exchange rate policy to the exchange rate mechanism II (ERM II), a target-zone system with broad (+/- 15%) fluctuation bands around a central parity to the euro. Technically, the Baltic countries could therefore be prone to currency crises until their adoption of the euro. When the euro is finally adopted, probably after three to five years of EU membership, the risk of currency crises is ultimately removed.¹

Concerns over the high deficits on the balance of payments in recent years in the Baltic countries have been addressed in several papers, such as McGettigan (2000), IMF (2003b, 2003c) and Gurtner (2003). The latest assessments by the IMF (2003b, 2003c), paint a comparatively bright picture of the future development for the Baltic economies although it is stressed that the economic policy “strategy [in these countries] is not without risks” and the report later adds that the actual current account deficits in Estonia and Latvia at 12.5% and 7.75% respectively, “are clearly unsustainable over medium-to-longer term” (IMF, 2003b, pp. 4-5) and the high current account deficit “render the economy more vulnerable to external shocks” (IMF, 2003b, p. 14). Gurtner (2003) provides evidence from the currency board arrangement in Argentina before the crisis there in 2001 and this experience is used for a discussion of the stability of the exchange-rate regime in Estonia. Because of several structural differences between Argentina and Estonia, such as differences in the degree of openness, flexibility in the labour markets and inflows of foreign direct investment (FDI), it is concluded that Estonia is in a more favourable situation than Argentina.

Two main arguments have been put forward to support a less concerned view about the balance of payments problem in the Baltic countries. First, all the three Baltic countries have for years benefited from a large inflow of foreign direct investment (FDI), which has contributed substantially to financing the deficits. Furthermore, this source of long-term financing is perceived as a ‘stable’ source of financing, making reversals of capital flows less likely in the immediate future. Second, international competitiveness is seemingly fine in all three Baltic countries.²

Yet, even in the most optimistic scenario it will take three to five years before the national currencies of the Baltic countries are replaced by the euro and the risks of a damaging currency crisis during this period needs to be taken seriously. Although there are no serious signs of an imminent currency crisis for the Baltic currencies, evidence from currency crises in the 1990s have repeatedly demonstrated that such crises may erupt suddenly, taking most

¹ The applicant countries for membership of the euro should, in accordance with this Maastricht criterion, demonstrate exchange-rate stability in the ERM II system for at least two years before full membership of the EMU. Nevertheless, Estonia and Lithuania have been allowed to continue their currency board arrangements until the adoption of the euro. Latvia plans to re-peg to the euro from 1 January 2005 (see www.bank.lv).

² See IMF (2003b) for an extensive analysis of this issue.

analysts by surprise. Notable examples are the Mexican peso crises in 1994–95 and the crisis in Argentina 2001–02, which were not foreseen by highly esteemed forecast institutions.³

Based on past experience (and surprises), this paper addresses the question of whether the Baltic countries might face the risk of a currency crisis in the future owing to the large and persistent structural current-account deficits. The paper is organised as follows. Section 2 puts the concept of sustainability of a balance of payments deficit into the framework of intertemporal optimisation of consumption in open economies. The section concludes by suggesting the Milesa-Ferretti & Razin definition, which states that a balance of payments deficit is sustainable if the present economic policy can be continued in the long run. Crucial to the assessment of this question are the prospects for long-term debt as well as various risk indicators for economic policy. Section 3 therefore examines the long-term dynamics of external debt and section 4 discusses various economic factors of importance for the vulnerability of an economy to a given long-term debt burden, i.e. external debt relative to GDP. Based on the sustainability indicators presented in sections 3 and 4, the case for the Baltic countries is analysed in section 5. As the long-term debt burden for a given current account deficit varies inversely with the rate of economic growth, a part of section 5 is devoted to an analysis of the growth prospects for the Baltic countries using Ireland and Portugal as benchmark economies. The prospects of future inflows of FDI are also addressed in particular in section 5, perceived as they are to be the most stable form of current account deficit financing, along with the impact on the balance of payments of structural funds transfers from the European Union to the Baltic countries under the present EU Financial Framework for 2000–06. Section 6 provides concluding remarks.

2. Balance of payments deficits and intertemporal optimisation of consumption and saving

In open economies where borrowing and lending is possible, the current account reflects intertemporal optimisation by consumers. The position on the current account equals national savings minus national investments; savings reflect the endeavours of consumers to smooth consumption across periods, based on a utility-maximising framework; investments reflect maximisation of expected returns for producers from different projects. Differences of investment opportunities across countries or differences with respect to consumer preferences may cause temporary discrepancies between savings and investments. Yet, fulfilling an intertemporal budget constraint implies that deficits on the current account will be reversed to surpluses in later periods, making external debt repayable. Hence, from a purely theoretical point of view, current account deficits or surpluses do not pose a problem. On the contrary, they provide an opportunity in open economies for consumers to increase welfare by smoothing consumption over time. This basic view on current account deficits can be traced back to Irving Fisher (1930) but has since then been stated several times in standard textbooks on macroeconomic theory (for example, see Obstfeld & Rogoff, 1996 or Barro, 1997).⁴

³ In December 1994, the same month as the peso crisis started, the OECD published a forecast of the real rate of growth for Mexico for 1995 of 4.0% and a rate of inflation of 5.7%. The actual figures turned out to be a real rate of growth of minus 6.8% and a rate of inflation of 39.1%. In mid-2001 the IMF forecast a real rate of growth in Argentina of 3.7% and a rate of inflation of 0.5% for 2002. The actual figures were a real rate of growth of minus 11.0% and inflation of 25.9%. (OECD, 1994 and 1996; IMF 2001 and 2003a)

⁴ This setup has been applied to the Baltic countries in IMF (2003c). It is shown that most of the current account deficits for these countries during the past decade might be explained as the result of consumption-smoothing and productivity growth.

Public investments and public savings do not change the above conclusion in case of ‘ultra-rationality’ or the Ricardian equivalence of public debt and taxes. Rational, forward-looking consumers take the public budget and debt into account in their intertemporal optimisation and public deficits are thus perceived as a future tax commitment, which the consumer includes among his liabilities. Frustrated expectations, such as those following external shocks or shifts in the perceptions of public sector debt in case of imperfect internalisation of the public sector finances, may lead to changes in the optimal consumption plans. But apart from very large negative shocks, consumers should be able to adapt planned future consumption such that claims from external creditors are not endangered.

Nevertheless, as addressed initially by Eaton & Gersowitz (1981) the above reasoning only addresses the *ability* but not the *willingness* to live up to the obligations of debt servicing. To deal with the latter question a political economy analysis is necessary, with voters and interest groups as the main agents. The outcome of such an analysis could describe cases where the political system pursues a macroeconomic policy that may be unsustainable in the long run. If the debt burden tends to infinity in the long run then the present economic policy certainly cannot be continued – but even in the case where the debt burden tends to stabilise at a finite but high level, the present economic policy could collapse because of unexpected refinancing problems. Yet there is no exact, critical maximum value for the debt burden beyond which a collapse of the economic policy will invariably appear. For a given debt burden the risk of a collapse depends on various factors in the economy. The following two sections describe a) the long-term dynamics of the debt burden and b) factors that may be important to assess the vulnerability of the present economic policy for a given debt burden.

3. The dynamics of the long-term debt burden

The dynamics of the debt problem can be analysed formally by defining the debt burden b by:

$$b = D/PY \quad (1)$$

where D is the total amount of external debt in current prices, P is the price level and Y is the real GDP. Disregarding foreign direct investment along with capital gains and losses on foreign assets and liabilities in the following simple calculation, the increase in total external debt is equal to the deficit on the current account of the balance of payments, i.e.

$$\dot{D} = -CA = (IM - EX) + iD \quad (2)$$

where CA is the position on the current account, $(EX - IM)$ is the trade deficit and i is the nominal interest rate. The dot over a variable denotes a change per unit of time of the variable, i.e. $\dot{D} = dD/dt$.

To calculate the long-term implications for the debt burden if the present economic development continues indefinitely, we assume that the real rate of growth of GDP, $\dot{Y}/Y = y$, the rate of inflation, $\dot{P}/P = p$ and the nominal interest rate i are all constant. Furthermore, it is assumed that the primary deficit (the trade deficit), constitutes an exogenous share, h , of nominal GDP, i.e.

$$IM - EX = h PY \quad (3)$$

Using these assumptions and substituting the nominal interest rate, i , with the real interest rate, r , defined by $r = (i - p)$, the dynamics of the debt burden can be written as:

$$\dot{b} = h - (y - r)b \quad (4)$$

If the real interest rate is less than the real rate of growth of GDP, i.e. $r < y$, the debt burden will in the longer term tend to stabilise at the level calculated in the equation below:

$$b^* = h / (y - r) \quad (5)$$

If the real interest rate exceeds the real rate of growth, i.e. $r > y$ (and the country is initially indebted), the debt burden will rise indefinitely. Any deficit on the primary balance is thus unsustainable in such cases.

In the former case of $r < y$, the long-term debt burden, although finite, might be very high and thus the required income transfers would be massive. Such cases might also be deemed unsustainable since the willingness to service the debt could be put into question. An unexpected, even minor increase of the real interest rate could trigger a default of the debt.

This simple calculation of the dynamics of the debt burden illustrates the role of the two variables, economic growth and the real interest rate. Stronger economic growth for a given real interest rate will slow down the growth of the debt burden and in some cases even bring the debt burden to a halt. A higher real interest rate for a given rate of real growth will increase the long-term debt burden, possibly to unsustainable levels.

For an assessment of the development of the debt burden, the *composition* of the current account is important, i.e. the current account deficit decomposed into trade and transfer deficits (Roubini & Wachtel, 1998). If the current account deficit is primarily caused by a deficit in income transfers, this will reflect a more mature and stable structural situation for the debt burden, being close to its long-term equilibrium. If, however, the deficit is caused by large trade deficits the actual debt burden might still be far below its long-term equilibrium and, hence, the deficit should be of more concern.⁵

Attention should also be paid to the *sources* of the current account deficits – the balance between savings and investments (Roubini & Wachtel, 1998). A deficit reflects the insufficiency of national savings to finance national investment. As high investment is (usually) associated with strong growth, it follows straightforward from the equation for the dynamics of the debt burden that a given balance of payments deficit is less concerning if the deficit is caused by high investment rather than low savings.

4. Economic policy vulnerability for a given level of long-term debt burden

The risk that a chosen economic policy collapses in the longer term depends not only on the implications for the long-term debt burden but also on various factors such as 1) the structure of capital flows, 2) the public sector deficit, 3) exposure to ‘original sin’ – currency mismatch or maturity mismatch of assets and liabilities, 4) the exchange-rate regime and finally 5) the degree of openness of the economy and flexibility of the labour market. These factors are described in more detail in the following.

⁵ The ratio between the transfer deficit and the trade deficit is given by iD/hPY . In a steady state where the debt burden is given by (5) this equals $i/(y-r)$. The transfer deficit thus varies proportionally with the trade deficit in the longer term for given i , y and r . Note that the ratio between the transfer deficit and the trade deficit in the longer term increases with the nominal interest rate and hence with the rate of inflation. This is due to money illusion when calculating the balance of payments deficit.

4.1 The structure of capital flows and the role of FDI

The dominating view concerning the stability of the various sources to finance the balance of payments deficits ranks short-term borrowing ('hot money') highest on the list as the most risky and unstable source of financing. The need for frequent renewals of short-term loans provides opportunities for easy withdrawals. Long-term borrowing, on the other hand, is more stable as the debtor is allowed more time to solve possible liquidity problems stemming from the renewal of a loan. Foreign direct investment is usually perceived to be the most stable source of deficit financing. It is argued that foreign direct investment provides a long-term commitment where the investor sees the investment materialise in tangible capital that is 'bolted down' in the host country without the possibility to withdraw the capital swiftly. From this argument it follows that current account deficits financed by an inflow of foreign direct investment makes an economy less prone to a currency crisis.

Foreign direct investment may also have other effects on the host country apart from being a source of financing balance of payments deficits. There are indirect effects on the current account and in the longer term on the real rate of growth as well.

The indirect effects on the current account of foreign direct investment are rather complex and they may be both positive and negative. In the very short term, the effect on the trade balance is probably negative since the establishment of a subsidiary is likely to trigger investments and induce imports of capital goods. Nevertheless, in the longer term, foreign direct investment represents not only physical capital but also new technology in the form of codified and tacit knowledge and this may lead to import substitution and/or an increase in exports. Empirical analysis seems to corroborate the positive relationship between foreign direct investment and the trade balance of the host country (see ECE, 2001, Chapter 5 for a survey of findings). The same survey also reports strong evidence of a positive relationship between the transfer of technology, productivity growth and inflow of foreign direct investment. The overall conclusion is therefore that capital inflows in the form of foreign direct investment are beneficial for the host economy, partly because it represents a stable source of financing of balance of payments deficits and, partly owing to the assumed beneficial effects on the trade balance and on the real rate of growth.

At least three caveats should be kept in mind, however, when contemplating the optimistic view on the beneficial effects of foreign direct investment. First, foreign direct investment is not an asset of the firm but one of its liabilities and financial claims can easily revert as stressed by Fernández-Arias & Hausmann (2001). Physical capital might be bolted down but owners of such assets still have the possibility to protect the value of their assets (measured in the currency of the home country) from possible exchange-rate loss by hedging and using the assets as collateral. Ultimately, the owners may also have the possibility of selling their claims in the market and withdraw their money, for example selling their shares and converting the revenue to the currency of the sending country. Such endeavours will aggravate the problems of a looming currency crisis.

Second, net inflows of foreign direct investment are in principle a stock adjustment, where investors abroad realise their plans to establish a subsidiary in a foreign country. When the actual stock of foreign subsidiaries equals the optimal stock, the net flow of new investment will decline to a lower level given by the incentive to adjust the existing stock of foreign-owned capital in accordance to growth of the economies and to offset the depreciation of the capital already invested (World Bank, 2003). FDI is therefore not a reliable source of finance for balance of payments deficits in the longer term.

Third, the prospects of transfers of the income of foreign direct investment may gradually pose an unpleasant problem of dividends payments. As argued by Brada & Tomsik (2003) theoretical considerations and empirical experience point to the existence of an *FDI financial life-cycle*. In a first phase, profits from foreign direct investment are usually reinvested in the host country to finance further expansion of the subsidiaries. Hence, a substantial part of the income transfers from foreign investment is automatically financed as no actual payment takes place. In a more mature second phase the investor wants to repatriate profits as openly paid dividends and at that time the debit side on the current account needs to be financed from alternative sources.

4.2 The public sector deficit

Attention should also be given to the size of the public deficit. Public deficits may not be fully incorporated by optimising consumers in case of non-rationality. A simultaneous deficit on the current account and on the public finances may in a future period result in severe negative surprises for consumers when the twin deficits are going to be redressed. This risk has been framed in the so-called ‘Lawson doctrine’, associated with the former British Chancellor of the Exchequer, Nigel Lawson. The Doctrine states that current account deficits should not be a matter of concern if they are caused entirely by private sector imbalances and not by fiscal imbalances. This view on the sustainability of a balance of payments deficit has also been stated by Corden (1994), who argues that contrary to private agents, politicians are myopically driven by ambitions to stay in power. Hence, the public sector may distort national savings and investment through public deficits and macroeconomic instability could prevail. The Lawson doctrine, however, is seriously challenged by evidence from several recent balance of payments crises (Edwards, 2001). A notable example is the Mexican currency crisis of 1995, which was preceded by a substantial balance of payments deficit but without fiscal imbalances.

4.3 The problem of original sin

The quality of the financial markets is also very important for the risk of a currency crisis. If it is not possible for a country borrow abroad in its own currency or if it is not possible to borrow long-term domestically then a risk of insolvency of domestic companies and financial institutions is prevalent in case of a currency crisis. The reason is a currency mismatch or a maturity mismatch, which imply balance-sheet effects in case of exchange rate changes or changes in the domestic interest rate. This risk has been coined as the problem of ‘original sin’ (Fernandez-Arias & Hausmann, 2001). Most obviously, if external debt liabilities are denominated in foreign currencies, a depreciation will have direct and immediate balance-sheet effects as the solvency of firms will be eroded. In a worst case scenario, companies will go bankrupt and give impetus to a collapse of output and a surge in unemployment. Argentina in 2001–02 provides an ominous example.

4.4 Exchange-rate regime

Countries with a fixed exchange-rate regime are the most vulnerable to currency crises. An unpleasant policy dilemma exists for troubled economies with a fixed exchange-rate regime. On the one hand, frequent small devaluations will ruin the credibility of the system and will result in high interest rates. On the other hand, complete rigidity of the parity preclude that growing tensions in the exchange market might be eased by a gradual change of the exchange rate. If widespread feelings develop, suggesting that the economic policy is too lax, the

market might ‘test’ the parity by launching a speculative attack. The ability of the central bank to defend the parity depends on the size of foreign exchange reserves and its external credit facilities. This vulnerability of fixed exchange-rate regimes exists in the case of hard pegs, e.g. those institutionalised through currency board arrangements as well as for target-zone systems, particularly for systems with narrow band margins. In a flexible exchange-rate regime or in a target-zone system with wide fluctuation bands the risk of losses and gains for agents considering speculating in a change of the exchange rate are considerable and, hence, speculative attacks are less likely.

4.5 Other aspects

The degree of openness and the flexibility of labour markets are also important factors when evaluating the risk of a currency crisis for a given external indebtedness. Open economies are more able to restructure and improve the trade balance if the obligations to service the debt unexpectedly worsen. The same argument applies if the labour market is flexible.

The above list of indicators provides information about the vulnerability of a currency crisis. If a currency crisis should materialise, however, it also needs a trigger, i.e. a negative shock that initiates a vicious circle that is difficult to control by the authorities. An unexpected decline in the real rate of growth, an increase in the interest rate or an unexpected real appreciation of the currency for a country with a fixed exchange-rate regime could be the trigger that initiates a currency crisis. A currency crisis is therefore not predictable in a deterministic way but should be seen as a possible outcome in a risk assessment.

5. Scrutinising economic development in the Baltics in the past decade

The theoretical analysis in the two preceding sections outlines a list of relevant factors for an assessment of whether or not the present economic policy can be maintained in the longer run. This set of indicators will be applied in this section to the three Baltic countries.

5.1 Prospects for the debt burden: Composition and sources of the deficit

The current account balance and the trade balance for the Baltic countries are reported in Table 1 for the period 1995⁶–2002. It appears from the table that current account deficits have been the norm in the Baltic countries since 1995. They have usually been very large, almost never below 5% of GDP and often exceeding 10%. As is also evident from Table 1, the current account deficits are caused by substantial trade deficits implying an upward pressure on the debt burden. Yet, as will be noticed later, the massive inflow of FDI has dampened the effect from current account deficits on the debt burden.

On 1 May 2004 the Baltic countries formally acceded to the European Union with the obligation later to seek membership of the EMU. These changes of the future institutional environment will have a direct impact on the current accounts of the balance of payments.

The removal of the remaining trade barriers will influence the trade balance, but as both exports and imports will be stimulated the net effect on the trade balance is ambiguous. More clear is the impact on the balance of income transfers. First, the current accounts may be improved because of an increased flow of remittances from labour migrating from the Baltic

⁶ Data preceding 1995 is notoriously unreliable in all three Baltic countries, which is why 1995 has been chosen as the starting point.

countries to the Western European countries. Second, and probably more important, the countries will be net recipients of transfers from the EU budget. The Baltic countries are expected to benefit substantially from access to the structural funds for member countries of the EU. The common agricultural policy may also provide net benefits to the Baltics, especially for Lithuania owing to its relatively big agricultural sector.⁷

Table 1. Composition and sources of balance of payments deficits in the Baltic countries, as a percentage of GDP

	Current account	Trade balance ¹	Gross investment	Gross savings
Estonia				
1995	-4.4	-8.0	26.6	18.8
1996	-9.1	-11.5	27.8	16.8
1997	-12.2	-11.6	31.0	17.1
1998	-9.2	-11.4	29.3	19.7
1999	-5.7	-6.9	24.5	18.6
2000	-5.7	-4.0	27.8	20.9
2001	-6.1	-3.7	28.9	21.8
2002	-12.3	-7.5	31.4	20.1
<i>1995-2002, average</i>	<i>-8.1</i>	<i>-8.1</i>	<i>28.4</i>	<i>19.2</i>
Latvia				
1995	-0.4	-2.4	16.9	17.3
1996	-5.5	-8.2	18.6	13.1
1997	-6.1	-8.5	23.1	16.9
1998	-10.7	-13.6	27.7	17.1
1999	-9.8	-10.4	26.9	17.2
2000	-6.9	-9.3	27.0	20.1
2001	-9.6	-11.1	29.7	20.2
2002	-7.8	-11.1	28.5	20.7
<i>1995-2002, average</i>	<i>-7.1</i>	<i>-9.3</i>	<i>24.8</i>	<i>17.8</i>
Lithuania				
1995	-10.2	-11.8	24.7	14.5
1996	-9.2	-9.9	21.6	12.5
1997	-10.2	-10.5	25.4	15.2
1998	-11.9	-11.7	26.3	14.4
1999	-11.2	-10.3	23.1	11.9
2000	-6.0	-6.4	20.2	14.2
2001	-4.8	-5.5	21.0	16.2
2002	-5.2	-5.5	22.5	17.7
<i>1995-2002, average</i>	<i>-8.6</i>	<i>-9.0</i>	<i>23.1</i>	<i>14.6</i>

Note: ¹Goods and services; small discrepancies between external savings (gross investment minus gross savings) and the current account appear as a result of different measuring methods.

Sources: IMF, International Financial Statistics, various years and authors' calculations.

In a recent analysis by Mayhew (2003), the net financial transfers from the European Union to the new member states have been assessed. The calculations are based on the present

⁷ Yet this transfer will be relatively small in the first years of membership as direct subsidies will be paid on a sliding scale starting from 25% of the level to the farmers in the old member states in 2004 to full payments in 2013 (Mayhew, 2003).

medium-term European Union financial framework for the seven-year period spanning from 2000 to 2006. The results concerning the Baltic countries are reported below in Table 2.

Table 2. Net transfers from the EU to the Baltic countries, percentage of gross national income (GNI)

	Estonia	Latvia	Lithuania
2003, pre-accession aid	0.8	0.9	0.8
2004	1.6	1.9	1.8
2005	2.2	2.8	2.8
2006	2.3	3.1	3.2

Note: Transfers relative to GDP are by and large the same in the table as the difference between GNI and GDP, which is usually negligible and does not exceed 6% for any year for any of the three countries.

Source: Mayhew (2003).

It appears from Table 2 that the expected net transfers to the Baltic countries from the EU are substantial, especially at the end of the present financial framework. This might offset parts of the current account deficits, which would otherwise have prevailed. An assessment of the future net transfers during the 2007–13 financial framework is not possible as no detailed agreement about budgetary issues beyond 2006 has been made at the EU level. It is reasonable to assume, however, that given the relative poverty of these countries, the net flows to the Baltic countries in 2006 will make up the minimum of what may be expected for the following years.

Baltic data for savings and investment are also reported in Table 1. The current account deficit reflects the gap between investments and savings, and optimistic growth expectations might have contributed negatively to savings because of incentives to smooth consumption. The three countries have performed rather differently regarding the share of gross investment to GDP. For the period 1995–2002, Estonia's level of investment has been high with shares ranging between 25% and 31%. For Latvia the share of investments increased from relatively low levels of 17–18% in 1995–96 to about 29% for 2002, while, for Lithuania, the evidence points at investment shares that have stagnated in the 20–25% range.

To put those figures into an EU perspective, the share of gross investment to GDP for the EU-15 countries for the same period hovered in the interval 19.2% (2002) to 21.0% (2000) of GDP while the current account was almost in balance, being in an interval of a surplus of 1.3% (1997) and a deficit of 0.3% (2000), (EU Commission, 2003, Table 78). A simple comparison with the EU thus indicates that the large current account deficits in Estonia and Latvia are related to high investment levels and not a low level of savings in these two countries. The same mitigating feature does not, however, hold for Lithuania where the current account deficit goes hand in hand with a quite low level of savings.

Future growth prospects after EU membership for the eight new Eastern European member countries (the Czech Republic, Hungary, Poland, Slovakia, Slovenia and the three Baltic countries) plus the applicant countries Bulgaria and Romania have been assessed in a report by the EU Commission (2001). An adapted Solow model was used for an assessment of future growth potential.⁸ For the period 2000–09 the annual average real rate of growth of GDP is projected at 4.0% in a 'central scenario' and 4.8% in an 'optimistic scenario'. The

⁸ The main departures from a standard neoclassical model are a generalised specification of technical progress, where the rate of technical progress depends on sector allocation, as well as a dissemination of technological knowledge from abroad (EU Commission, 2001, pp. 65).

central scenario assumes that the share of gross investment to GDP constitutes around 26–27% whereas the optimistic scenario assumes an increase in the share of investment from around 27% to about 32% during the calibration period. If applied specifically to the three Baltic countries, Lithuania falls below this investment condition even for the central scenario. Moreover, all three countries need to raise the share of investments significantly to match the conditions of the optimistic scenario. But an increase of the investment share may cause a further deterioration of the current accounts unless the share of savings does not see at least an equivalent increase.

The brighter growth prospects following EU membership will definitely pose a challenge for macroeconomic policy. Investment ratios should be raised to support growth but consumers may be inclined to smooth consumption and decreased savings ratios may be envisaged. This might aggravate the current account problem and ultimately threaten the growth process.

Economic growth, however, is not only dependent on the accumulation of physical capital but is influenced by a range of other determinants. This is well illustrated by the growth performance of Ireland and Portugal over the past decade and the experience from those two countries could provide a useful benchmark for an assessment of the possible growth process for the Baltic countries. Ten years before the turn of the century, GDP per capita measured at current exchange rates was substantially below the EU-15 average in these two countries (see Table 3). Nevertheless, during a relatively short span of years, Ireland jumped from a meagre 70% to 134% of the EU level and Portugal also improved its position, albeit less impressively from 38% to 50% of the EU level.⁹

Table 3. A benchmark case: economic growth, investment and current accounts, Ireland and Portugal, 1990–2002

	Ireland	Portugal
<i>Growth accountancy, average annual percentage changes 1991-2002</i>		
Real GDP	6.9	2.1
Employment	3.4	1.0
Capital deepening	0.4	0.4
Total factor productivity	3.0	0.7
<i>Gross investment, average percentage of GDP 1991-2002</i>	20.3	25.6
<i>Share of population aged 25-64 having completed at least upper secondary education</i>		
1992	42.3	59.2
2001	19.9	19.8
<i>Current accounts, percentage of GDP</i>		
Average 1990-2002	1.6	-5.3
1990	-1.8	-1.0
2002	-0.9	-7.8
<i>GDP per capita at current prices (EU-15 =100)</i>		
1990	70.4	37.5
2002	133.8	52.7

Note: Secondary education is defined in accordance with ISCED (International Standard Classification of Education).

Sources: EU Commission (2003), *European Economy*, No. 4, Broad Policy Guidelines (for the 2003–05 period), Statistical Annex; EU Commission (2003), *Eurostat Yearbook 2003, The Statistical Guide to Europe, Data 1991-2001* and authors' calculations.

⁹ In purchasing power standards the increase in relative GDP for the two countries is smaller due to the Balassa-Samuelson effect.

The challenging question is whether a future scenario of the Baltic countries might mimic an Irish growth miracle or a Portuguese slower convergence. To explore this question, Tables 3 and 4 present some key macroeconomic figures for the two benchmark economies, Ireland and Portugal, and for the three Baltic countries.

A closer look at the growth process in Ireland and Portugal reveals interesting differences in the nature of growth in the two countries. Table 3 decomposes, based on the Solow approach, the overall growth rate into that which is caused by growth in factor inputs (labour and capital) and growth of total factor productivity.

In the Irish case, growth has been associated with high growth rates of employment and total factor productivity. Only a minor role can be ascribed to capital deepening, i.e. the increase in physical capital per person employed. The average share of investment in Ireland is by and large at the same level as the present shares in Lithuania, which, as mentioned earlier, fall below the target shares used in the EU Commission's growth calculation. In contrast, capital deepening has played a more important role for economic growth in Portugal as the larger shares of investment have translated into growth through capital deepening. The recent experiences from the two countries thus offer the insight that high investment shares are neither a necessary nor a sufficient condition for fast growth, at least not in the medium term.

The astonishingly high growth in Ireland has been dealt with in several analyses (Coorey et al., 1999 and Honohan & Walsh, 2002). These analyses point in particular to three factors that have benefited growth in Ireland. First, the very strong growth has been possible because of an ample supply of labour from various sources (see Table 4). The activity rate – the labour force as a share of population aged 15 to 64 – has increased substantially during the 1990s (not least owing to a larger participation rate among women) from a relatively low level in 1990. A dramatically shrinking unemployment rate, the much diminished role of labour from an initially large agricultural sector and the reversal of Ireland's long history of emigration have contributed to secure a flexible labour supply during the several years of high growth.¹⁰

Second, the educational attainment of the population is also quite high and has even improved significantly during the last decade, and this feature of the labour market has facilitated growth in technically advanced sectors. Third, strong international competitiveness of the Irish economy has stimulated aggregate demand and enabled growth without severe balance of payments problems – in fact for most of the years during the 1990s the Irish current account was in surplus. Finally, Ireland has benefited from its trade openness and its huge inflow of FDI, which has raised productivity substantially, especially because established subsidiaries have been export-oriented industries (Barry, 2000).¹¹ Nevertheless, because of these highly profitable foreign-owned subsidiaries and the interest service on foreign debt accumulated in previous periods gross national income is considerably lower (but not low anymore!) than gross domestic product.

¹⁰ As analysed more extensively by Honohan & Walsh (2002), the Irish and UK labour markets are very integrated through migration, which is sensitive to differences in economic growth in the two countries.

¹¹ The very high growth of total factor productivity might exaggerate the real productivity growth because of transfer pricing. Friendly taxation of corporate income in Ireland provides an incentive for multinationals to let income appear in Ireland and this will be reflected in measured productivity in Ireland (see Honohan & Walsh, 2002 for a deeper discussion of this point).

A comparison of the structural indicators in Tables 3 and 4 for Ireland and Portugal illustrate the more limited growth potential for Portugal on all accounts apart from the share of investment.¹² Noticeable in particular is the lower educational attainment in Portugal, the substantial balance of payments deficits in Portugal and the wedge between gross domestic product and gross domestic income because of foreign debt.

Table 4. Growth framework for Ireland, Portugal and the Baltic countries, various years

	Ireland	Portugal	Estonia	Latvia	Lithuania
<i>Activity rate</i> ¹					
1990	60.9	69.7			
2001	68.4	71.9	69.9	68.0	70.4
<i>Unemployment rate</i>					
1990	13.4	4.8			
2001	3.8	4.1	12.4	13.1	16.5
<i>Share of employment in agriculture</i>					
1990	13.6	12.8			
2002	7.0	10.9	7.1	15.1	16.5
<i>Degree of openness</i> ²					
1990	54.7	36.2			
2002	84.4	34.0	88.9	50.8	57.0
<i>Inward stock of FDI, \$ per capita</i>					
1990	9757	1057			
2002	40220	4256	3105	1164	1148
<i>GNI/GDP</i>					
1990	0.89	0.89			
2002	0.80	0.90	0.95	1.00	0.99

Notes: ¹ Activity rate represents the labour force as a percentage of the population aged 15-64 years.

² Exports plus imports divided by two times GDP.

Sources: Eurostat (2002), *Employment in Europe: Recent Trends and Prospects*; EU Commission, *European Economy*, various years; UNCTAD FDI Database; IMF, *Financial Statistics*, various years and authors' calculations.

Table 4 also allows a comparison of the present structural indicators for the Baltic countries with similar indicators for Ireland and Portugal from 1990, the year that initiates a decade of very different growth performance for those two countries. Two main conclusions are apparent: first, the three Baltic countries differ internally in their structure; second, none of the three Baltic countries fully matches the indicators of either Ireland or Portugal in 1990.

Reasons for some growth optimism might be found in an ample labour supply because of high unemployment, and for Latvia and Lithuania a potential labour supply from the future restructuring from agriculture to other industries. Yet the activity rates are already quite high and very similar to the situation in Portugal in 1990, thus probably not leaving any major potential for an increase in the labour supply.

¹² See Vamvakidis & Zanforlin (2002) for a recent growth analysis of Portugal.

On the optimistic side is also the relatively high educational level in all three Baltic countries although comparative measures are difficult to establish. The high degree of trade openness and a substantial inflow of FDI places Estonia closer to the Irish case – in contrast with Latvia and Lithuania, which seem more to mirror the Portuguese case. All three Baltic countries suffer from severe balance of payments deficits, which under the present exchange-rate regimes might endanger future strong growth if no determined efforts to improve international competitiveness take place. The pattern is therefore quite complex. Most of the indicators paint an optimistic picture for an assessment of the growth prospects, especially in the case of Estonia.

5.2 Vulnerability of the economic policy

The stability of capital flows

All three Baltic countries have experienced massive inflows of foreign direct investment, which have financed a substantial part of the current account deficits of these countries. For some years the net inflows of FDI have even exceeded the current account deficits (Table 5), allowing either for a reduction of net foreign debt or for an increase in foreign exchange reserves.

Membership of the EU and the economic and monetary union might also temporarily stimulate net inflows of foreign direct investment to the Baltic countries owing to the credibility of membership. This may ease the financial problem of a current account deficit in the vulnerable period in the near future when the Baltic countries must display exchange-rate stability.¹³

The conclusion to be drawn is that the composition of the capital inflows supports the less concerned view about the possible dangers for the economic policy of the large current account deficits. It should be noted, however, that the FDI inflows, albeit substantial, have been highly volatile and since foreign direct investment inflow represents a stock adjustment this contribution to financing the deficits will eventually come to a halt.

Furthermore, the large inflow of foreign direct investment to the Baltic countries in recent years could cause large future payment obligations in the form of dividends. Foreign direct investment income will increase substantially in the future and, sticking to the FDI financial life-cycle hypothesis, the balance of payments deficits may be more difficult to finance.¹⁴ Columns 3 and 4 in Table 5 provide some dark omens of this future burden as the figures show that reinvested earnings in the late 1990s have been very substantial, especially in Estonia.

¹³ The effects on the flows of foreign direct investments of a reduction of trade barriers are ambiguous from a theoretical point of view. On the one hand, the decline of trade costs weakens the incentive to set-up a subsidiary in foreign markets, as exporting will become cheaper and by concentrating production in one location only, cost efficiency improves because of internal economies of scale. On the other hand, market integration makes it more important for a company to be present in the partner country and this points to a positive effect of membership on foreign direct investment. Based on previous experience from enlargements, the latter effect seems to dominate.

¹⁴ The reported actual foreign direct-investment income as well as reinvested earnings might, as mentioned by Brada & Tomsik (2003), be underestimated as some accumulation of tangible and intangible capital in the company's accountancy could be reported as costs. The figures in Table 5 therefore underestimate the existing potential for dividends.

Table 5. Current account deficits, FDI capital flows and FDI-related income transfers to the Baltic countries, as a percentage of GDP

	Current account	FDI inflow (net)	Direct investment income (net)	Reinvested direct investment income (net)
Estonia				
1995	-4.4	-	-	-
1996	-9.1	2.4	-0.5	0.1
1997	-12.2	2.8	-2.5	1.9
1998	-9.2	11.0	-1.4	0.5
1999	-5.7	4.3	-1.8	0.8
2000	-5.7	6.3	-3.7	2.0
2001	-6.1	6.0	-5.1	4.0
2002	-12.3	2.4	-5.3	2.5
Latvia				
1995	-0.4	-	-	-
1996	-5.5	7.4	-0.9	0.7
1997	-6.1	9.1	-1.2	0.9
1998	-10.7	5.0	-1.2	0.9
1999	-9.8	5.0	-1.9	1.3
2000	-6.9	5.6	-0.8	0.8
2001	-9.6	2.0	-1.4	0.8
2002	-7.8	4.6	-2.0	1.2
Lithuania				
1995	-10.2	-	-	-
1996	-9.2	1.9	-0.3	0.3
1997	-10.2	3.4	-0.8	0.5
1998	-11.9	8.6	-1.2	0.9
1999	-11.2	4.5	-1.4	1.3
2000	-6.0	3.3	-0.4	0.8
2001	-4.8	3.7	-1.2	0.7
2002	-5.2	5.1	-0.8	0.5

Note: Reinvested earnings are gross for Latvia for the years 1996, 1999 and 2000 and for Lithuania for 1996. Reinvested earnings invested abroad are negligible for all three Baltic countries for the years where those figures are reported.

Sources: IMF, International Financial Statistics, various years; IMF, *Balance of Payments Statistics Yearbook*, various years and authors' calculations.

Public finances

As is apparent from Table 6, public finances have been largely sound in all the Baltic countries. Public budgets have for most of the period been close to balance and even in surplus for some of the years reported. This is therefore a positive element in the assessment of the current account deficits of the Baltic countries, whether or not the Lawson doctrine applies.

Table 6. General government budget balance, as a percentage of GDP

	Estonia	Latvia	Lithuania
1995	-0.6	-4.0	-4.8
1996	-0.8	-1.6	-3.6
1997	2.5	0.7	-1.9
1998	-0.1	0.1	-0.4
1999	-0.2	-3.6	-7.1
2000	0.2	-2.7	-1.3
2001	2.3	-1.4	-0.4
2002	1.2 ¹	-1.9	-1.2

Notes: ¹ Estimate.

Sources: IMF (2003), International Financial Statistics; Statistical Office of Estonia; and the European Bank for Reconstruction and Development (EBRD) (2003), *Transition Report*.

Foreign debt, foreign-owned assets and original sin

In spite of the persistent high level of current account deficits in all three Baltic countries, net debt as a percentage of GDP was still at a one-digit level for both Estonia and Latvia and made up less than 20% for Lithuania at the end of 2002 (Table 7). These levels do not seem alarming. The reason for the modest growth of foreign debt to GDP is the massive inflow of FDI and also the strong economic growth.

Table 7. Foreign debt, inward stock of FDI and foreign-owned assets, as a percentage of GDP

	Foreign debt (net)	Inward stock of FDI	Foreign-owned assets
Estonia			
2000	3.2	51	54
2001	2.7	58	62
2002	3.1	-	-
Latvia			
2000	8.0	29	37
2001	9.5	31	41
2002	8.9	-	-
Lithuania			
2000	22.1	21	43
2001	20.8	22	43
2002	18.1	-	-

Sources: Statistical Office of Estonia (2003), *Estonia, Latvia, Lithuania – in Figures 2003*.

The inward stock of FDI to GDP has therefore risen considerably for all three countries but mostly for Estonia, where the inward stock constituted approximately 58% of GDP by the end of 2001. Adding foreign debt to the inward stock of FDI gives the stock of foreign-owned assets. For all three Baltic countries this stock of foreign-owned assets made up around half of GDP by the end of 2002. This figure reveals some information about the future flow of income transfers. If the capital-output ratio in a catching-up country is assessed, roughly, to be about two, a quarter of capital income constitutes the income transfer to foreign owners and creditors.

Nevertheless, given the high productivity of capital in the Baltic countries the stock of foreign-owned capital reflects an efficient allocation of capital that might benefit the citizens of the Baltic countries through higher real wages as well as the capital owners abroad owing to a higher real return on capital.

The data available does not allow for an empirical assessment of the problem of original sin. All casual evidence leaves no doubt, however, that foreign borrowing in the Baltic countries is denominated in foreign currencies, mainly in euros and US dollars. It leaves the countries vulnerable to balance-sheet effects in case of changes in the current parities. Yet, this does not seem to be a big problem given the relatively low debt burden for all three countries.

Exchange-rate regime and other aspects

The present fixed exchange-rate systems in the Baltic countries have delivered monetary stability in recent years but have exposed the countries to higher risks of a currency crisis compared with flexible exchange-rate regimes. The risk of currency crises has been limited by a high degree of openness of the Baltic countries measured by the share of exports and imports to GDP. This ensures a high capability to influence the current accounts through changes in economic policy and hence provides foreign creditors with the belief that debt obligations will be met. The Baltic countries are also perceived to have a high degree of flexibility in their labour markets because of weak trade unions and low levels of welfare benefits, which also contributes to reducing the risk of currency crises.

More important for sustainability than the above-mentioned effects are the expected changes of the monetary policy regimes for the new member countries after accession. The new member countries are committed to eventually join the EMU and adopt the euro. In the interim period the new member countries should as a first step join the ERM II – a target-zone system with the euro as anchor currency. To avoid a ‘double-regime shift’ the existing currency board arrangements in Estonia and Lithuania have been accepted as a substitute for participation in the ERM II system.¹⁵ Latvia is expected to re-peg the lat from the SDR to the euro by 1 January 2005 and at the same time join the ERM II. After at least two years of exchange-rate stability within the ERM II and after fulfilling the other convergence criteria for ‘sound public finances’ as well as for inflation and interest-rate convergence, the countries can apply to the European Council of Ministers for adoption of the euro.

The new member countries face a dilemma when planning the timetable for adopting the euro. On the one hand, the accession countries are still in a transition process from the planned economy of half a century. In this still-ongoing restructuring process the countries might benefit from having the exchange-rate instrument as a last resort in case of an asymmetric shock between the EU and the new member states. This points to a relatively long period before the euro should be adopted. On the other hand, adopting the euro eliminates once and for all the risk of a currency crisis and by this argument a short interim period is to be preferred.

The Baltic countries will probably go for a swift change to the euro. The fixed exchange-rate systems during the past decade have delivered monetary stability without severe problems. Furthermore, the public finances are not in disarray in any of the three Baltic countries so the Maastricht criterion of public deficits not exceeding 3% of GDP is not a serious hindrance for membership of the EMU.

¹⁵ See the statement by the then President of the ECB, W. F. Duisenberg, at a press conference on 13 April 2000.

Nevertheless, ‘demand’ for membership should be matched by ‘supply’ of membership of the eurozone if the entrance into the EMU is to become a reality. Regarding the supply of membership, the final decision of accepting new member countries will be taken by the European Council of Ministers, wherein voting rights are only available to the present group of euro countries. There are no signs, however, that EMU membership for the new member countries will be blocked or delayed by the incumbent countries, so a plausible scenario could see the Baltic countries adopting the euro after three to five years of membership in the EU (2007–09).

6. Concluding remarks

A superficial glance at the main macroeconomic indicators for the three Baltic countries reveals several positive trends but also one major issue of concern: the very substantial and persistent deficits on the current accounts of the balance of payments, implying a risk for the fixed exchange-rate policies and the smooth process towards the eventual adoption of the euro. This working paper has dealt with these topics and presented a picture with more nuances.

At least three issues have been highlighted:

- 1) Many – but not all – indicators support a less concerned view on the balance of payments problems.
- 2) The problems of current account deficits are neither similar nor equally serious in the three Baltic countries.
- 3) Even in the absence of devaluation and with a successful entry into EMU some three to five years from now, the current account deficits will remain an important issue although the focus will shift from possible devaluation to the development of standards of living.

Supporting a less concerned view on the balance of payments problem are indicators such as public finances (generally sound), low levels of debt, EU membership (increased income transfers from EU structural funds will alleviate current account problems), huge inflows of FDI (not ‘hot money’), very open economies and flexible labour markets. On the negative side are the size and persistence of the deficits on the balance of payments, the prospect of a substantial decrease of the net inflow of FDI because of completion of the capital stock adjustment and an increasing outflow of dividends in the second part of the FDI financial cycle. The latter has still not appeared (except to some extent in Estonia, see Table 5) and may appear too late to put pressure on the exchange rates as a result of the upcoming adoption of the euro. Also on the negative side is the problem of original sin, especially for Lithuania where foreign debt is substantially higher than in the two other countries.

Although all three Baltic countries have had large deficits on balance of payments for all years since 1995, the ranking of countries by size of deficit has changed. Currently, the deficit is the highest in Estonia and the smallest in Lithuania. Yet it may be argued (see Table 1) that the issue is more problematic in Lithuania. In Estonia the deficit may be viewed as mainly caused by very substantial investment whereas for Lithuania it is to a larger extent caused by a low savings rate. Moreover, budget deficits have consistently been lower and foreign debt much smaller in Estonia than in Lithuania, portraying, perhaps, that Lithuania’s exchange-rate regime as shakier than Estonia’s. Latvia appears somewhere in between.

In the case of a successful adoption of the euro, the current account deficits will cease to be possible indicators of devaluation – but they will neither cease to exist nor cease to be of importance. Rather, the focus will shift. The increasing external debt and the increasing share of foreign ownership of Baltic companies, which is implied by the deficits, will cause an increase in the flows of income transfers abroad and thereby widen the gap between GDP and gross national income (GNI) – and it is GNI that is the relevant measure for standards of living. Nevertheless, the huge FDI inflow embedded in subsidiaries, which produce and export, points to a strong growth effect and the gap between GDP and GNI might reflect intertemporal optimisation by consumption-smoothing consumers in a financially integrated world economy.

The main conclusion in this working paper is therefore that the large deficits in the current accounts of the Baltic countries pose some risk for the sustainability for the fixed exchange-rate policies and ultimately for the endeavours of these countries to keep their economies on a fast track of convergent growth to the EU level of standards of living.

To minimise the risk it seems important that the economic policies of these countries preserve and even improve their international competitiveness through a strategy based on monetary stability and fiscal prudence. As the fundamental equilibrium real exchange-rate tends to appreciate, owing to the Balassa-Samuelson effect, a policy that ensures a rate of inflation not above the level in the eurozone will gradually lead to an improvement of the international competitiveness for given nominal exchange-rates. Such a strategy will not only minimise the risk of a currency crisis but also ease the way to adopting the euro.

References

- Barro, R. J. (1997), *Macroeconomics*, Cambridge, Massachusetts: MIT Press.
- Barry, F. (2000), “Convergence is not automatic. Lessons from Ireland for Central and Eastern Europe”, *World Economy*, Blackwell Publishing.
- Brada, J. F. and V. Tomsik (2003), *Foreign Direct Investment and Perceptions of Vulnerability to Foreign Exchange Crises: Evidence from Transition Economies*, ZEI Working Paper, B 10, Zentrum für Europäische Integrationsforschung, Rheinische Friedeich-Wilhelms Universität Bonn.
- Corden, W. M. (1994), *Economic Policy, Exchange rates, and the International System*, Oxford, Oxford University Press, and Chicago: The University of Chicago Press.
- Coorey, S., N. Koliadina, B. Aitken and Z. Kontrolemis (1999), *Ireland: Selected Issues and Statistical Appendix*, IMF Staff Country Reports No. 99/108, International Monetary Fund, Washington, D.C.
- Eaton, J. and M. Gersovitz (1981), “Debt with Potential Reputation: Theory and Estimation”, *Review of Economic Studies*, 48, pp. 289-309.
- ECE (2001), *Economic Survey of Europe*, No.1, Economic Commission for Europe, United Nations, Geneva.
- Edwards, S. (2001), *Does Current Account Matter?*, National Bureau of Economic Research (NBER) Working Paper No. 8275, May, Cambridge, MA.
- EU Commission (2001), *The Economic Impact of Enlargement*, Enlargement Papers No. 4, Directorate-General for Economic and Financial Affairs, Brussels.
- (2003), *The EU Economy: 2002 Review*, EU Commission No. 6/2002, Brussels.
- Fernández-Arias, E. and R. Hausmann (2001), “Is Foreign Direct Investment a Safer Form of Investment”, *Emerging Markets Review*, 2, pp. 34-49.
- Fisher, I. (1930), *The Theory of Interest*, New York: Macmillan.
- Gurtner, F. J. (2003), “Currency Board and Debt Traps: Evidence from Argentina and Relevance for Estonia”, *The World Economy*, 26, pp. 209-228.
- Honohan, P. and B. Walsh (2002), *Catching Up with the Leaders: The Irish Hare*, Brookings Papers on Economic Activity No. 1, The Brookings Institution, Washington, D.C.
- IMF (2001), *Argentina: Third review Under the Standby Arrangement, Request for Waivers and Modification of the program – Staff Report and News on Brief on the Executive Board Discussion*, IMF Country Report No. 01/90, IMF, Washington, D.C.
- (2003a), *World Economic Outlook, Growth and Institutions*, International Monetary Fund, Washington, D.C., April.
- (2003b), *Competitiveness in the Baltics in the Run-Up to EU accession*, IMF Country Report No. 03/114, Washington, D.C., April.

- (2003c), *Republic of Estonia: Selected Issues and Statistical Appendix*, IMF Country Report No. 03/331, Washington, D.C., October.
- Mayhew, A. (2003), *The Financial and Budgetary Impact of Enlargement and Accession*, SEI Working Paper No. 65, SEI, Sussex.
- McGettigan, D. (2000), *Current Account and external Sustainability in the Baltics, Russia, and Other Countries of the Former Soviet Union – Issues in Transition*, IMF Occasional Paper No. 189, IMF, Washington, D.C.
- Milesi-Ferreti, G. M. and A. Razin (1996), *Sustainability of Persistent Current Accounts Deficits*, NBER Working Paper No. 5467, NBER, Cambridge, MA, February.
- Obstfeld, M. and K. Rogoff (1996), *Foundations of International Macroeconomics*, The MIT Press, Cambridge, Massachusetts, London, England.
- OECD (1994), *Economic Outlook*, Organisation for Economic Co-operation and Development, No. 56, December, OECD, Paris.
- (1996), *Economic Outlook*, Organisation for Economic Co-operation and Development, No. 59, June, OECD, Paris.
- Roubini, N. and P. Wachtel (1998), *Current Account Instability in Transition Economies*, NBER Working Paper No. 6468, March.
- Summers, L. (1995), *The Economist*, 23 December 1995 – January 1996, pp. 46-48.
- Vamvakidis, A. and L. Zanforlin (2002), *The Determinants of Growth: Experience in the Southern European Economies of Greece and Portugal*, IMF Country Report No. 02/91, IMF, Washington, D.C.
- World Bank (2003), *Global Development Finance 2003*, World Bank, Washington, D.C.

Recent CEPS Publications

Paperback Books (€25 in print or €10 in PDF)

- Breaking the Reform Deadlock*, 6th Annual Report of the CEPS Macroeconomic Policy Group, Daniel Gros, Thomas Mayer, Roberto Perotti and Angel Ubide, July 2004
- The EU Constitution: In the Making*, Kimmo Kiljunen, May 2004
- Readings in European Security*, Vol. 2, Dana H. Allin, Michael Emerson and Marius Vahl (eds), March 2004
- The Nine Lives of the Stability Pact*, Special Report of the CEPS Macroeconomic Policy Group, Daniel Gros, Thomas Mayer and Angel Ubide, February 2004
- The Wider Europe Matrix*, Michael Emerson, January 2004

CEPS Research Reports in Finance and Banking (€40 in print or €20 in PDF)

- No. 34 *Banking Consolidation in the EU: Overview and Prospects*, Rym Ayadi and Georges Pujals, April 2004
- No. 33 *Securities Market Regulation in the EU: Everything You Always Wanted to Know about the Lamfalussy Procedure*, Karel Lannoo and Mattias Levin, April 2004

CEPS Task Force Reports (€25 in print or €10 in PDF)

- No. 51 *The New Basel Capital Accord and the Future of the European Financial System*, Rym Ayadi and Andrea Resti, April 2004
- No. 50 *A New European Agenda for Labour Mobility*, Anna Turmann, April 2004
- No. 49 *Completion of the EU Emissions Trading Scheme in the Emerging Global Climate Regime*, Christian Egenhofer and Noriko Fujiwara, March 2004

CEPS Working Documents (€12 in print or available for free downloading from www.ceps.be)

- No. 206 *Measuring the Economic Impact of an EU-GCC FTA*, Dean A. DeRosa and David Kernohan, forthcoming, 2004
- No. 205 *Why is there a productivity problem in Europe?*, Francesco Daveri, July 2004
- No. 205 *Why is there a productivity problem in Europe?*, Francesco Daveri, July 2004
- No. 204 *Theorising European Strategic Culture: Between Convergence and the Persistence of National Diversity*, Christoph Meyer, June 2004
- No. 203 *R&D and the Financing of Ideas in Europe*, Laura Bottazzi, forthcoming 2004
- No. 202 *Economic Policy Coordination in EMU: What role for the SGP?*, Jørgen Mortensen, June 2004
- No. 201 *Economic Prospects for Kaliningrad: Between EU Enlargement and Russia's Integration into the World Economy*, Evgeny Vinokurov, June 2004
- No. 200 *Business Cycle Synchronisation in the Enlarged EU: Co-Movements in the New and Old Members*, Zsolt Darvas and György Szapáry, March 2004
- No. 199 *Searching for the Determinants of IT Investment: Panel Data Evidence on European Countries*, Paolo Guerrieri, Cecilia Jona-Lasinio and Stefano Manzonchi, January 2004

CEPS Policy Briefs (€12 in print or available for free downloading from www.ceps.be)

- No. 54 *The European Productivity Slowdown: Causes and Implications*, Daniel Gros and Jorgen Mortensen, July 2004
- No. 53 *Council Voting in the Constitutional Treaty: Devil in the Details*, Richard Baldwin and Mika Widgren, July 2004
- No. 52 *The EU-Russia-US Triangle*, Michael Emerson, June 2004
- No. 51 *Enlargement: A Process rather than a Point in Time*, Daniel Gros with Ben Crum and Anna Turmann, April 2004
- No. 50 *Winners and Losers under Various Dual-Majority Voting Rules for the EU's Council of Ministers*, Richard Baldwin and Mika Widgren, April 2004
- No. 49 *Headscarves, Skull Caps and Crosses: Is the proposed French ban safe from European legal challenge?*, Alan Riley, April 2004
- No. 48 *Has Turkey fulfilled the Copenhagen political criteria?*, Michael Emerson, April 2004
- No. 47 *Three Theses for the New Commission President*, Ben Crum with Etienne Davignon, Philippe de Schoutheete and Stafano Micossi, February 2004
- No. 46 *The European Arrest Warrant: A Good Testing Ground for Mutual Recognition in the Enlarged EU?*, Joanna Apap and Sergio Carrera, February 2004
- No. 45 *Can Europe deliver growth? The Sapir Report and Beyond*, Jacques Pelkmans and Jean-Pierre Casey, January 2004

ESF (European Security Forum) Working Papers (€12 in print or available for free downloading from www.ceps.be)

- No. 16 *Russia and the West*, François Heisbourg, Irina Kobrinskaya, Michael Emerson and Robert Nurick, forthcoming 2004
- No. 15 *What Strategy for the Greater Middle East?* François Heisbourg, Michael Stürmer, Steven Simon and Irena Zvygelskaya, January 2004

ECRI (European Credit Research Institute) Research Reports (€25 in print or available for free downloading from www.ecri.be or www.ceps.be)

- No. 6 *EU Data Protection in the Context of Financial Services*, Alfredo Sousa de Jesus, April 2004
- No. 5 *The Regulation of Financial Privacy: The United States vs Europe*, Nicola Jentzsch, June 2003

ENEPRI (European Network of Economic Policy Research Institutes) Working Papers (€12 in print or available for free downloading from www.enepri.org or www.ceps.be)

- No. 29 *The Impact of Unemployment on Individual Well-Being in Europe*, Namkee Ahn, Juan Ramón García and Juan Francisco Jimeno, forthcoming, 2004
- No. 28 *Has trade any importance in the transmission of currency shocks? An empirical application for New EU Members from Central and Eastern European Countries*, Roberta De Santis, July, 2004
- No. 27 *Can labour market institutions explain unemployment rates in new EU member states?*, Sjef Ederveen and Laura Thissen, July 2004

- No. 26 *Factor Mobility and Regional Disparities: East, West, Home's Best?*, Richard Nahuis and Ashok Parikh, January 2004
- No. 25 *Convergence of Real GDP Per Capita in the EU-15 Area: How do the accession countries fit in?*, Ville Kaitila, January 2004
- No. 24 *Time-Varying Nairu and Real Interest Rates in the Euro Area*, Camille Logeay and Silke Tober, October 2003
- No. 23 *Back on Track? Savings Puzzles in EU Accession Countries*, Mechthild Schrooten and Sabine Stephan, October 2003
- No. 22 *Structural Estimates of Equilibrium Unemployment in Six OECD Economies*, Albert van der Horst, July 2003
- No. 21 *Fiscal Policy in the New Open Economy Macroeconomics and Prospects for Fiscal Policy, Coordination*, Leonor Coutinho, June 2003
- No. 20 *European Wage Coordination: Nightmare or dream to come true?*, Alain Borghijs, Sjeff Ederveen and Ruud de Mooij, June 2003

INDES (Insuring against Disruptions of Energy Supply) Working Papers (available for free downloading from [www. www.ceps.be](http://www.ceps.be))

- No. 7 *Oil Security, Short- and Long-Term Policies*, V. Constantini and F. Gracceva, March 2004
- No. 6 *Social Costs of Energy Disruptions*, V. Constantini and F. Gracceva, March 2004
- No. 5 *The Question of Generation Adequacy in Liberalised Electricity Markets*, L.J. de Vriesand and R.J. Hakvoort, March 2004
- No. 4 *Transport Energy Security – The Unseen Risk?*, D. Fisk, March 2004
- No. 3 *Investments in Gas Pipelines and LNG Infrastructure: What impact on the security of supply?*, P. Cayrade, March 2004
- No. 2 *Security of Supply for Natural Gas Markets: What is it and what is it not?*, G. Luciani, March 2004
- No. 1 *A Market Compatible Approach to Making Security of Supply Operational*, C. Egenhofer et. al., March 2004

ENARPRI (European Network of Agricultural and Rural Policy Research Institutes) Working Papers (€12 in print or available for free downloading from www.enarpri.org or www.ceps.be)

- No. 6 *Fifty Ways to Leave Your Protection: Comparing Applied Models of the Euro-Med Association Agreements*, Marijke Kuiper, May 2004

EPIN (European Policy Institutes Network) Working Papers (€12 in print or available for free downloading from www.epin.org or www.ceps.be)

- No. 11 *Preview of the 2004 European Parliament Elections: Results of an EPIN Survey of National Experts*, Sabastian Kurpas, Marco Incerti and Ben Crum, May 2004

<p>To order any of these CEPS publications, please contact the CEPS Publications Office: tel: 32.(0)2. 229.39.11 or fax: 32.(0)2. 219.41.51. Additional details and abstracts of CEPS publications are also available on the CEPS website (http://www.ceps.be).</p>
--

About CEPS

Founded in 1983, the Centre for European Policy Studies is an independent policy research institute dedicated to producing sound policy research leading to constructive solutions to the challenges facing Europe today. Funding is obtained from membership fees, contributions from official institutions (European Commission, other international and multilateral institutions, and national bodies), foundation grants, project research, conferences fees and publication sales.

Goals

- To achieve high standards of academic excellence and maintain unqualified independence.
- To provide a forum for discussion among all stakeholders in the European policy process.
- To build collaborative networks of researchers, policy-makers and business across the whole of Europe.
- To disseminate our findings and views through a regular flow of publications and public events.

Assets and Achievements

- Complete independence to set its own priorities and freedom from any outside influence.
- Authoritative research by an international staff with a demonstrated capability to analyse policy questions and anticipate trends well before they become topics of general public discussion.
- Formation of seven different research networks, comprising some 140 research institutes from throughout Europe and beyond, to complement and consolidate our research expertise and to greatly extend our reach in a wide range of areas from agricultural and security policy to climate change, JHA and economic analysis.
- An extensive network of external collaborators, including some 35 senior associates with extensive working experience in EU affairs.

Programme Structure

CEPS is a place where creative and authoritative specialists reflect and comment on the problems and opportunities facing Europe today. This is evidenced by the depth and originality of its publications and the talent and prescience of its expanding research staff. The CEPS research programme is organised under two major headings:

Economic Policy

Macroeconomic Policy
European Network of Economic Policy
Research Institutes (ENEPRI)
Financial Markets, Company Law & Taxation
European Credit Research Institute (ECRI)
Trade Developments & Policy
Energy, Environment & Climate Change
Agricultural Policy

Politics, Institutions and Security

The Future of Europe
Justice and Home Affairs
The Wider Europe
South East Europe
Caucasus & Black Sea
EU-Russian/Ukraine Relations
Mediterranean & Middle East
CEPS-IISS European Security Forum

In addition to these two sets of research programmes, the Centre organises a variety of activities within the CEPS Policy Forum. These include CEPS task forces, lunchtime membership meetings, network meetings abroad, board-level briefings for CEPS corporate members, conferences, training seminars, major annual events (e.g. the CEPS International Advisory Council) and internet and media relations.