Estonia’s Accession to the EMU

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Abstract

CEE countries have passed the process of transition to market economy and eight of them, including Estonia, joined the European Union in 2004. Estonia has been very successful in the transition process, mainly owing to the currency board-based monetary system, which serves as a signal of commitment to prudent monetary policy and as a guarantee of sound money during the transition period.

The current paper discusses the thirteen years of experience in operating the currency board-based monetary system in Estonia. Estonia’s accession to the European Union will soon be accompanied by membership of the Economic and Monetary Union (EMU). Here it is also explained why Estonia wants to join the EMU as fast as possible and what the prospects are to do it on time, at the beginning of 2007.

JEL Classification numbers: E42, E5, F33.

Keywords: monetary systems, monetary policy, Economic and Monetary Union

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1. Introduction

On 1 May 2004 the biggest enlargement in the history of the European Union took place: ten new Member States including Estonia joined at a time. This indicates that Estonia’s economic policy has been comparatively successful over the past decade – the choices made have been the right ones. Monetary policy based on the currency board arrangement and supported by conservative fiscal policy and a tax system promoting entrepreneurship has provided us with a competitive edge in the highly competitive capital market (Parts, 2004, p.39). The author aims at proving that the monetary policy adopted in 1992 was to some extent inevitable for Estonia, and that the transition period itself showed it was the best way to enhance economic reforms. The major reason why active monetary policy failed in Estonia was a deep economic crisis, the weakness of the state power and the habit not to follow laws and regulations.

When assessing the Estonian monetary policy in the Wall Street Journal, Mr David Hale, Chief Economist of Chicago Kemper Financial Co, comes to the
conclusion that Estonia is one of the three countries in the world which does not have to fear Mexico’s fate because of the cleverly designed local monetary policy (Hale, 1995).

Currency boards are not a new economic phenomenon. The currency board principle was established in the Bank Charter Act of 1844, where the Issue Department of the Bank of England acted as a currency board. For this reason, many of the British colonies in Africa, Asia and the Caribbean used currency boards on the introduction of their own currencies. The first currency board was established in Mauritius in 1849. More than 70 such boards operated at one time. There are also numerous literature sources on the experience of the currency board arrangement in various countries (see Kwan and Lui, 1996; Balino and Enoch, 1997; Perry, 1997; Enoch and Gulde, 1997; Eichengreen et al., 1998; Glosh, Gulde and Wolf, 1998; Schuler, 1998; Dobrev, 1999; Avramov, 1999; Korhonen, 1996; Korhonen, 1999; Gulde, 1999 etc.).

The liberation of the Central and Eastern European countries (CEEC) from the socialist political and economic regime previously forced on them gave birth to financial and economic problems analogous to those caused by the liberation from colonial subjection. It was therefore natural for the idea of the currency board to be reborn in the 1990s. The aim of a currency board system is to achieve currency convertibility and a fixed exchange rate, thereby helping to stabilise the economy, bring about structural changes and integrate the country into the world economy as quickly as possible. Details on how to solve problems of introducing a currency board in a former socialist country are presented by Hanke, Jonung and Schuler, 1993.

The core economic and political goals of Europe are stable economic growth and price stability. To this end, single currency and coordinated economic policy are implemented in the European Union within the framework of the European Economic and Monetary Union (EMU).

Accession to the European Union enables Estonia to join also the EMU. Estonia’s aim is to introduce euro as soon as possible. The country’s goal is supported by deep integration with European economy and the fixed exchange rate against the euro.

This paper is organised as follows. The first section treats the necessity of the currency reform in Estonia in 1992 and the main characteristics and impact of the monetary system on Estonia’s economy, the second section discusses some future prospects of Estonian monetary system after joining the ERM2 in June 2004, and the paper ends with some conclusions.

2. Performance of Estonian Monetary System

In June 1992, Estonia became the first of the newly independent Baltic States to introduce its own currency – the Estonian kroon (EEK). Experience gained so far suggests that the reform can be considered a success. This can be attributed to a long period of preparatory work, the confidence shown by the population and the government in the new currency, and international support (Kallas and Sõrg, 1993).

There were several valid economic arguments for the introduction of national currencies in countries that had formerly been part of the rouble zone.

1) A national currency allows the pursuit of a more independent economic policy, while at the same time underlining the responsibility of national decision-makers for economic development.

2) There was no reason to think of the rouble zone as an optimal currency area. The resource endowments, probable exogenous shocks, institutions and policy goals of the former Soviet republics vary hugely.
3) The rapid depreciation of the rouble had made it necessary for these countries to buffer themselves against the crisis of the rouble.

4) Particularly during the early months of 1992, the rouble zone suffered from a simultaneous excess supply of deposit roubles and a shortage of cash roubles. Supplementary currencies were duly introduced in several of the former Soviet republics for transaction purposes. There existed the probability that regional or enterprise-based currency – for example, the Tartu money of spring 1992 – would have appeared without the introduction of sovereign currencies.

5) The existence of national currency also introduces the possibility of garnering governmental revenue in the form of seigniorage (Lainela and Sutela, 1994).

Before Estonia’s currency reform (second quarter of 1992), the dollarisation ratio peaked around 60 percent in Estonia, 50 percent in Lithuania (first quarter of 1993), and 35 percent in Latvia (first quarter of 1993) (Sahay and Végh, 1995, p.37).

For Estonian authorities, this situation set up two preconditions for a successful currency reform. First, the currency reform had to be carried out as quickly as possible before multiple wages and inflation shocks would have caused a social explosion and economic collapse. Second, the new currency had inspired confidence, though introduced under circumstances of deep economic crisis and lack of experience by the central bank in carrying out monetary policy. An early main goal of the monetary reform was to control inflation.

Those in charge of carrying out a currency reform must take into account a temporary acceleration in inflation. After cash shortage has been eliminated, it is necessary to create confidence in the new currency. This may be done by means of a currency board arrangement where the value of the new currency is fixed in terms of a major reserve currency. In Estonia, the exchange rate between the Estonian kroon and the German mark (DEM) was based on the prevailing market exchange rate between the Soviet rouble (SUR) and the German mark (approximately 80 SUR = 1 DEM) at the moment of the currency reform. Thus, roubles were exchanged for kroons at the rate of 10 SUR = 1 EEK, and the Estonian kroon exchange rate was fixed at 8 EEK = 1 DEM. In general, the Estonian kroon was under-valued by about four to five times. The excessive undervaluation resulted in inflationary pressure on consumer prices. However, inflation rate in Estonia was declining continuously (Table 1).

### Table 1. Inflation against the Previous Year (%)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in consumer prices (CPI)</td>
<td>1076.5</td>
<td>47.7</td>
<td>23.1</td>
<td>8.2</td>
<td>4.0</td>
<td>3.6</td>
<td>3.0</td>
</tr>
<tr>
<td>tradable sector</td>
<td>991.6</td>
<td>33.9</td>
<td>18.6</td>
<td>6.4</td>
<td>3.8</td>
<td>2.2</td>
<td>3.4</td>
</tr>
<tr>
<td>non-tradable sector</td>
<td>1702.7</td>
<td>89.2</td>
<td>30.5</td>
<td>13.4</td>
<td>4.4</td>
<td>6.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Increase in producer prices (PPI)</td>
<td>...</td>
<td>36.8</td>
<td>14.9</td>
<td>3.9</td>
<td>4.9</td>
<td>0.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Increase in export prices</td>
<td>...</td>
<td>...</td>
<td>11.3</td>
<td>2.1</td>
<td>7.8</td>
<td>4.0</td>
<td>2.2</td>
</tr>
</tbody>
</table>

*Source: Eesti Pank.*

In 1998, the CPI increase had reached a level lower than 10%, and in 2003 it was already 1.3%. After joining the EU the convergence of taxes and prices again increased the inflation rate in Estonia.
Professor Williamson identified four major claims made on behalf of currency boards:

- that they assure convertibility;
- that they instil macroeconomic discipline;
- that they provide a guaranteed payment adjustment mechanism;
- that because of those three features they create confidence in the monetary system and therefore promote trade investment, and growth (Williamson, 1995, p.13).

The most important advantage of a currency board arrangement is the high credibility it gives to conducting monetary and exchange rate policy in an unstable macroeconomic environment, as it still exists in transition economies (Calvo and Mendoza, 2000, p.63). At the same time, the fixed exchange rate can successfully act as a nominal anchor during macroeconomic stabilisation. Introduction of the currency board arrangement requires tight fiscal policy, since financing of the government’s budget deficit is not allowed under the currency board regime. Figure 1 shows that Estonian fiscal policy is continuously the most balanced among the new EU Member States and even much better than in the euro area itself.

**Figure 1. Indicators of Compliance with Maastricht Criteria in 2004**

![Diagram showing indicators of compliance with Maastricht criteria in 2004 for various countries.]

Source: ECB, compiled by the author.

However, in the first stage of transition risks are high and the bank customers very careful. For insurance banks and their customers concluded forward contracts against exchange rate risks from April 1994 to April 1995 for the purchase and sale of the Estonian kroon and the German mark with a fixed exchange rate 8 to 1 and maturity of 7 years. The fact that commercial banks used only 25% of the limit imposed on such insurance against exchange rate risk proves that in principle the fixed exchange rate between the Estonian kroon and German mark was believed to be maintained. The latter was also one of the major reasons for terminating these contracts (Kallas and Sõrg, 1995).

FDI is one of the most important contributors to economic growth and technological development of fledgling market economies in Central and Eastern Europe (CEE). Transition economies generally have insufficient domestic savings due
to their meagre income. Transition countries find international investment very effective, because these enable the import of new technology, expertise, management skills, and the launch of new business projects, all of which could otherwise be unattainable because of their exorbitant prices.

It should be noted that foreign investors are very careful in placing their money in countries undergoing economic transition. A fixed exchange rate coupled with liberal monetary policy was therefore no less than an essential precondition for foreign investors to take the risk of investing in Estonia.

By FDI inflow per capita, Estonia is a leader among the new EU Member States. Foreign direct investment in the amount of EEK 115.5 billion had been made in Estonia by the end of 2004 (EEK 86.9 billion by the end of 2003). Estonian GDP in 2004 was 139.1 billion kroons (i.e., approximately EUR 8.9 billion).

From Figure 2 we may see that among CEE countries, Estonia has the highest FDI stock per capita and per cent to the GDP.

The result of a study conducted by KPMG (1993) showed that Western investors have considered political and financial security as the main stability actors when making decisions regarding investment in Eastern Europe. Other stability factors include the conditions the host country imposes on repatriating profits or investment of capital.

Implementation of the currency board arrangement and fixing the Estonian kroon to the German mark and later to the euro has been a solid nominal anchor to the economic recovery and development of the economy. Of course, the fixed exchange rate regime was only one (but possibly the most important) component of the Estonian economic policy framework for macroeconomic stabilisation. Other policies include liberal trade regime, or tight fiscal discipline, which has been an important factor of macroeconomic stabilisation.

**Figure 2. FDI Stock in CEE Countries**

![Chart showing FDI stock in CEE countries]

*Source: Havlik, 2005.*

From Figure 3 we can see that GDP growth in Estonia during the last decade was ca 45% - the second highest growth rate among the 8 new EU Member States from former socialist countries. The figure shows that growth in the Baltic States was quicker than the average in this country group.
The experience of currency boards in post-colonial Africa points to the weaknesses of this system. The chief criticism of currency boards can be summarised as follows: (1) since the volume of currency is linked to the state of the balance of payments, the supply of money is reduced whenever the balance of payments is in the red. In other words, the economy has to deflate at the time of a deficit on the balance of payments. Contrariwise, with a surplus on the balance of payments, the money supply expands; (2) domestic finance is thus really governed by the vagaries of foreign trade and such a situation may be considered unacceptable; (3) the financial system will fail to promote the growth of poor regions since it is not designed to perform this function; (4) the existence of a currency board deprives a country of monetary sovereignty, which would be needed to pursue independent economic policies; (5) currency boards have also been criticised because of the cost of the foreign reserves necessary to back the local currency (Ghatak, 1995, pp.73–74).

In the case of Estonia such problems are not acute because the negative trade balance has been offset by capital inflow, Estonian monetary sovereignty has not been compromised, and the reserve backing allows the central bank to earn revenue by investing such assets in foreign countries. This covers the expenses of the currency issue and the bank’s operating expenditure, and may provide financial aid to problem banks and dividends to the state budget. It should be stressed that a currency board needs sound and liberal monetary policy support, an open economy and free international financial and trade relations.

Table 2 shows that during last five years Estonia has been able to maintain a high GDP growth rate. At the same time the gold and foreign currency reserves increased, inflation and interest rates decreased. This indicates the performance of Estonian monetary policy and competitiveness of Estonian economy.

Estonia has successfully used a currency board-based monetary system for over 13 years. Also stochastic simulation, which makes the comparative analysis of monetary rules somewhat more realistic, proves currency board arrangement to be the most suitable for Estonian economy (Sepp, 2000). This is proved by all the indicators presented in this part of the paper. Estonia has undoubtedly no problems with continuing to use the suitable and stable monetary policy also in the future.
Table 2. Estonia’s Main Economic Indicators

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth (%)</td>
<td>7.8</td>
<td>6.4</td>
<td>7.2</td>
<td>5.1</td>
<td>6.2</td>
</tr>
<tr>
<td>Growth in the exports of goods and services (%)</td>
<td>38.8</td>
<td>7.0</td>
<td>–1.1</td>
<td>8.9</td>
<td>17.5</td>
</tr>
<tr>
<td>Foreign trade turnover (% of GDP)</td>
<td>144.0</td>
<td>133.9</td>
<td>124.4</td>
<td>127.9</td>
<td>127.3</td>
</tr>
<tr>
<td>Export and import ratio (%)</td>
<td>81.4</td>
<td>80.8</td>
<td>76.2</td>
<td>74.4</td>
<td>75.3</td>
</tr>
<tr>
<td>Ratio of external reserves change to GDP (%)</td>
<td>2.6</td>
<td>–0.7</td>
<td>0.9</td>
<td>2.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Current account balance (% of GDP)</td>
<td>–5.5</td>
<td>–5.6</td>
<td>–10.2</td>
<td>13.2</td>
<td>–12.6</td>
</tr>
<tr>
<td>General government budget balance (% of GDP)</td>
<td>–1.0</td>
<td>0.3</td>
<td>1.0</td>
<td>3.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Consumer price index of 12 months (%)</td>
<td>4.0</td>
<td>5.8</td>
<td>3.6</td>
<td>1.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Consolidated loan portfolio of banks (% of GDP)</td>
<td>36.9</td>
<td>39.0</td>
<td>42.8</td>
<td>55.0</td>
<td>66.5</td>
</tr>
<tr>
<td>3-month TALIBOR (%, annual average)</td>
<td>5.7</td>
<td>5.3</td>
<td>3.9</td>
<td>2.9</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Source: Eesti Pank, compiled by the author.

3. Estonian Perspectives of Joining the EMU

The European Central Bank’s Accession Master Plan for preparation of expansion of the euro area presumes that the expansion of the ESCB by 10 states takes place in May 2004 and that the first wave of countries adopts euro in January 2007. A large-scale simultaneous expansion is not likely, however, because accession countries have themselves set varying dates for accession. After all, besides the generally positive impact of accession on the EMU, candidate countries can also expect new limitations to their economic policies, which they are trying to consider when drawing up accession schedules.

From Table 3 it can be seen that Estonia is in the first group of countries, who have planned to adopt the euro already at the beginning of 2007.

The Government of the Republic of Estonia and Eesti Pank have established the goal of introducing the euro at the first opportunity when Estonia will have fulfilled all the necessary conditions. It is quite natural as Estonia already has a fixed exchange rate against the euro (EUR 1 = EEK 15.6466), high integration with EU countries and very open economy. In 2004, Estonia ranked 4th on the Index of Economic Freedom Ranking after Hong Kong, Singapore and Luxemburg. It had the highest ranking – 28th – among CEE countries on the World Competitiveness list (Mikecz, 2005, p.140).

We know that the advantages of a single currency are greater in open economies. The more open an economy, the higher its welfare gains will be. Adoption of a single currency greatly increases microeconomic efficiency through elimination of transaction costs and exchange rate uncertainties, greater price stability, increased foreign investment, and higher productivity.
Table 3. Official Strategies for Full Monetary Integration

<table>
<thead>
<tr>
<th>Country</th>
<th>ERM2 start date/target date</th>
<th>Euro target date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>Estonia since 28 June 2004</td>
<td>2006 or 1 January 2007</td>
</tr>
<tr>
<td>LT</td>
<td>Lithuania since 28 June 2004</td>
<td>1 January 2007</td>
</tr>
<tr>
<td>SI</td>
<td>Slovenia since 28 June 2004</td>
<td>1 January 2007</td>
</tr>
<tr>
<td>CY</td>
<td>Cyprus since 29 April 2004</td>
<td>as soon as possible</td>
</tr>
<tr>
<td>LV</td>
<td>Latvia since 29 April 2004</td>
<td>1 January 2008</td>
</tr>
<tr>
<td>MT</td>
<td>Malta since 29 April 2004</td>
<td>as soon as possible</td>
</tr>
<tr>
<td>PL</td>
<td>Poland at least 2.5 years before euro target date</td>
<td>2008 or 2009</td>
</tr>
<tr>
<td>SK</td>
<td>Slovakia (2005 or) 2006</td>
<td>(2008 or) 1 January 2009</td>
</tr>
<tr>
<td>CZ</td>
<td>Czech Republic at least 2.5 years before euro target date</td>
<td>2009 or 2010</td>
</tr>
<tr>
<td>HU</td>
<td>Hungary not specified</td>
<td>1 January 2010</td>
</tr>
</tbody>
</table>

Source: European Central Bank.

When adopting the euro, Estonia’s role in influencing the economic policy of the European Union will also increase. Current developments have shown that the impact of countries that do not belong to the euro area on the economic policy of the EU is significantly smaller than that of those within the euro area. After being granted full membership of the EMU and the introduction of the euro, representatives of the Ministry of Finance will start to participate in the work of the Euro Group, which consists of representatives of euro area members. The role of the Euro Group in economic policy-related decision-making will continue to increase in the future. Representatives of Eesti Pank will also start taking part in the formulation of monetary policy in the euro area by way of participating in the activities of the Council, the most important decision-making authority in the EBC (Estonia’s National Changeover Plan, 2005, p.8).

Practical preparations for the euro changeover started in Estonia after the Cabinet meeting of 15 January 2004, when the Government of the Republic of Estonia set the goal of being technically ready for the introduction of the euro by the middle of 2006, which would enable transition to the euro on 1 January 2007. At the sitting of 13 May 2004, the Government approved Estonia’s first convergence programme, which reflects Estonia’s economic policy on the way to the euro. The Council of Ministers of the EU approved the programme on 5 July 2004. On 28 June 2004, Estonia joined the Exchange Rate Mechanism II (ERM2), which is a system for ensuring exchange rate stability prior to euro area accession (Estonia’s National Changeover Plan, 2005, p.4).

At the Cabinet meeting of 9 December 2004, Estonian Government decided to form the National Changeover Committee to coordinate the activities necessary to ensure a smooth changeover to the euro. The Committee is chaired by the Secretary General of the Ministry of Finance. The committee comprises the Deputy Governor of Eesti Pank, the Secretary General of the Ministry of Justice, the Secretary General of the Ministry of Economic Affairs and Communications, the Secretary General of the Ministry of International Affairs and the Director for European Union Affairs of the State Chancellery.

At its first meeting on 15 February 2005, the Committee adopted the decision to form six working groups, whose objective was to map out and find solutions to
potential problems that may arise in different areas with regard to the euro changeover. From Figure 4 it can be seen that the working groups were established in the following areas: Eesti Pank and credit institutions, the business community, the governmental authorities, consumer protection, legislation and communication. Working groups include participants from both the public and private sector.

The first version of Estonia’s National Changeover Plan from 22 August 2005 is directly based on the input of all working groups, who have been meeting since March 2005 and mapped out the issues that need to be dealt with in association with the changeover. The objective of the plan is to provide guidelines for governmental authorities and information for the wider public in order to prepare for the euro (see also Appendix I). The plan is not final and will be updated as issues are identified and solutions found in the working groups. The National Changeover Plan is a public document.

**Figure 4. Estonia’s Changeover Coordination Organisation**

Accession to the EMU and the euro system has two stages. In the first two years as a member of ERM2 (the status of members with a derogation in the monetary union), Estonia has to bring its financial regulation, fiscal and monetary policy in harmony with EU legislation.

During this stage, the country must fulfil the Maastricht criteria, which are required for joining the euro area. In the second stage, Estonia will join the euro area and obtain the status of a full-fledged member of the monetary union.

In this final stage Estonia will adopt the euro as the sole legal tender. Estonia will start to participate in the making of the common monetary policy of the European Union, contributing to its fixed and reserve capital. This means that Eesti Pank will become a co-owner of the European Central Bank and Governor of Eesti Pank will become member of the Governing Council of the European Central Bank, participating in the making of common monetary policy. Eesti Pank will start to implement monetary
policy directives of the ECB and manage the transaction and cash circulation of the euro in Estonia. Thus, Estonia will start utilising the full set of monetary policy instruments of the euro system. Among other things, this will mean that Estonia will receive a portion of the revenue from emission of euro, as well as of profits of the European Central Bank (Euro ja Eesti, 2001, 108).

The candidate countries are obliged to fulfil the convergence criteria (Maastricht criteria) that are the precondition for joining the EMU. As shown in Table 4, there are five monetary policy criteria, some of them having fixed values, whereas inflation and interest rates are judged on the basis of three EU Member States in which these indicators have the lowest levels.

**Table 4. Maastricht Criteria**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Principles of the criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation criterion</td>
<td>Inflation in a candidate country must not exceed average inflation of the three EU Member States with the lowest inflation, plus 1.5 percentage points – in 2004, the indicator was 2.4%.</td>
</tr>
<tr>
<td>Interest rate criterion</td>
<td>Interest rate on long-term (10 years) government bonds nominated in national currency of the candidate country must not exceed average long-term interest rates in the three EU Member States with the lowest inflation, plus 2 percentage points – in 2004, the indicator was 6.4%.</td>
</tr>
<tr>
<td>Exchange rate criterion</td>
<td>During the period in ERM II, the national currency of the candidate country must not fluctuate more than ( \pm 15% ) against the euro. Usually accession agreements state narrower limits to fluctuation.</td>
</tr>
<tr>
<td>Government budget criterion</td>
<td>Annual budget deficit of the candidate country must not exceed 3% of the country’s annual GDP.</td>
</tr>
<tr>
<td>Public debt criterion</td>
<td>General government debt of the candidate country must not exceed 60% of the country’s annual GDP.</td>
</tr>
</tbody>
</table>

*Source: European Central Bank.*

The objective of the convergence criteria is to ensure that economic development in the EMU is balanced and does not generate tensions between Member States. Member States must also continue to fulfil the fiscal criteria (budget deficit and public debt) after entry into the EMU.

In order for Estonia to be among the first new Member States to adopt the single currency, it is important that conservative economic policies be continued (see Table 5):

? Estonia’s general government budget has remained close to balance and, accordingly, public debt is very low (less than 5% of GDP);

? Estonia joined ERM2 on 28 June 2004, while preserving the currency board arrangement and assuming a unilateral commitment to keep the exchange rate of the Estonian kroon pegged to the euro (EUR 1 = EEK 15.6466). The exchange rate of the Estonian kroon has thus been stable during the ERM2 period;

? Estonia lacks a proper instrument for assessing the convergence of interest rates (i.e., at least a 5-year government bond issued in EEK) but, based on the low level of kroon interest rates in the private sector, low public debt and a
good budgetary position, the European Commission has expressed the opinion that Estonia should not have problems in fulfilling the interest rate criterion; ? Under the conditions of rapid economic growth and harmonisation of price levels, only meeting of the inflation criterion may prove problematic for Estonia. On the other hand, a higher level of economic growth, which accelerates the unification of price levels, does not endanger exchange rate stability.

Table 5. Compliance with the Maastricht Criteria in Accession Countries, 2004

<table>
<thead>
<tr>
<th></th>
<th>Inflation</th>
<th>Government budget deficit</th>
<th>Public debt</th>
<th>Interest rate on long-term bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyprus</td>
<td>1.9</td>
<td>−4.2</td>
<td>71.9</td>
<td>6.3</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2.6</td>
<td>−3.0</td>
<td>37.4</td>
<td>4.1</td>
</tr>
<tr>
<td>Estonia</td>
<td>3.0</td>
<td>1.8</td>
<td>4.9</td>
<td>−</td>
</tr>
<tr>
<td>Hungary</td>
<td>6.8</td>
<td>−4.5</td>
<td>57.6</td>
<td>7.2</td>
</tr>
<tr>
<td>Latvia</td>
<td>6.2</td>
<td>−0.5</td>
<td>14.3</td>
<td>4.6</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1.1</td>
<td>−2.5</td>
<td>19.7</td>
<td>4.0</td>
</tr>
<tr>
<td>Malta</td>
<td>2.7</td>
<td>−5.2</td>
<td>75.0</td>
<td>4.7</td>
</tr>
<tr>
<td>Poland</td>
<td>3.6</td>
<td>−4.8</td>
<td>43.6</td>
<td>6.0</td>
</tr>
<tr>
<td>Slovakia</td>
<td>7.4</td>
<td>−3.3</td>
<td>43.6</td>
<td>4.6</td>
</tr>
<tr>
<td>Slovenia</td>
<td>3.6</td>
<td>−1.9</td>
<td>29.4</td>
<td>4.1</td>
</tr>
<tr>
<td>Criterion</td>
<td>2.4</td>
<td>−3.0</td>
<td>60.0</td>
<td>6.4</td>
</tr>
</tbody>
</table>


Estonia has problems with fulfilling the inflation criterion. It has some objective reasons.

The fast economic growth constitutes the biggest problem for Estonia for its effect coupled with a fixed exchange rate. Normally rising productivity would lead to exchange rate appreciation, but when this cannot happen, prices rise instead. Even the ECB accepts this “Balassasamuelson effect” could add two percentage points to inflation in a country experiencing fast productivity growth (Flights to Frankfurt, 2005).

We can see in Table 5 that it is the inflation criterion that Estonia failed to fulfil in 2004. Feldman and Watson (2002) find that the accession countries must take extraordinary measures (e.g., reducing indirect taxes by a factor of 1.5) in order to fulfil the inflation criterion. Some researchers are not sure that currency board arrangement will be able to deliver satisfaction of the inflation criterion for EMU membership without an unnecessary recession (Buiter and Grafe, 2001, p.43).

But from a macroeconomic model-based research by Kattai (2004) appeared that among three exchange rate regimes inflation was the lowest under the currency board regime. But it did not reflect inflation reactions to shocks, i.e. change in price dynamics when there is a change in the economic environment.

Our most important special characteristic relevant to the Maastricht criteria is our relatively low level of income, whereas economic growth takes place at a faster rate than in the current EMU Member States.

If such differences in growth rates persist, the level of income in Estonia would attain the current EU average level in 20 years and converge to EU Member States in 30 years.
At present, Estonia lacks an instrument (ten-year government bonds nominated in national currency) meant for assessing fulfilment of the Maastricht interest rate criterion. However, the European Central Bank has assured Estonia that it may use the interest rate on long-term kroon loans as a reference. In order to make sure that interest rates on kroon loans granted to Estonian enterprises and individuals remain low in the future, it is necessary to use all instruments of economic policy to ensure balanced economic development also in the long run.

Estonian economy is closely connected to the economy of the European Union – nearly 80% of Estonia’s external trade is conducted within the EU. The introduction of the euro will result in smaller transaction costs, as the need for currency exchange will decrease. The experience of other countries has shown that such savings may reach up to 0.2% of GDP. The euro will also allow for a more effective comparison of prices.

Estonia’s national legislation will also be amended to meet the conditions necessary for changeover. In the last convergence report (November 2004), the European Commission expressed its opinion that section 111 of the Constitution of the Republic of Estonia is not in conformity with the Treaty on European Union and the statutes of the ESCB. Currently, negotiations regarding this issue are being held in order to find a solution.

A comprehensive “umbrella” law, enabling a complete overview of the legislation to be amended, will be prepared for the purpose of the introduction of the euro. The Act on the Introduction of the Euro will cover the procedures of exchanging kroons to euros and removing kroons from circulation, the regulation of parallel circulation and the necessary changes in existing laws (currently 207 laws). The Act on the Introduction of the Euro will repeal the Republic of Estonia Currency Act and Republic of Estonia Act on the Security for Estonian kroon. Ministers’ Regulations and Government Regulations that also need to be amended will be added to the draft legislation. In the course of work, it may prove necessary to pass amendments to certain legal acts separately (Estonia’s National Changeover Plan, 2005, p.11).

The objective of the Estonian euro changeover communication strategy is to ensure that all residents of Estonia be adequately informed of the practical changes it will bring. The communication strategy and the associated action plan have been completed in cooperation between the communications working group and interest groups representing the most important entrepreneurs and customers.

It may be seen that investors and businessmen have positively reacted to the euro adoption prospects. Growth of share prices in Tallinn Stock Exchange, decrease in loan interest rates and increase in lending are demonstrating it. FDI inflows are also rapidly growing. It indicates that the market is waiting for the euro.

4. Conclusions

At the time of writing this paper, nearly thirteen years had elapsed since the Estonian currency reform. Estonian economy had reached the upturn stage, the balance of payments (except current account) showed a modest surplus, Estonia’s external debt was minimal, and the inflation rate declining, the unemployment rate stable and real income growing. It seems reasonable to conclude that this success is positively related to the country’s currency board system, supported by suitable monetary and economic policy.

After the restoration of national independence in 1991, it was natural for Estonia to choose a currency board system. The economic stability, resources and experience necessary to introduce a flexible exchange rate regime did not exist at the
time. Instead, a monetary system that met the actual economic and financial situation in Estonia, suitable to its banking and management skills, was opted for. The currency board endowed the Estonian kroon with confidence, which helped to attract foreign capital to support the country’s reforms and supply the resources necessary to back its currency. Another key to the success of the currency board is the extremely liberal and balanced economic policy applied at the same time. This created a favourable environment for the financial infrastructure necessary for the progress of reform, and the rapid integration of Estonia’s financial system and economy with the international economy.

The main aim of Estonian macroeconomic policy today is to increase integration with the European Union and to join the European Monetary Union in near future. As the exchange rate of the kroon has been pegged to the euro, Estonia is already connected with the European monetary policy. The currency board arrangement is a suitable monetary framework for joining the EMU, and after finishing preparatory work and meeting the Maastricht convergence criteria, euro may be in circulation in Estonia already in 2007.

References


http://www.bankofestonia.info
Appendix 1. Man Principles of Euro Changeover

Changeover to the euro must be smooth. This requires extensive preparatory work in different areas\(^1\), involving representatives from different institutions and target groups. The public at large must also be well informed. The activities necessary for the introduction of the euro are planned in such a manner as to make the changeover as convenient as possible to all. The interests of entrepreneurs are also taken into account and the simplest and most cost-effective methods will be used, while making sure that all the necessary preparations for a smooth changeover are made. Also, different measures will be used in order to minimise price pressure. The main principles of the euro changeover are the following:

? Introduction of the euro in electronic money, accounting and contractual relations will take place as a “big bang”, i.e. there will be no transitional period\(^2\);

? With a view to ensuring a smooth changeover to the euro, a two-week period of dual circulation\(^3\) will start from the €-day\(^4\), during which the euro and the kroon will be treated as equal legal tenders. Both euros and kroons will be accepted in shops. Change, in general, will be given in euros. After the period of dual circulation, the euro will become the sole legal tender in Estonia;

? In order to simplify the issue of euro cash, commercial banks will, upon agreement with the Eesti Pank, change kroons into euros at the central exchange rate and without a service fee for a month prior to and six months following the €-day, and will then continue to provide the same service within a limited branch network for at least another six months. After the termination of exchange of kroons to euros in commercial banks, Eesti Pank will continue to exchange kroons to euros at the central exchange rate and without a service fee for an unlimited period of time:

? Six months before and after the €-day (1 July 2006 to 1 July 2007)\(^5\) retailers will be required to display prices, written manually or in printed form, at points of sale in both kroons and euros, using for conversion the exchange rate established by the Council of the European Union or in the event of non-availability of the rate\(^6\), the official exchange rate of Eesti Pank.

\(^{1}\) The main areas requiring special attention with regard to euro changeover that the Changeover Committee identified are the ones for which working groups were created: central banking and commercial banking, business environment, public sector, legal issues, consumer protection and communications.

\(^{2}\) Transitional period – the period from the beginning of full membership of the Economic and Monetary Union until the moment when the national currency is no longer in use in accounting, as money in accounts or in contractual relations. This period may coincide with the period of parallel circulation but may also be omitted (in the event of a big bang).

\(^{3}\) Period of parallel circulation – the period when kroons and euros are both in circulation as legal means of cash payment.

\(^{4}\) €-day – the day on which Estonia becomes a member of the euro area and the euro is introduced.

\(^{5}\) Hereinafter the date has a rough meaning; the actual enforcement of changes will depend on the decision of the Council of the European Union, which will conclusively determine the accession of Estonia to the euro area and the conditions of accession thereto (the date and exchange rate between the euro and kroon).

\(^{6}\) The decision of the Council of the European Union may be adopted in July 2006.
In order to reduce price pressure, the government will set example to the private sector by rounding down the kroon amounts of taxes and state fees into euros, i.e. in a more favourable direction for taxpayers;

Expenditures related to the changeover will be covered, in general, by market participants.