STAREBEI: DELIVERABLE 1

The Estonian Economic Conditions: A Review

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Abstract

The objective of this report is to analyze the historical, economic and financial situation in the Republic of Estonia and in particular its real estate market. The economic growth of the Baltic Region after independence has largely been realised through numerous reforms and capital market liberalisation. The Estonian economy in the past two decades was highly leveraged and was characterised by the increase in real estate prices. Within this context, we examine the presence and development of speculative bubbles in the financial and real estate markets. The analysis is extended in order to evaluate how the Estonian land fiscal system may have failed to prevent market distortions.
1. Introduction

Estonia is one of three Baltic Republics to obtain its independence from Russia in 1991. It is the smallest in terms of size among the three and has a population of nearly 1.5 million. The other two republics are Latvia (64.589 km$^2$ and 2.231.503 inhabitants) and Lithuania (65.200 km$^2$ and 3.555.179 inhabitants). Each of the republics gained independence from Russia in 1991 and has subsequently adopted a parliamentary republic as its political system. The three republics have made striking progress in transition and since their independence, through the creation of modern infrastructure, structural reforms and new fiscal systems and thus have successfully set up a competitive free market economy. Estonia identifies strongly with Finland and Sweden because of cultural, historical and linguistic links, and it is presently classified 13$^{th}$ (just after the Netherlands) in a ranking of 162 countries,$^1$ thus attracting relevant foreign investment.

The objective of this report is to provide a technical economic survey of Estonian economic and historical development for the setting of the financial crisis of the last two years. Over the course of the analysis particular attention is paid to the housing market, since this is a main force on the path to economic recovery and growth. We aim to examine Estonian economics in terms of a comparison between the ex-ante and ex-post independence periods and in contrast to the rest of the EU member states; this allows us to better understand the mechanisms working together for growth.

The report is structured as follows: in section 2 we provide a synopsis of the geographic, historical and economic aspects of Estonia, Latvia and Lithuania. Section 3 gives a macroeconomic perspective on Estonia. In section 4 we focus on the economic and financial crisis that suffers Estonia since mid-2007. In section 5 we analyze the role played by the financial sector in the crisis and in boom and bust cycle. Section 6 concludes the report.

2. Context: The Baltic Republics

We can characterise the macroeconomic development of the three Baltic Republics after independence by four steps. From 1991 to 1994 the primary goal of Estonia, Lithuania and Latvia was to emerge from their economic crisis due to independence, and to strive towards stabilisation. The second phase started about 1995 and can be regarded as the “accumulation before the take off”. In this period the

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$^1$Measures ten components of economic freedom, assigning a grade in each using a scale from 0 to 100, where 100 represents the maximum freedom. The ten component scores are then averaged to give an overall economic freedom score for each country. The ten components of economic freedom are: Business Freedom, Trade Freedom, Fiscal Freedom, Government Size, Monetary Freedom, Investment Freedom, Financial Freedom, Property rights, Freedom from Corruption, and Labour Freedom. For further information, see [http://www.heritage.org/index/Default.aspx](http://www.heritage.org/index/Default.aspx)
three republics conducted a number of structural and economic reforms and transformations that resembled those of modern and dynamic countries in Scandinavia. The third step took place from 2001, when the Baltic economies realised a rapid and strong growth with a constant increase in external and internal demand, and with particular focus on durable goods. The last step, begun in 2007 and continuing to the present day, is identified by the economic and financial crisis (Figures 1 and 2).

Figure 1. The Baltic Republic: development steps

![Figure 1](image1.png)

*Data Source: UCL calculation.*

Figure 2. Baltic Republic GDP variation between 1991 and 2009

![Figure 2](image2.png)

*Data Source: ERS, USDA; UCL calculation. Note: Variation is expressed in (ln) on the same period of the previous year*

Between 1996 and 2006 the three states have been able to create a substantial economic growth thanks to an increase in internal expenditure, investment and external demand. As can be seen in Table 1, Estonia, Latvia and Lithuania were characterized by similar growth rates and average growth rates.
Table 1. Percentage GDP Variation 1996-2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Estonia</th>
<th>Latvia</th>
<th>Lithuania</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>3.6</td>
<td>5.2</td>
<td>5.7</td>
</tr>
<tr>
<td>1997</td>
<td>8.3</td>
<td>7.5</td>
<td>11.7</td>
</tr>
<tr>
<td>1998</td>
<td>4.8</td>
<td>7.6</td>
<td>6.7</td>
</tr>
<tr>
<td>1999</td>
<td>3.3</td>
<td>-1.1</td>
<td>-0.3</td>
</tr>
<tr>
<td>2000</td>
<td>6.9</td>
<td>3.3</td>
<td>10</td>
</tr>
<tr>
<td>2001</td>
<td>8</td>
<td>6.7</td>
<td>7.5</td>
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<tr>
<td>2002</td>
<td>6.5</td>
<td>6.9</td>
<td>7.9</td>
</tr>
<tr>
<td>2003</td>
<td>7.2</td>
<td>10.2</td>
<td>7.6</td>
</tr>
<tr>
<td>2004</td>
<td>8.7</td>
<td>7.4</td>
<td>7.2</td>
</tr>
<tr>
<td>2005</td>
<td>10.6</td>
<td>7.8</td>
<td>9.4</td>
</tr>
<tr>
<td>2006</td>
<td>12.2</td>
<td>7.8</td>
<td>10.6</td>
</tr>
<tr>
<td>2007</td>
<td>10</td>
<td>9.8</td>
<td>6.9</td>
</tr>
<tr>
<td>2008</td>
<td>-4.2</td>
<td>2.9</td>
<td>-5.1</td>
</tr>
<tr>
<td>2009</td>
<td>-18</td>
<td>-14.7</td>
<td>-13.9</td>
</tr>
</tbody>
</table>

*Data Source: EURO Stat; UCL calculation. The GDP at current prices are valued in the prices of the previous year, and thus the computed volume changes are imposed on the level of a reference year.*

Internal expenditure in the three countries increased from December of 1993, and between 1997 and 2007 the increase has been, on average, more than 7% per year, while in European countries the growth rate was 3.9% on average.

*Figure 3. GDP current price - Euro per inhabitants*

*Data Source: EURO Stat; UCL calculation.*
This success has certainly been the result of independence, but we need to observe that the three states did proceed more rapidly on the path of recovery than other Central Eastern Europe countries such as Bulgaria, Hungary, Poland, and Slovakia, with average growth rates under 11%. In addition to the high growth rate in the Baltic region, there was also an increase in the inflation rate between 2003 and 2008, where inflation grew on average 5%, with a peak in 2008 when the Latvian inflation rate reached nearly 14%.

3. Estonia: Macroeconomic Perspectives

Between 1996 and 2006, the Estonian GDP per inhabitant had an average growth rate of 7% year-on-year, with a peak in 2006 of 12%\(^2\); however, this growth has stimulated the rise of the inflation rate. Inflation showed an upward trend starting from 1.3% in 2003 - rising to 10.4% in 2008\(^3\), with an increase average rate of 5.8%. In Latvia and Lithuania, as Figure 3 shows, there has been a similar pattern in growth rate and average growth rate.

\(^2\) Whole Estonia country Gross Domestic Product at current prices, all data available on line at [http://www.stat.ee/](http://www.stat.ee/)

\(^3\) Consumer Price Index, Change over previous year. All data has been provided by [http://www.stat.ee/](http://www.stat.ee/)
In Estonia between 1997 and 2007, wages strongly increased and the Labour Cost Index (wages and salaries) between 2002 and 2008 was 12.9%, while the average percentage change in the Labour Cost Index in the European Union during the same period was about 2.8% (see Figure 5). The increase in wages determined a steep rise in the inflation rate, as underlined by Vanags and Hansen⁴; for instance, after mid-2005, Latvia suffered structural price problems that instigated a high level in inflation rates. The increase of the Estonian inflation rate was certainly due to rapid increases in wages and labour costs; however, in Estonia the large deficit in the current balance sheet was also one of the main causes of the increase in inflation rates. As shown in Figure 6, between 2004 and 2008 the Current Deficit in Payment Balance increased sharply.

Figure 6. Estonian deficit in Current Account

Data Source: Statistics Estonia; UCL calculation. Note: value is expressed in millions of Euro.

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The deficit was caused not only by an increase in imports but also by the low national savings level. We can observe that in the last decade in Estonia the major driver of the rapid growth in internal demand has been the financial sector, in particular, the banking sector. The financial sector was primarily facilitated by foreign capital inflows (where debt instruments owned from abroad have increased on average by 30% year-on-year\textsuperscript{5}) and foreign direct investment (in 2000 was equal to €140 million and in 2007 reached €1273 million); nonetheless, the financial sector was characterized by an attitude of undervaluation of risk as well as low interest rates.

As Figures 7 and 8 illustrate, between 2005 and 2008 the price of credit risk and mortgage loans in particular, slowed sharply.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure7.png}
\caption{Comparison between mortgage loans, long-term corporate credit and EURIBOR 6-month rates in Estonia}
\end{figure}

The increase of debt in the current account deficit was eased by bank loans and by the financial account surplus, thus leaving the total balance of payments with a small level of surplus.

\textsuperscript{5} Data Source: EURO Stat. UCL calculation.
If we examine the HCPI index between 2004 and 2008, this was equal to or higher than the Estonian Money Market interest rate (Figure 8), thus explaining the increased trend in liability and liquidity in the different sectors. The financial attitude of households was to maintain short-term liquidity, take on more debt, and reduce their level of savings. In other words, it was as if what had been saved was simultaneously lost in the Estonian purchasing capability. Between 2003 and 2008 the credit demand in Estonia grew at an average rate of 50% per year; but if we examine the credit demand as a yearly figure, the rates were for instance, 49% of GDP in bank assets\textsuperscript{6} in 2000, 70% in 2003, and 172% in 2007.

\textsuperscript{6} Financial position consolidated, total economy, asset loans in percentage of GDP. Data source: Eurostat.
Loan liabilities were primarily attributed to non-financial enterprises which mostly comprised stock loan liabilities. When we turn our attention to Estonian household loans, as shown by Figure 9, between 2002 and 2007 the household liability stock in loans increased markedly: in 2002, household loans provide only 18% of total GDP-percentage in liability loans, while in 2007 household loans comprise 30% of the total.

Figure 10. Total economy liabilities in percentage of GDP: an historical comparison between Estonia and Finland.

Data Source: EURO Stat; UCL calculation. Note: Whole Economy Consolidated Financial Position, percentage of GDP.
At the end of 1990s and in the aftermath of the Russian crisis, Nordic banks in Finland and Sweden began to acquire the main components of Estonia’s financial system. As a result, competition increased, and the mortgage loan market in particular became the most relevant activity in the portfolio of Estonian banks. If we compare the liability/GDP ratio between Estonia and Finland, we observe that the ratio for Finland was almost stable, whereas for Estonia we observe that the ratio overtook the Finnish one in 2005 and then increased continuously. The implication of this increase is that the units in surplus (household) was indebtedness, that is, a low aggregate saving and a general debt economic position.

Figure 11. Estonian percentage yearly variation of the ratio Net saving/Net incoming

Against a background of income increases (wages and salaries) as mentioned earlier, between 2003 and 2007 we observe that aggregate saving variation (year-on-year) decreased sharply, particularly after 2005 (Figure 11). During this period the loan market and mortgages rose in volume with a rebound in the housing price market that grew yearly between 2000 and 2006. The average growth in the number of purchase contracts was 26% per year, while the total value of contracts increased more than 40% per year (Figure 12).
4. The Financial and Economic Crisis

Figures 13 and 14 depict how strongly the recession has impacted on the Estonian economy; in fact when we compare the peak of the Estonian economy with the worst of the recession, we see a 20% contraction. The Estonian MSCI index indicates that the highest value was reached in mid-2007 and after this point we observe a sharp downturn and slowdown till its bottom in May, 2009. The trend of the Estonian MSCI index was characterized by a rapid upward trend from 400 points in 2002 to 1500 points by the end of 2006. In 2007, after having reached the second maximum, the index turned downwards and started a sharp decrease until end 2008; in November 2008 the Estonian MSCI index had returned to the value reached six years earlier.
The latest data available on the unemployment rate was provided by Estonia Statistics and reports a worsening situation in Estonia: during the third quarter of 2009 the unemployment rate was 14.6% (Figure 14). The Estonian state has been forced to suspend all the payment of wages on second-pillar (funded pensions) in order to compensate the increase in the unemployment insurance tax rate.

*Data Source:* Estonia Statistics; UCL calculation. Note: Unemployment rate by 3rd quarter of each year.
Between the third quarter of 2007 and 2009, the rapid increase in unemployment has caused a downturn in domestic demand; on average we observe an annual decrease by 15%\(^7\) in net wages. Moreover, the low levels of domestic saving have instigated a slump in internal demand. The Estonian economy, as seen in the previous section, was essentially driven by domestic demand and by internal private investment and consumption, which had allowed for a GDP average growth of 7.5% per year. For instance, in 2007, at the highest point of growth, there was a larger volume of imported goods (178 billion Kroon) than exports (125 billion) leaving a deficit in the Estonian current account of 53 billion Kroon.

The main trade partners of Estonia, i.e., Finland, Sweden and Russia\(^8\), have been suffering a slowdown in consumption and production and this has caused negative effects on the Estonian external demand for goods. In 2009 a sharp slowdown of exports (74 billion Kroon) was counterbalanced by the fall in exported goods (84 billion Kroon), thus determining a deficit equal to 10 billion Kroon.

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\(^7\) Data Source: Bank of Estonia (2009).

\(^8\) Other important trade partners of Estonia are Lithuania, Latvia and Germany.
Firms have aimed to consolidate their short debt by issuing long debt in order to replace the expired short debt. They have de-leveraged through the increase in internal fund expenditure. However, we observe that if the short-term liabilities on sale revenues increase – due to the decrease in sale revenues – the implication are that many funds must be spent to pay the obligation, thus leaving fewer resources for investment, renewal and R&D expenditure. Of course this trend would lower the expected potential growth rate.

Estonian households have started to increase their saving levels in spite of the decrease in net wage income. This trend is due to the fact that the majority of Estonian loans are linked to the 6-month Euribor Rate. In the last year (2009) the Euribor Rate has fallen by more than 80%, allowing for a significant savings for many households. At present, new households and enterprises are modifying their financial behaviour by considering portfolio choices; moreover, the difference between savings and investment has become more balanced than in 2007, while the internal expenditure is ensured, on balance, by the internal income.

5. The real estate loan and banking role in the crisis

One of the sectors most affected by the global economic crisis is the real estate market. As underlined in the previous sections, between 2002 and 2007, the main driver of Estonian growth in internal demand was the possibility for Estonian households to enter into the real estate market. This process has induced a high level of indebtedness, in particular concerning loans on houses and apartment purchases. As a result of the economic downturn, the contraction and unravelling of Estonia’s rapid property boom has presented high systemic risks to the banking system connected to losses on loans and borrowing. When the crisis affected the Estonian economy in mid-2007, the total amount of long-term loans in financial institution asset portfolios consisted of about 272 billion Kroon; while short-term loans\(^9\) consisted of 35 billion Kroon, thus implying a high value at risk for the Estonian banking system\(^10\) as well as possible financial instability.

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\(^9\) There is one deviation concerning short-term loans. According to Estonian accounting law corporations, corporations (except credit institutions and leasing companies) have long-term loans when original maturity is more than one year, and they have short-term loans when maturity is less than one year.

\(^10\) As argued above, the downturn point is reached in mid-2007.
Figure 16 depicts the contraction and weakness of credit supply for enterprises and households. Estonian banks have increased their internal funds in relation to the rise in expected losses incurred by the economic crisis and in order to abide by the Basel II principle. This is because different from other banks that have financed their activities with various debt obligations, Estonian banks have based their lending on deposits and short-term borrowing. The IMF financial stability assessment\(^{11}\) underlines that the Estonian banking system has problems of maturity mismatch that could lead to vulnerability in liquidity shock.

Moreover, it is important to observe that the Estonian banking system is dominated by large Swedish-owned banks, which are de facto backed by the Swedish government. Swedish banks have reported large losses in the Baltic region, particularly in Latvia and Lithuania. A stress test\(^{12}\) conducted by Swedish “Finansinspektionen” (2009) shows that liquidity and systemic risk are avoided, mainly because banks operating in the Baltic region have adequate conditions for withstanding even extremely negative scenarios. Nevertheless, considerable uncertainty remains about how large future losses will be in Estonia, implying that the interest rate should remain at a lower rate for most of 2010, since a rise in the interest rate will translate into increases in banks’ credit losses.

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\(^{12}\) Finansinspektionen stress tests major banks, Memorandum, June 2009, Finansinspektionen.
6. Conclusion

This report has focussed on the economic and financial development in Estonia from independence to future economic and financial recovery. Over the course of its development, it is interesting to compare Estonia to the other Baltic Republics of Lithuania and Latvia, as well as to other EU member states, in order to chart the path of Estonia’s growth. However, we have also observed how rapid and sharp growth in Estonia has induced a number of problems. During the final period of the 1990s, the Estonian financial market was characterized by an increased volume of foreign capital inflows which were mainly converted into investments and loans.

A process of foreign capital inflows has not only instigated a substantial credit expansion and increase in risk taking but has also stimulated a sharp increase in asset prices. The condition of exchange rate pegged to Euro currency matched with high foreign capital inflows bring to loose control (to snap) of the monetary base and money supply (M1, M2 and M3) and to credit boom, with a consequent worsening in credit quality and creating real estate bubble. Real estate prices in particular, between 2001 and mid-2007, given the highly leveraged position of the Estonian economy, began to assume the pattern of a speculative bubble. Starting in June 2007 the bubble began to burst. The boom-and-bust cycle has produced several instabilities within the financial and economic structure of Estonia. In the context of the financial and economic global crisis, Estonia has suffered a severe downturn which necessitates robust structural economic reforms so that it may regain its momentum towards economic and financial growth and development.
References


