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The opinions expressed in this paper are those of the authors and do not necessarily reflect the views of the Bank of Finland.

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The Comparative Efficiency of Baltic Monetary Reforms[1]

1 Introduction

It is often considered somewhat paradoxical that while Western European countries are moving toward monetary integration, the countries of the former Soviet Union (FSU) have been busy establishing their own national currencies. Politically, the divergence is easy to characterise. While one part of the Eurasian continent is groping for further internationalisation, the other is in the process of nationbuilding. For some FSU states, this is the first period of independence. Others, like the Baltics, are rebuilding their independence-involuntarily lost for many decades.

There are many economic and other reasons why a country might want to have a sovereign currency (Hansson 1993, Lainela – Sutela 1993). A national currency allows for the conduct of a more independent economic policy and at the same time underlines the responsibilities of national decision-makers. It is also a potent national symbol, and as such may influence the behaviour of economic agents. In the case of the FSU, the need for introducing national currencies has also been underlined by the fact that the former ruble zone was never an optimal currency area, by continued extremely high and volatile ruble inflation, by difficulties in the supply of legal tender, and by the seeming impossibility to find workable rules for a monetary union among FSU states. They are heterogenous in resources and policies, of very unequal size, and also unable to trust in one another in a way necessary for jointly shared monetary arrangements. It is therefore anything but surprising that all attempts to maintain the ruble zone beyond Russia have so far failed.

For the Baltic states in particular, the introduction of national currencies was first seen as a way of escaping from the ruble. The Monetary independence achieved was thus originally of a negative sort: freedom from Moscow rule. In the Baltic nations, having a national currency was seen as a natural part of shedding the Soviet identity and "returning to Europe". It was part of the exceptional politics of the immediate post-liberation period. Only later, are the Baltics starting to grapple with the fact that monetary independence is always relative. There is no way these countries can escape from the newly arising interdependencies that are entailed in the integration of their economies into the global network of trade and payment flows. Neither is money simply a matter of exceptional politics. It is also a question of the everyday technicalities of exchange rates, credit flows and

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[1] The views expressed in this paper are those of the authors and do not necessarily reflect the views of the Bank of Finland. The authors are grateful to the editors and to Dr. Ardo Hansson for valuable comments. In addition to the literature cited, the paper has benefitted from discussions with Baltic authorities.

payment systems. What matters is not only the fact of having a sovereign currency but also whether the currency is introduced in an efficient way and whether the institutions and policies needed to support monetary stability are in place.

This paper begins by discussing the options available to FSU countries in transition from a planned economy to a market economy as they establish their own national currencies and devise mechanisms for the conduct of monetary and exchange rate policies. The Baltic states are used to exemplify different approaches that are available. Beyond that, the paper establishes a set of analytical criteria by which to judge the degree of success of monetary reforms. The Baltic states have used different ways of introducing a national currency, and there are also differences in their monetary and exchange rate policies. Therefore, one should ask whether different institutions and policies bring about the same results or whether one of the Baltic experiences is clearly preferable. This paper also asks why different countries end up with different solutions.

2 Preconditions for the introduction of a national currency

The rationality of introducing sovereign currencies in the FSU, as described above, is currently beyond doubt (Abrams – Cortés-Douglas 1993, Villanueva 1993). Still, the introduction of a national currency is a sizable task, especially for a country lacking the experience, traditions and institutions of a market economy. It is therefore not surprising that the need for consideration and adequate preparation was recommended by many observers and advisors, as the first FSU states started to prepare for monetary reform after the collapse of the Soviet Union. The views of the International Monetary Fund (Hernandez-Cata 1992) can be cited as an example.

It was emphasised by this established wisdom that the preconditions for monetary reform included a high degree of economic liberalisation and stabilisation, an established monetary institution, proper legislation and trained personnel, among other things. If a full-fledged central bank was to be established, it needed instruments for controlling money and credit.

Essentially, these arguments concern the sequencing of the steps involved in the process of transition from a Soviet socialist economy to an independent market economy. The established wisdom essentially argued that a sovereign money should come only after the preconditions enumerated above had been met. Therefore, one would expect that the degree of success of monetary reform would be greater the further advanced the country in question was in creating the necessary preconditions. In the worst case, monetary reform without proper preparation might prove abortive. Given the kind of blow that this would be to the credibility of independence, market reform and new political elites, being too late is much preferred to being too early.

As we now know, the matter is not as clear-cut as established wisdom had claimed. The Baltic experience has shown that at least some of the necessary preconditions can be developed after the introduction of the national currency. This assumes, of course, that a critical mass of the most fundamental elements of monetary reform are in place from the start. What this might mean will be discussed below.

But before this, the criteria for successful monetary reform must be established. This paper proposes to use two main criteria, complemented by a wider consideration. First, the public has to accept the new currency as money. It must be generally accepted as a means of exchange, unit of account and store of value. As new currencies compete with rubles and other foreign monies that are circulating within the country at the time of monetary reform, this will be called the Market Share Criterion. The second criterion is what we call the Interest Rate Parity Criterion. Differences in interest rates for the domestic currency and dollar denominated assets within the country involved are suitable measures of the perceived risk attached to the domestic currency. Discussion of these criteria will be complemented with a comparison of inflation experiences. These reflect monetary stability, but because things like financial and monetary policy and

speed of price liberalisation are also involved, inflation performance cannot be related solely monetary reform[2].

The existence of a national currency – and the way in which it is introduced – is naturally not the only factor explaining the degree to which these criteria will be met. An elementary choice has to be made as to the appropriate policy structures; in particular, the exchange rate regime has to be decided.

If policy credibility and monetary stability is the prime goal, a pegged or more permanently fixed exchange rate regime provides a nominal anchor that has often proven useful. The new national currency is pegged to either a major foreign currency or a basket of currencies. The peg – if it is to be maintained – compels the country to pursue stringent monetary and fiscal policies. Monetary policy is aimed at maintaining the exchange rate. Such a tying of hands naturally limits policy options, but the price of not being able to inflate is one that a government committed to stabilisation should be willing to pay.

The real problems of a pegged exchange rate system lie elsewhere. It may be difficult to determine the correct level of the exchange rate at the outset. This is the case particularly in the former socialist countries with their distorted internal price structures. Further, some amount of foreign exchange reserves is required from the very beginning so as to enable the authorities to defend the chosen rate if necessary. The fact that Latvia originally had much smaller gold reserves than Estonia (Lainela – Sutela 1993) may have effectively limited her possibilities.

The opposite alternative is to let the new currency float freely. In this case, there is no need to maintain foreign exchange reserves for defending the external value of the currency. Markets set the exchange rate, and domestic monetary policy can be pursued independently. The drawback to this alternative is that a floating exchange rate cannot be used as a nominal anchor.

Between these two extremes lie various intermediate alternatives of dirty float, adjustable peg and target zones. In practice, most existing currency regimes are of the intermediate variety. With regard to currency reforms, one may however limit preliminary discussion to the extreme cases. This is because reforming authorities often tend to choose one of the pure cases for simplicity, credibility and for the lack of the instruments and expertise needed in the somewhat more complex intermediate cases. In particular, though the intermediate cases require smaller reserves than fixed rates, they place a premium on good and rapid information flow, high-quality personnel and also on central bank autonomy. These resources are often in desperately short supply in transitional economies.

On the basis of above discussion, one would expect that the pegged exchange rate regime is chosen when the government is strongly committed to stabilisation, has ample reserves and can trust in its ability to stabilise the economy. If one or more of these conditions is not fulfilled, a floating regime would be expected.

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[2] The use of exchange rate stability as a criterion has also been proposed (by one of the editors of this volume). However, because different Baltic currencies have been either de facto or de jure pegged to different foreign currencies – and pegs have also been changed in the course of time – this criterion would be difficult to operationalize. Neither does it seem proper to use exchange rate appreciation or depreciation as a criterion. New currencies are as a rule introduced or old ones declared convertible at undervalued exchange rates in order to create credibility and for balance of payments purposes. One therefore expects real appreciation over time. It is unclear, however, how far this should go, as purchasing power parities may not be the proper yardstick and they are in any case notoriously difficult to measure in a transitional economy.

Another choice to be made at the outset concerns the desired degree of convertibility. It has been part of the standard wisdom that currency convertibility is the outcome of a possibly lengthy process during which the liberalization of trade and capital movements takes place, an appropriate exchange rate is found, sound macroeconomic policies are put in place and economic agents come to have incentives to respond to market prices, which should be free of major distortions (see e.g. Sutela 1992). What has been controversial is whether these are really preconditions for convertibility or whether they can be at least partly introduced, along with convertibility, as part of a package – as was done in Poland in 1990.

Ever since the Polish experience, proponents of early convertibility have dominated the discussion. Convertibility has a strong signalling value and raises the political cost of reneging. Current account convertibility enhances import competition and tends to speed up the alignment of domestic prices with prices in the world market, if there is simultaneous liberalisation of foreign trade from administrative controls of the former socialist countries, only by the Baltics capital account convertibility. This is explained by the danger of capital outflow from countries that, after all, suffer from a severe shortage of domestic capital. However, capital controls are difficult to establish and attempts to administer them may prove counterproductive.

This paper does not attempt to face all the choices and issues outlined – and many more could be added. We shall only analyze the basic choice of monetary and exchange rate regime – its background and consequences. It is however important to remember that many other choices and outcomes are involved as well. Therefore one must be careful in drawing causal conclusions. As will be seen below, this caveat has not always been kept sufficiently in mind in previous discussions. We shall use the recent paper by Hansson and Sachs (1994) as an example of this.

3 The case of the Baltics

3.1 Different methods of introducing national currencies

Like other FSU nations, the Baltic states faced important handicaps as they started to build their national monetary systems. Monetary and fiscal institutions that had developed during independence were completely dismantled during the Soviet period. This placed a high premium on the speed and simplicity of administrative reform. The small Baltic states are poor in natural resources, which increased their trade dependence on Russia and other FSU countries. Consequently, the output decline following the Soviet collapse has been exceptionally steep.

But these states had important relative advantages as well. The goal of independence from Russia has been widely shared, and historical, cultural and geographical proximity with the Nordic countries has offered a natural reference point for Estonia and Latvia in particular. Past independence offered both a sense of historical continuity and –more mundanely – the possibility to get back foreign exchange reserves temporarily lost in 1940. Being the first FSU states to claim independence was advantageous in terms of getting foreign assistance, while the small size of the countries implies that what would be almost negligible assistance to Ukraine of Kazakhstan can be crucial for a Baltic state.

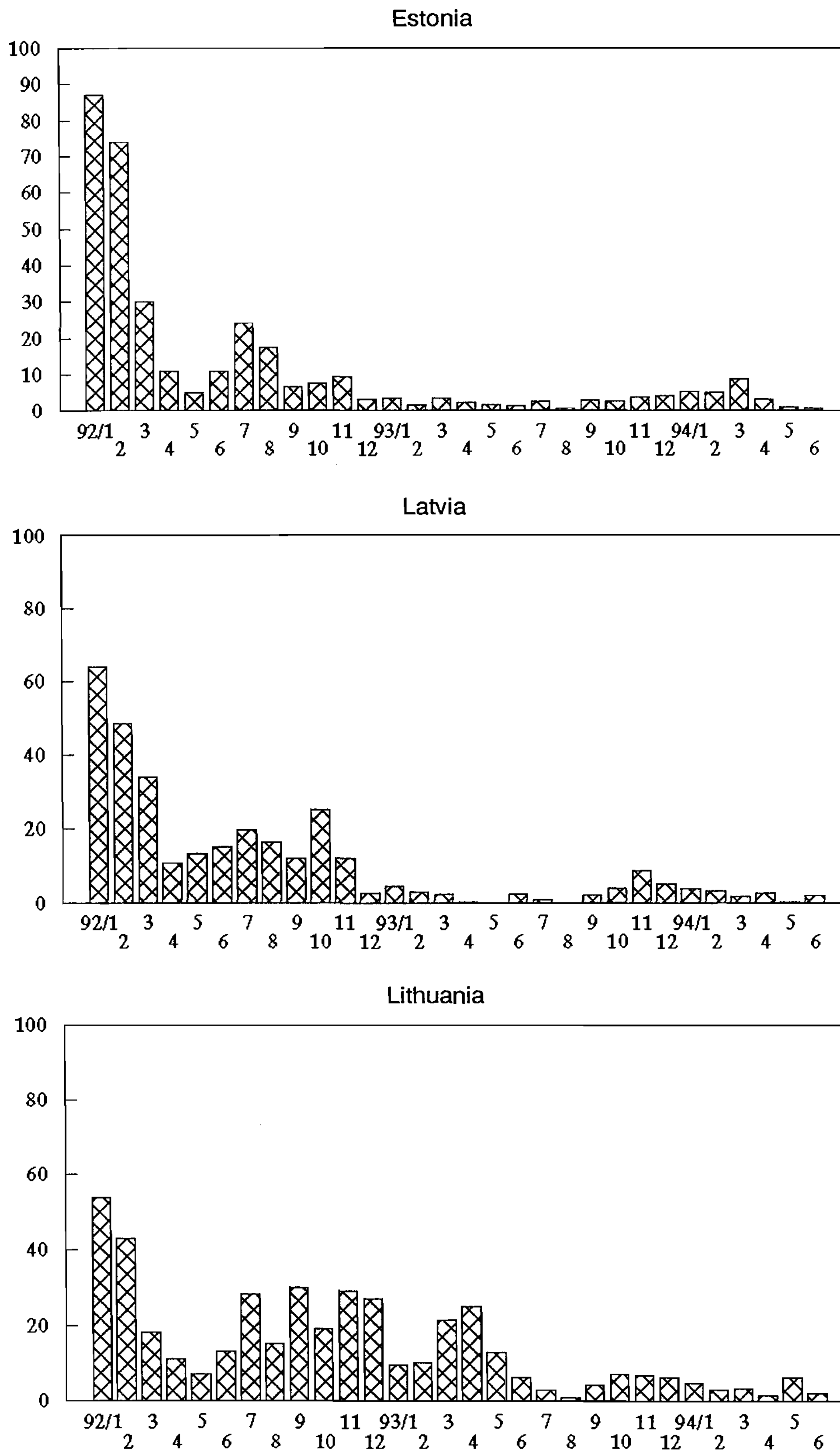
Historically, culturally, linguistically, religiously and politically the Baltic states are far from identical (Lieven 1993). Estonia and much of Latvia once belonged to Sweden, while Lithuania has a distant history of being regional great power. Estonia and Latvia identify much more with the Nordic countries than does Lithuania. In the two northern countries, foreign influence is widespread and tends to come from Finland and Sweden. Lithuania is more closed and oriented towards the east and south. Also contrary to the two northern countries, Lithuania has recently been governed by a left-wing government.

Still, similarities overwhelm these differences. Recent history is similar position within the Soviet Union was essentially the same; differences in income levels and productive structures are not crucial. Many policies and policy outcomes are also quite similar (IMF 1993a,b,c). Liberalisation and stabilisation has been given a high priority, though later in Lithuania than elsewhere. The inflation record is truly impressive, especially relative to the rest of the FSU (Figure 1). Budgets have been in balance or in acceptable deficit. Change in foreign trade orientation has been speedy, with the partial exception of Lithuania.

Thus, both the underlying background and policy outcomes have been essentially similar. But the intervening factor, the monetary regime, has been different. Estonia chose an extreme form of fixed exchange rates, the currency board. Latvia had floating rates until spring 1994, when it announced that the currency had been pegged. Lithuania first followed the Latvian model but switched in April 1994 to the Estonian model. Similar starting points can lead to widely differing institutional choice, which consequently produce astonishingly similar outcomes. Finally, in spring 1994, all the countries converge to the fixed exchange rate regime. The rise and seeming demise of the difference between the Estonian and Latvian–Lithuanian models calls for an explanation.

Figure 1.

Monthly Inflation Rate in the Baltic Countries



Source: Official statistics of the Baltic countries

This article argues that the choice of different monetary arrangements in the Baltics was largely a matter of political coincidence. It could as well have taken some other course. On the basis of the Market Share Criterion, Estonia has done much better than either Latvia and Lithuania. Hansson and Sachs (1994) argue that Estonia's primacy is also evident using the Interest Rate Parity Criterion. This is a strong conclusion which is also open to qualifications. But obviously, the recent convergence to fixed exchange rates shows that the Baltic states have understood the long-term advantages of this type of regime for a small open economy.

The actual process of introducing Baltic national currencies has been described in detail before (Hansson 1993, Lainela 1993, Lainela – Sutela 1993). Chart 1 will serve as background for the discussion to follow.

Chart 1. **The Transition to National Currencies in the Baltics**

	Separation from the Ruble Zone	Conversion Restrictions	Current Currency Use Restrictions	Credibility Paradox	Introduction of Final Currency
Estonia	Early, immediate	Limit	Kroon only, from beginning		Immediate
Latvia	Early, 3 Months	No limit	Lats, rubles and hard currencies allowed	Yes, no ruble flood	Gradual
Lithuania	Early, 5 months	No limit	Litas only de jure, hard currencies also	No, ruble flood	Fast

As the Chart makes it clear, the main difference was between Estonia, on the one hand, and Latvia and Lithuania on the other. Estonia was first to undertake currency reform, in June 1992. It made the speediest conversion from rubles to the national currency. There was no intermediate parallel-currency phase and the amount of rubles to be exchanged was limited. The use of all other currencies has been prohibited in Estonia since the conversion date. Indeed, the kroon instantly established its position as virtually the only means of payment in the country. Estonia thus scores the highest possible points on the basis of the Market Share Criterion.

This was a remarkable achievement, bearing in mind the large amount of foreign currencies (mainly dollars and Finnish markka) that had been in circulation before the reform. Unfortunately, there are no accurate data on their amount, but their large share in the ruble economy was reflected in the rapid growth of the central bank's foreign exchange reserves during the months following the conversion, as people converted foreign currencies into kroons in order to handle their daily transactions.

Latvia and Lithuania chose a more gradual and perhaps less organized exit from the ruble. Latvia left the ruble zone in July and Lithuania in October 1992 when they declared their respective interim currencies, which had been circulating alongside the Russian ruble since spring of the same year, to be the sole legal tender in the country. In Latvia the central bank replaced Russian rubles with Latvian rubles over the course of several months. There were no limits on the amount of Russian rubles that could be converted.

This could have had a detrimental effect on the Latvian economy and the new currency, if a flood of Russian rubles had come in from other FSU states. Perhaps fortunately, there apparently was not much confidence in the new currency outside the country. Latvia was thus able to complete the process in an orderly manner. In Lithuania the conversion principles were basically the same as in Latvia. But contrary to Latvia, Lithuania had to take abrupt measures and withdraw the remaining Russian rubles from circulation during one week in September, as there was a large inflationary inflow of Russian rubles especially from Ukraine. Perhaps Lithuania suffered from being the last Baltic state to begin its conversion. After the successful Estonian and Latvian conversions, speculators were now more willing to bet on a new currency.

The use of interim currencies in Latvia and Lithuania needs to be explained. It might have seriously damaged the credibility of new currencies, as there was no single date signalling the change of monetary regime. At worst, people might have thought they are simply witnessing a parade of different coloured papers, one after another. And perhaps some of this danger did materialize, as the market shares of the lats and litas remained much lower than that of the kroon. No exact estimates are available.

The use of interim currencies in Latvia and Lithuania was largely due to a lack of preparation. The simple technical fact was that these countries did not have the final currencies printed at the time when the monetary situation in the FSU compelled them to leave the ruble zone. This is however not the official reason given for interim currencies. Latvian and Lithuanian authorities claim that they did not want to introduce their final currencies until their economies had been stabilized. Their declared approach was thus more in line with the established wisdom of currency reform described above than was the case was with Estonia.

Another period of gradualism followed when Latvia and Lithuania introduced their final currencies, the lats and the litas, in 1993. In Latvia the conversion period was several months, in Lithuania one month. The immediate reason for the timing of the introduction of the lats and the litas again seems to have been technical. The amount of forged banknotes in both of these countries was rising rapidly, as the interim banknotes were of a low quality and easy to counterfeit. The final conversion had to be started earlier than intended. This is clearly true for Lithuania and probably also for Latvia. As the new and higher quality banknotes were supplied only gradually, gradualism was inevitable.

In terms of the Market Share Criterion, the gradualism exercised in Latvia and Lithuania seems to have come at a price. The use of convertible currencies in domestic circulation was quite common during the last years of the ruble zone. In Estonia, the kroon prevailed from the beginning. Citing the market-based principles of economic liberalism and competitive currencies, Latvia still allows the use of foreign currencies, though prices have to be stated in lats. Lithuania only prohibited the use of other currencies in autumn 1993. As mentioned, no reliable information is available on the market shares of foreign currencies. Both anecdotal evidence and various estimates tell that especially dollars and German marks are still widely used for making payments in both Latvia and Lithuania, in particular within the enterprise sector. The stabilisation of the lats and the litas should have improved their popularity in 1993. On the other hand it may be that the increasing currency substitution that took place in Russia during 1993 also reached these countries, as they are heavily involved in dollar-based legal and informal Russian

foreign trade. Therefore, the only thing we know for certain about the extent of currency substitution in Latvia and Lithuania is that it is much greater than in Estonia[3].

[3] One informal estimate of the share of foreign currencies in Latvia is 30–40 per cent.

3.2 Monetary and exchange rate policies

The main features of Baltic monetary policies and institutions, as discussed by Bennett (1992), Hansson (1992, 1993), Hansson – Sachs (1994), Lainela – Sutela (1993, 1994) and Repše (1993) as well as by international financial organisations in various reports, are summarised in Chart 2.

Chart 2. **Monetary Policies and Institutions in the Baltics**

	Price Liberalisation and Fiscal Policy	Banking Regulation	Central Bank	Regime
Estonia	Almost complete, very restrictive	Relatively strong	Autonomous, combines currency board, banking supervision and development of money markets	Fixed exchange rate, currency board, full reserve backing. Monetary policy passive, little need for a central bank
Latvia	Almost complete, restrictive	Weak	Autonomous, few policy instruments. Banking supervision	Floating, recently pegged exchange rate
Lithuania	Imperfect, very restrictive	Weak	Traditionally less autonomy. Now currency board. Banking supervision	Floating, recently fixed exchange rate, currency board

Price liberalisation was largely completed in the Baltic states by the time they left the ruble zone. The exception generally remaining is energy prices. Price adjustment has however not been immediate, and it still continues in particular in the non-tradables sector, thus contributing to the remaining inflation. There are differences in foreign trade liberalisation. Estonia is unique among European countries as it does not even protect its food markets. Latvia intends to maintain some agricultural protection, while Lithuania has been ready to protect certain industrial markets as well. Such differences have handicapped joint trade policy efforts.

All the countries – Latvia to a slightly lesser extent than the others – have consistently pursued very tight fiscal policies. A somewhat different picture emerges in the banking sector. Both Estonia and especially Latvia have high ambitions concerning the financial sector. The difference is that in Estonia banking reform has progressed under the firm guidance of the authorities, while Latvia and Lithuania have a mushrooming, but probably not very reliable, banking sector with only weak regulation.

This difference in banking regulation is not easy to explain. Estonian authorities have obviously been strongly influenced by the Nordic examples. There may also be an institutional explanation. The Estonian central bank was established from scratch, whereas in Latvia and Lithuania the central banks are the outcomes of mergers between local branches of several former all-Union banks. This meant that these central banks were originally burdened with commercial banking responsibilities, and they were somewhat slow so shed these activities.

The choice of monetary regime is also relevant here. Because Estonia opted for a modified currency board (Bennett 1992, Osband – Villanueva, 1992), which left the Bank of Estonia with no proper central banking functions, scarce human and other resources could be better concentrated on banking regulation. In the other countries, central banks have not only been slow to evolve but they have also been highly preoccupied with gradual monetary reform, running a dirty float (see below) and most recently in Lithuania by the drawn-out introduction of a currency board. The Lithuanian central bank in particular has also suffered from a number of political disputes and alleged scandals.

The celebrated Estonian arrangement is one of a modified currency board. As in Argentina since 1991, base money must always be backed by gold and hard currency reserves. The Bank of Estonia, which acts as a currency board, is forbidden by law to extend credit to the government, and it can extend credit to commercial banks only in the case of a well-defined bank rescue operation. The exchange rate (against the deutschmark) is fixed by law, and the central bank cannot devalue it. Interest rates adjust freely to clear the market. The Bank of Estonia thus has few powers, but this is in fact the essence of its high degree of independence. It cannot be forced to endanger monetary stability by extending credit to the government or different interest groups. This, after all, has proved to be the immediate danger against which central bank independence is most needed in transitional economies.

The Estonian currency board arrangement quickly endowed the new currency with credibility, as seen above and allowed for the immediate convertibility of the kroon. It has clearly contributed to stabilisation, though credit also goes to the society's wide acceptance of the stabilisation goal, which muted the pressure for deficit financing[4]. A currency board also economises on human resources. On the other hand, one may argue that the arrangement has not yet been seriously tested, as foreign exchange reserves have continued to grow and the currency is probably still undervalued.

The kroon exchange rate (1 DEM = 8 EEK) is based on market exchange rates in early 1992. It therefore reflects the extreme scarcity of hard currencies in the ruble economy. Some estimates (Arvo Kuddo, **Rahva Hääl** 1 February 1994) put the original rate of undervaluation at something like 1:3. A low exchange rate was good for credibility. It also boosted exports and limited imports, but at the same time, it left much room for domestic inflation. Partially at least that was necessary, as there was a great need for relative price adjustment within a frame work of nominal price and wage stickiness. Possible excessive nominal undervaluation may however be an explanation for the continuation of inflation in Estonia[5].

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[4] Ardo Hansson (1994) – a member of the board of the Bank of Estonia, an advisor to the Prime Minister and member of the Currency Reform Committee in 1992 – has argued on the basis of personal experience that probably not all politicians understood how they had harnessed money supply by opting for a currency board. On the other hand, the population certainly accepted the burdens of stabilisation in the name of defending the kroon much more willingly than would have been the case in a ruble economy.

[5] Estonia had an inflation peak in early 1994. During one month, inflation there was even slightly higher than in Russia. The main explanation seems to be price pressure in the non-tradables sector together with administrative rises in certain regulated prices. See 'Eesti Pank', 1994.

Latvia and Lithuania chose a more conventional monetary regime. In both of these countries the exchange rate floated until spring 1994. It was however not a clean float. Like Estonia, both countries started with evident undervaluation. Particularly in Latvia the clearly stated goal was to appreciate the lats in real terms so that it would smoothly approach purchasing power parities (Repše, 1993). In Lithuania, policies have not been as consistent, but real appreciation has recently been evident there as well (Figure 2).

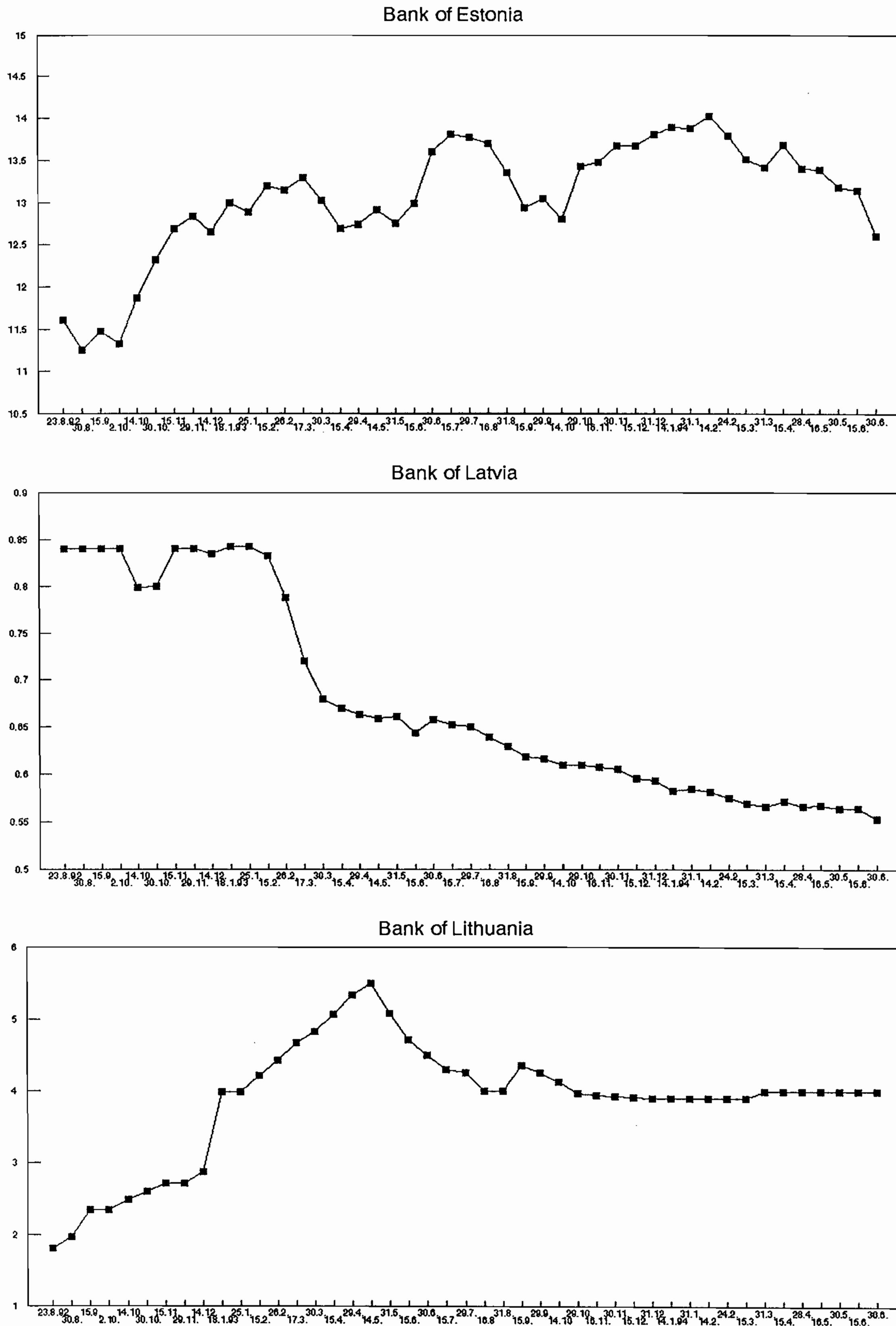
Following the real appreciation of the currencies[6], Baltic monthly wages have risen from USD 40 (Lithuania) and USD 80 (Estonia and Latvia) in June 1993 to USD 80 (Lithuania), USD 110 (Estonia) and USD 140 (Latvia) in April–May 1994 (**The Baltic Independent** June 17–24, 1994). As even the Latvian dollar wage is just over a half of Polish industrial wages, the currencies probably remain undervalued. The Latvian and Lithuanian central banks have slowed down or stopped nominal appreciation by accumulating currency reserves. This is done to defend the competitiveness of export industries, which have complained loudly about the real appreciation of currencies. The pressure for nominal exchange rates to appreciate in these countries comes primarily from a large inflow of currencies from the FSU area, reflecting the role of Latvia and Lithuania as transit routes, and partly from Riga's emerging role as a regional financial center. Finally, the Bank of Latvia announced in May 1994 that the lats was pegged to the SDR (**Baltic News Service** 23 May, 1994). Given the fact that the Latvian float had always been highly regulated, this came as no great surprise.

The Latvian central bank has extensive independence. This is partially legislative, as the financing of budget deficits is forbidden except in well-defined exceptional circumstances. Central bank independence has also been enhanced by the impressive recent stabilisation record as well as by the strong personality of the bank's leadership. Still, it is clear that the independence of Latvian monetary policy is not as secure institutionally as that in Estonia.

Maintaining central bank independence has been a problem in Lithuania. In October 1993 the central bank governor was sacked. He was accused of corruption but later acquitted. Most of bank board was also fired later. The real reason behind these episodes may have been (Hansson – Sachs 1994, p. 32–33) that monetary policy was deemed too stringent by powerful lobbies. In this light somewhat surprisingly, Lithuania introduced – over central and commercial bank objections – an Estonia-type currency board in April 1994. The litas is now fixed to the dollar. On the one hand, this enhances policy independence by tying the hands of the policy makers. Recent incidents should be impossible in the future. On the other hand, the move to a currency board should make preferential extension to credit to lobbies impossible.

[6] Tracking the deutschmark, the kroon depreciated slightly in nominal terms against the dollar during the period but appreciated in real terms. The lats appreciated even nominally, while the litas was nominally almost stable against the dollar. See Figure 2.

Figure 2.



Quotations are shown for the middle and end of each month.
Source: Äripäev, Baltic News Service

The Lithuanian case will be an interesting test of currency boards in transitional economies. As emphasised above, Estonia has been a relatively easy argument for currency board, as the goal of stabilisation has been widely shared among decision makers. This country also had a high degree at – though certainly not complete (Hansson, 1994) – unanimity on the choice of monetary regime. Therefore, the Estonian currency board has not been the object of heated debates, especially as its benefits were fast to appear. It is clear, however, that if inflation cannot be held to a level consistent with productivity rises, the time will come when real appreciation of the kroon forces a currency devaluation. This might also be the time to exit from the currency board arrangement, and the consistency of Estonian policies will meet their great test.

The Lithuanian case is different. The move to a currency board came after a lengthy period of gradualist monetary reform, when inflation was finally subsiding and the dollar exchange rate had been stable for several months. The currency board arrangement was debated for months, the central bank was opposed and the Minister of the Economy actually resigned over the issue. Even since April, calls for a devaluation have been quite vocal. The basic principles of a currency board thus remain either misunderstood or contested, and it remains to be seen whether the legal arrangements for the Lithuanian currency board are sufficiently robust. In the past, Lithuanian laws have often proved short-lived.

The consequences of a possible failure of the Lithuanian currency board might be dramatic. The country, which used to have neither an Estonian-type currency board nor Latvian-type central bank independence, has a history of political and economic instability, and monetary stabilisation has been successful only since spring 1993. In this respect, the currency board arrangement continues the stable dollar exchange rate which stretches back to autumn 1993. A failure would risk all past achievement in this area.

3.3 Exchange controls and convertibility

Contrary to Estonia and Latvia, Lithuania in principle had a dual exchange rate system until late 1993, though it is unclear whether this was of any major practical importance. Differences between the three countries have been greater in foreign exchange controls, but recently that has changed as well. All the Baltic foreign exchange regimes are now highly liberal. Estonia maintained some minor restrictions on current account convertibility until 1993, and there were also modest restrictions on capital movements (IMF 1993a). However, not all of these controls were implemented. Further liberalisation has been stepwise, until March 1994, when the parliament introduced full capital account convertibility.

Latvia's approach to foreign exchange transactions has long been extremely liberal. As mentioned, even the use of foreign currencies as a domestic means of payment is allowed. There is full current and capital account convertibility, de jure and defacto. This has helped Riga to make a good start in regaining the position it held as a major regional financial centre in the pre-war period (IMF 1993b). But over a longer term, Latvia's ultra-liberal approach to foreign exchange transactions, together with its underdeveloped banking regulations, may prove a major

problem, especially given Riga's position as a gateway between the FSU and the West.

The Lithuanian foreign exchange regime is also very liberal, though not completely so, as is the case in the two northern countries. There has been full current account convertibility since the establishment of the national currency. Households and private enterprises have the right to hold foreign currency deposits and the capital account transactions regime is on the whole very liberal (IMF 1993c). Like Estonia but contrary to Latvia, Lithuania has liberalised capital account transactions gradually. State enterprises still need permission to have foreign currency accounts abroad, and their surrender requirements were abolished only in 1993.

4 The performance of the Baltic monetary regimes

Two years after Estonia was the first country of the FSU to introduce a national currency, all the Baltic countries now have domestic currencies that are either fully (Estonia and Latvia) or highly (Lithuania) convertible. Up until spring 1994, exchange rates were either fixed (to the deutschmark in Estonia), smoothly appreciating (vis-à-vis the dollar in Latvia) or recently very stable (vis-à-vis the dollar in Lithuania). In spring 1994, Latvia announced a peg of the lats to the SDR and Lithuania fixed the litas to the US dollar. Though there is variation in inflation performance, even in the case of Lithuania it has been immensely better than in the non-Baltic FSU states.

Above, we introduced two formal criteria for assessing the relative performance of the Baltic currencies. On the Market Share Criterion, Estonia emerges as a clear leader. The kroon is virtually the only currency used within the country. The relative position of Latvia and Lithuania is impossible to assess due to the lack of information, but foreign currencies are widely used within the country. However, one should note that the Latvian authorities would not accept the validity of the Market Share Criterion. In the view of the Bank of Latvia, competitive currencies are a natural market-based phenomenon. They might propose another criterion, that of Market Share Development. Most likely, the lats has been able to increase its market share since its introduction.

Using the Interest Rate Parity Criterion is more complex (for a previous discussion see Hansson – Sachs, 1994). Ideally, we would like to compare ex ante real interest rates for assets denominated in foreign and domestic currencies within each country. Comparisons between countries of the kind made by Hansson and Sachs (1994) are also interesting, but they capture other country risk as well, not only the one risk that concerns us here, i.e. that connected with the national currency. Even in the case of the Baltics, as similar as they are in many aspects, country risk not connected with currencies might well vary substantially. The fact that Lithuania only started strong stabilisation in Spring 1993 also complicates comparisons across countries. One would expect nominal interest rates to remain high for a relatively long time after the start of stabilisation. The less the credibility of economic policies the longer the time.

Hansson and Sachs (1994) present various cross-country interest rate comparisons – both nominal and ex post real – for the Baltic states[7]. In all cases Estonia emerges as the winner, i.e. as the country having the lowest interest rates. They conclude that this is due to the "enhanced credibility of the exchange rate peg". This explanation is credible, but not beyond debate. As for Lithuania, a possible explanation for high nominal interest rates was suggested above. As for Latvia, one may note that as of end-January 1994 (Hansson – Sachs 1994, Table 12, reproduced as Table 3 here) even dollar deposits earned an average interest of 25 per cent. The figure is even higher for Lithuania, 31 per cent[8].

[7] They also compare factors like bank spreads and the share of non-performing loans – all to the advantage of Estonia.

[8] The validity of using average interest rates could be questioned because there is wide variation in rates offered by different banks, reflecting bank reputation and portfolios.

Chart 3. **Interest rates in local currency and dollars**
(annual rates, as of end-January 1994)

Deposit rates	Local Currency	US Dollars
Latvia	37	25
Lithuania	56	31
Loan Rates	Local Currency	US Dollars
Latvia	na	na
Lithuania	108	77

Source: Hansson and Sachs 1994.

As such, high dollar deposit interest rates may drag domestic currency rates up as well. But why are dollar interest rates so high? On the one hand, they must be regarded a sign of perceived political risk. Governments might freeze or confiscate foreign currency accounts, as has been done in various countries, including the USSR. On the other hand, banks must be able to afford to pay these interest rates. Their existence presumably reflects the profitability and character of transactions that both Latvian and Lithuanian banks are involved in between the FSU and the West.

The true measurement of ex ante real interest rates as the difference between nominal interest rates and expected inflation is obviously impossible. Therefore, real interest rates for local currencies have to be defined as the difference between deposit rates at end-January 1994 minus – for instance – The Economist Intelligence Unit (EIU) inflation forecast for 1994. For Latvia, real interest rate so defined is 22 per cent (37–15). This is very high and coincidentally almost the same as the dollar deposit interest rate. The Lithuanian inflation forecast was highly uncertain, but the EIU forecast puts the real interest rate at 96 per cent (56–150). Obviously, the Interest Rate Parity Criterion makes no sense for Lithuania. For Latvia, it does not point to currency uncertainty.

The Estonian case is complex. Interest rates for three month deposits in January 1994 were around 10–15 per cent. Given the EIU inflation forecast of 20 per cent, this made real interest rates slightly negative[9]. Because of a surge of inflation in early 1994, the Estonian inflation forecast for 1994 was later doubled. In spite of this, a well-reputed bank (Hansapank) paid at end-June just 6.95 per cent interest on a three-month deposit. Even the nominal interest rates of 16–30 per cent on loans may have made real interest rates negative.

Applying the Interest Rate Parity Criterion to Estonia is hampered by the fact that foreign currency deposits have only recently been allowed in Estonia. Such deposits are still a rare occurrence, and their interest rates are 4–5 per cent annually. This, naturally, is greatly at odds with the other Baltic countries and

[9] And most savings are in sight deposits with a nominal interest rate of only about 2 per cent.

testifies to the perceived smaller political risk in Estonia[10]. Similarly to Latvia, the Interest Rate Parity Criterion tells of no currency risk proper.

[10] There is no information on the origin of dollars deposited in Latvia and Lithuania, and their eventual foreign origin might explain part of the difference. An unofficial estimate puts the share of Eastern (mainly Russian) money in Latvian banks as high as 60–70 per cent of all deposits (**The Baltic Observer** 19–25 May, 1994).

5 Conclusions

Until spring 1994, the Baltic monetary systems could be neatly divided into two. Estonia had opted for a currency board, strict banking regulation and limited capital account convertibility. The Latvian–Lithuanian model included floating exchange rates, a liberal attitude to banking regulation and (in the Latvian case) full convertibility. Hansson and Sachs (1994) argue that the Estonian model created more credibility, which can be seen in lower interest rates as well as in other indicators.

Some of the neatness of this division into two models was always illusory. Estonia made no complete one-time jump into convertibility, but it did liberalise its foreign exchange controls gradually, and in the end sooner fast than slowly. Lithuania did the same, and by spring 1994 all the Baltic countries had either full or very high convertibility. What is more important, neither is the contrast between fixed exchange rates in Estonia and the float elsewhere all that clear-cut. The float of the lats and litas – as long as it lasted – was highly regulated. By autumn 1993, the dollar exchange rate of the litas had become stable, while the lats appreciated very smoothly against the dollar. On April 1, 1994 Lithuania finally adopted an Estonian-type currency board, while the Bank of Latvia announced that the lats had been pegged to the SDR since February. The Bank would presumably also defend the peg (**Baltic News Service** 24 May, 1994). Most of the differences between the Estonian and the Latvian/Lithuanian model had thus evaporated in less than two years.

The common features of the Baltic models should be emphasised. In particular, there was – as Hansson (1994, p. 3) puts it – an almost religious devotion to currency convertibility and trade reorientation. They were seen as essential elements of escape from the USSR and return to Europe. This is what had the highest priority in all the Baltic countries, and this separates the Baltic countries from all the other FSU states. There was the feeling of an overwhelming national mission, and this explains the relative weakness of lobbies and vested interests in Baltic politics. If industrial lobbies could have decided, trade reorientation from Russia to the West would certainly have been much slower. If the agrarian lobby had been strong, Estonia would not have completely liberalised foreign trade. In principle, the time of lobbies might come when politics turn into normally after the national mission has been fulfilled, but by then the traditional lobbies will have been much weakened by economic and social change.

There is no evidence that the practical, technically economic steps needed to make this shift had been widely understood or very competently debated in any of the countries. As Hansson (1994) describes it, the decision to adopt the currency board in Estonia was almost an accident of history. There was social demand for a speedy currency reform, and the plan for a currency board happened to be the only one available. In Latvia, the powerful personality of the Bank of Latvia's governor has certainly played a key role in the country's choice of the liberal route. As to Lithuania, what could tell more of the role of political chance than the decision to adopt the currency board, **after** stabilisation was succeeding without it?

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