Estonian and Hungarian Economic Policies Before and During the Crisis: Virtue Unrewarded and Profligacy Unpunished

Adam Koronowski

Collegium Mazovia 08-110 Siedlce, ul Sokołowska 161, Poland Tel: +48-604-625-727 E-mail: Adam.Koronowski@aster.pl

Received: January 4, 2012	Accepted: February 1, 2012	Published: March 15, 2012
doi:10.5430/rwe.v3n1p63	URL: http://dx.doi.org/10	0.5430/rwe.v3n1p63

Abstract

The aim of the paper is a comparison of economic policies in Estonia and Hungary before and during the recent financial and economic crisis and the results of the policies. Such a comparison is justified by a crucial similarity of the economics of both countries; they are small, open economies highly integrated within the European Union. However, economic policies have been quite different. Estonia and Hungary have applied opposite exchange rate/monetary policy regimes. Hungary, in opposition to Estonia, had a rather lax and pro-cyclical fiscal policy. When it comes to policy results it turns out that the Hungarian economy was more stable in terms of the volatility of unemployment, inflation, GDP growth rates and current account. Hungary recorded lower average unemployment rates and current account deficits but economic growth was faster and average inflation was lower in Estonia. The interpretation provided argues that Estonia has been experiencing a boom and bust cycle typical for fixed exchange rate regimes. Hungary has taken advantage of the adjustment mechanism of a flexible exchange rate but its economic policy lacked credibility and there were no strong incentives – even cyclical – for fast growth. The case of Estonia, as compared with Hungary, does not support the claim that the common currency should clearly bring advantages if only fiscal discipline were preserved.

Keywords: Financial Crisis, Economic Policy, Estonia, Hungary

1. Introduction

The aim of the paper is a comparison of economic policies in Estonia in Hungary before and during the recent financial and economic crisis and the results of the policies. Both economies exhibit major similarities but economic policies have been quite different. Firstly, Estonia maintained a currency board system and Hungary adopted a wide exchange rate band/floating exchange rate during the period analyzed. In fact, while Estonian croon remained perfectly stable, the Hungarian forint was highly volatile. This difference also crucially determined the scope for monetary policy; only Hungary could use active interest rate policy which it applied both to stabilize the economy and the exchange rate. Secondly, both countries executed different fiscal policies. Estonia had a surplus in its public finances before the crisis and it allowed some minor deficits when economic downturn came. Conversely, Hungary had high budget deficits and it only chose to improve its fiscal stance shortly before the crisis started and it continued efforts to further limit fiscal imbalances during the crisis.

These major policy differences between two otherwise similar economies raise questions about their effects. A simple analysis of the data shows that the Hungarian economy was more stable in terms of the volatility of unemployment, inflation, GDP growth rates and current account. Hungary recorded lower average unemployment rates and current account deficits but economic growth was faster and average inflation was lower in Estonia. This is an interesting observation as it contradicts the claims of euro enthusiasts that the single currency creates a more stable economic environment, particularly in small, open economies. These results do not suit neither more general propositions of the theory of optimum currency area which claim that fixed exchange rates (a common currency) in small, open economies bring nominal stability and that floating rates are ineffective shock absorbers. Moreover, these examples show that the link between stability and economic growth is not a simple relation.

In these days, when the crisis of the euro zone is identified with fiscal problems of some member countries it is particularly important to underline that the case of Estonia, as compared with Hungary, does not support the claim that the common currency should clearly bring advantages if only fiscal discipline were preserved.

The paper is organized as follows. The next part presents the characteristics of economies and economic policies of both countries. The third part describes the effects of different economic policies. The fourth part contains an interpretation of the observations. The last, fifth part shortly concludes.

2. Estonia and Hungary; Similarities between the Economies and Differences between Their Economic Policies

Economies of Estonia and Hungary exhibit crucial similarities. First of all, they are small, open economies. In 2008 GDP of Estonia was equal to 27.7 bln USD and GDP of Hungary reached 198,1 bln USD which is a few times more than in the case of Estonia, but in broader relative terms this is still typical for a small economy. Both countries are members of the European Union and they have introduced respective regulations and liberalized foreign economic relations, including free capital flows. The ratio of foreign trade to GDP is high; in Estonia in 2008 it was equal to 77,7% and in Hungary the value of the ratio was 81,7%; undoubtedly these are open economies. The countries exhibit also very similar levels of economic development. GDP per capita in Estonia was 20,6 thousand USD while in Hungary it was 19,7 thousand USD in 2008. What is also important and what may express the levels of economic development and international integration, Estonia and Hungary had in 2008 similar ratios of their domestic consumer price levels to the euro area average; it was respectively 75% and 65%. (OECD data, http://stats.oecd.org/Index.aspx?DataSetCode)

The economies are quite similar but economic policies of the two countries differ crucially.

Each of the countries pursue a different monetary policy strategy and applies a different exchange rate regime. Estonia adopted a currency board regime in 1992 and in 2004 the Estonian kroon entered ERM II. For the whole period the exchange rate remained at the official parity, until Estonia became a member of the euro area on January 1st, 2011. The exchange rate was not subject to serious tensions during the reference period, though rising money market interest rates in Estonia and the spreads vis-à-vis euro money market suggest an increase in risk perception in years 2008 and 2009.

The Bank of Estonia did not set monetary policy interest rates. Domestic (kroon) interest rates were directly affected by the monetary policy of the ECB through the operation of Estonia's currency board system and they also expressed specific country risks, as mentioned above. This latter factor meant that money market rates in Estonia during the worst phase of the crisis (years 2008 and 2009) were rising even though the ECB set its interest rate close to zero.

It is worth mentioning that the Bank of Estonia signed in February 2009 an agreement with the central bank of Sweden which strengthened the Bank of Estonia's capabilities to provide liquidity to the financial sector. However, there were no extraordinary needs for liquidity and the agreement has not been activated.

The central bank of Hungary between 2001 and February 2008 pursued an eclectic monetary policy strategy which combined inflation targeting and exchange rate control. The Hungarian forint was pegged to the euro with a fluctuation band of +/-15%. On 26th February 2008 the exchange rate band was abolished and a free-floating exchange rate regime was adopted. This change was intended to eliminate possible conflicts between meeting the inflation target and maintaining the exchange rate within the band. However, "in October 2008, the central bank increased the main policy rate by 300 basis points to stabilize the exchange rate in the midst of the financial market turmoil" (European Commission, 2010).

In fact, the exchange rate of the forint has been rather unstable in recent years and during the financial crisis in particular. An earlier weakening trend of the forint was reversed in mid-2006 when the adoption of fiscal consolidation plans improved investors' perception of Hungary. After some moderate depreciation the forint strengthened further until July 2008 when it started depreciating at a fast pace in the wave of the global financial tensions. In October 2008 Hungary decided to accept balance of payments assistance by international institutions (The European Union, IMF and the World Bank) at the same time tightening the monetary policy, as mentioned above. After a temporary stabilization the forint depreciated further until March 2009 when it started to recover as the situation in global financial markets calmed down – this trend has generally continued until now (September 2011).

This short overview of exchange rate fluctuations of the forint in recent years shows that it was prone to both domestic and external shocks and developments. In particular, it reacted strongly to the developments in the fiscal policy and to changing investors' sentiments reflecting the global financial crisis. These factors influenced the payments situation and the exchange rate played the role of a shock absorber in this respect – whether it has been effective is a matter of general economic policy results, as outlined and discussed further on.

The interest rate policy of the central bank of Hungary has been fairly active in recent years. In years 2006 and 2007 the base interest rate fluctuated between 6.25% and 8%. In April 2008 a series of interest rate increases started and in October 2008 the base rate reached its maximum of 11.5%. From that time on the interest rate was consistently lowered and it reached 5.25% in April 2010. In November 2010 a new series of modest interest rate hikes started as a reply to inflationary pressures and since then the rate has been raised two times more up to 6.0%.

Interest rate policy of the central bank of Hungary was clearly tight only in 2008 and 2009 when interest rate hikes accompanied falling inflation rates. In fact these increases were intended to counter financial market pressures, including the depreciation of the forint, and coincided with declining economic activity. In a sense, monetary policy was forced by the financial market to act pro-cyclically. Accordingly, forint money market interest rates and its spreads to the euro money market were generally high and they much exceeded those of the money market in Estonia, especially during the crisis culmination in 2009.

When it comes to fiscal policies in Estonia and Hungary, they have exhibited major differences in recent years, too.

Public finances in Estonia were in surplus until 2007. However, this positive result was achieved in the situation of a rapid expansion of private sector expenditures and consequently buoyant fiscal revenues. Some part of high revenues was saved and provided fiscal buffers as accumulated assets of the government sector. When the crisis came, Estonia's fiscal position was fairly good.

As a consequence, in the situation of a downturn in the domestic demand and economic activity and in the face of the global crisis the Estonian authorities could avoid a fiscal contraction which would further worsen the economic situation. In 2008 the general government position deteriorated by 5.3 percentage points of GDP and the structural balance worsened by about 3.3 percentage points of GDP (European Commission, 2010). The deficit reached 2.8% of GDP in 2008 and the structural deficit rose to 4.0% of GDP. In the course of year 2008 efforts were undertaken to confine the deficit, which were continued in 2009. As a result the general government deficit declined to 1. 7% of GDP in 2009 (structural deficit 0.2% of GDP) and in 2010 public finances were in surplus again (structural deficit 0.4% of GDP) (European Commission, 2011). This fairly good fiscal position was maintained in spite of a deep economic contraction in Estonia in 2008 and – particularly so – in 2009. Due to strong fiscal position before the crisis and the economic downturn Estonia managed to avoid fiscal policy which would be clearly pro-cyclical. Conversely, Estonia pursued fiscal policy which helped to restrain economic slowdown. Although, as the crisis unfolded, Estonia had to correct its rising deficit, it had enough fiscal space to allow for an increase in both headline and structural deficits as compared with pre-crisis years. This relative easing of fiscal policy did not impinge on the financial credibility of the government.

Budgetary positions looked completely different in Hungary. First of all, Hungary had high deficits before the crisis; they peaked in 2006 when the deficit reached 9.3% of GDP. In 2004 the Commission started the procedure of an excessive deficit against Hungary; it has been held in abeyance since February 2010. It was only in mid-2006 when fiscal policy was reversed and budget deficit was reduced to 3.7% of GDP in 2008. Structural deficit declined from 10.6% in 2006 to 4.1% of GDP in 2008 when the financial crisis hit. The economic downturn brought about a moderate increase in the public sector headline deficit which reached 4,5% of GDP in 2009 in spite of strong efforts to keep it under control; the structural deficit declined the same year to 2.2% of GDP. In 2010 the fiscal situation did not change much (headline deficit 4.2% and structural deficit 3.1% of GDP). (European Commission, 2010, 2011)

Hungary did not have much choice as financing needs were difficult to meet due to investors' concerns about the sustainability of budgetary positions and exchange rate stability. Hungary managed to restore confidence and put its public finances on a sustainable path but it had to do that against the winds of the crisis. Fiscal policy could neither support an economic recovery, nor even allow for automatic stabilizers. It had to be tighten to keep the deficit under control as the crisis developed.

The above sketch of economic policies in Estonia and Hungary presents how different they have been in the case of two otherwise similar economies. These policy differences provoke a question about their outcomes. At a first glance it seems that Estonia should do much better before and during the crisis.

According to the theory of optimum currency areas these small, open economies should benefit from having a fixed exchange rate or the euro. A credible peg – as in Estonia – should promote economic stability and enhance general credibility of the country. In fact, interest rate spreads were much lower in Estonia as compared with Hungary both in tranquil and stormy economic conditions.

Moreover, Estonia pursued a conservative, balanced budgetary policy. It was a major factor behind its high credibility. Estonia managed to save some budgetary proceeds in good times and it had enough room for a fiscal maneuver during the crisis not to be forced to run pro-cyclical policy when the crisis hit. Having no its own interest rate policy it was not able to use it to support economic recovery but it experienced a relatively modest rise in money market interest rates.

In the case of Hungary the exchange rate was unstable and it reacted not only to fundamental factors but also to speculative swings. Fiscal policy until 2006 was very lax, it undermined financial credibility of the country and it had to be tighten severely just before and during the crisis, thus exacerbating the downturn. In the situation of low credibility the central bank had to raise its interest rates, in particular to confine excessive changes of the – formally freely floating

- exchange rate. This also could aggravate the economic slowdown. Hungary had to recourse to international financial aid.

What seems so clearly superior at the first glance does not necessarily has to prove its merits when the effects are studied more carefully; that is the subject of the next part of this paper.

3. The Effects of the Economic Policies of Estonia and Hungary

Since it is widely believed that a fixed exchange rate - and the single currency even more - should be propitious to economic stability and eventually to prosperity it is interesting to analyze a few variables which are important in this respect. They are unemployment rates, inflation rates, GDP growth and current account balances in both countries.

In Estonia unemployment (table 1) was steadily declining from high levels at the beginning of the previous decade as the economy was booming and it exploded to record levels during the crisis. In Hungary it was rising for all the period between 2001-2010. However, for Estonia the average of 9.72% is higher than 7.46% for Hungary. Moreover, unemployment rates were much more volatile in Estonia as compared with Hungary: the variance is equal respectively to 14,1 and 3,1. This means that Hungary did much better than Estonia both in terms of the average rate of unemployment and its volatility. In 2011 (data for the second quarter) it dropped considerably in Estonia to 13.3% (as compared to 18.6% in the same period of the previous year) but it still remained higher than in Hungary (10.8 in July 2011) (all the data for vear 20011 come from http://www.eestipank.info/dynamic/itp2/itp_report_2a.jsp?reference=502&className=EPSTAT2&lang=en_for_Estonia and from http://english.mnb.hu/Statisztika/data-and-information/mnben statisztikai idosorok for Hungary).

The average inflation during the period 2001-2010 was 3,21% in Estonia and 5.67% in Hungary. However, in Hungary inflation rates (table 2) were less volatile; the variances are 8.3 for Estonia and 3.2 for Hungary. Both aspects of stability matter here; low rates of inflation and low volatility. In theory, they should go hand in hand; a major advantage of low inflation should be a reduced inflation volatility and enhanced predictability. What really matters is predictability – it is uncertainty that badly influences economic decisions, investment in particular (Sohmen, 1971). However, in the case of Estonia (as compared with Hungary) lower average inflation does not mean less volatile and thus more predictable inflation.

It is also worth noticing that inflation again gets dynamics in Estonia in 2011 - in the second quarter CPI reached 105,2 (100 in the same period 2010); in Hungary, conversely, price level has been further stabilizing (103,1 in July 2011, same month of proceeding year = 100).

GDP growth was much faster in Estonia in the analyzed period (table 3. On average it was equal 4.12% as compared to 1.93% in Hungary during the previous decade. For the whole period the cumulated GDP growth was 46% and 21% respectively. In terms of economic stability, however, Hungary again had much better records; the variance is 53.6 for Estonia and 10.12 for Hungary.

Year 2010 showed that recovery in Estonia was slightly stronger. In the second quarter of 2011 GDP growth reached in Estonia impressive 8.4% (constant prices, % change to same period of previous year) while in Hungary GDP growth (volume) remained very slow (101.5 in July 2011, July 2010 = 100).

Current account deficits (table 4) were on average higher and much more volatile in Estonia than in Hungary; the averages are 8.3% and 5.7% of GDP and the variances are 47.4 and 12.4 respectively. Estonia's deficits were very high and persistent. What is also important and should be underlined here, the deficits turned into surpluses during the crisis; the change was particularly abrupt in Estonia. Following a strong fall in domestic demand, which led to lower imports, the current account balance of -9.7% of GDP in 2008 turned sharply into a surplus of 4.5% of GDP in 2009.

Beyond these basic statistics it is also important to note that in the period 1998-2008 the share of foreign trade in GDP rose by 20.4% to 81.7% in Hungary while in Estonia it declined by 1.9% (which is quite exceptional) and it was at 77.7% in 2008, lower than in Hungary (http://stats.oecd.org/Index.aspx?DataSetCode). It is quite interesting in the context of a widely disseminated argument that fixed rates and a single currency promote foreign trade development.

Summing up, in spite of its poor economic policy Hungary achieved in the analyzed period much better economic results than Estonia except for the rate of GDP growth and average inflation. In spite of pro-cyclical fiscal and monetary policies, the volatile exchange rate of the forint and volatile interest rates the Hungarian economy was much more stable and on average it was closer to – or less far from - both internal and external equilibrium. The Hungarian economy also opened faster and wider than the Estonian one. Estonia, however, on average recorded faster growth during the period 2001-2010 even when the recent deep recession is taken into account; it also regained fast growth in 2011. The data above show that Estonia's economy was growing faster not because it was more stable but in spite of its nominal and

real instability (high volatilities). How can it be explained that the Estonian economy was relatively unstable and it was growing faster, anyway? These puzzles are considered in the next part.

4. An Interpretation of the Difference of Economic Performance of Estonia and Hungary

Table 5 presents data on investment rates in Estonia and Hungary before the crisis. Investment plays a crucial role in and it has direct impact on economic growth so its rates can help explain the rates of growth. It easy to notice that Estonia recorded considerably higher rates of investment each year between 2001 and 2008. The average values for that period are 31.2% of GDP for Estonia and 22.2% for Hungary.

One can still ask why the rates of investment differ. Although enthusiast of the euro are inclined to argue that this is a more stable macroeconomic environment that enhances investment we know that this argument does not generally hold in the case of Estonia and Hungary. However, there is one important aspect of stability which was present only in Estonia; this is the stability of the exchange rate. The absence of exchange rate risk could have a strong impact on foreign investment or – saying the same in different terms – on capital inflows and foreign financing of investment.

Not surprisingly, higher investment brought about higher rates of labour productivity growth (Table 6): the average for Estonia between 2001 and 2009 was 4.0% and for Hungary 3.0%.

As mentioned above, high investment rates in Estonia were boosted by capital inflow. In fact, domestic savings played little role in capital formation in Estonia. There is a significant difference between Estonia and Hungary with respect to households savings rates. They were negative in Estonia every year between 2001 and 2008 and sometimes took astonishingly high values. In Hungary, conversely, they were always positive and assumed fairly considerable values.

It is difficult to draw far reaching conclusions on the basis of the presented data but a draft interpretation of the differences in policy outcomes seems to be possible. It is a matter of fact that the fixed rate of the Estonian krone did not bring about general stability of the economy, as it has been noticed above. Nevertheless, investment rates and labour productivity growth were high. Investment was easily financed with high capital inflows (and huge current account deficits were the other side of the process). Such an abundant capital inflow was – as it seems – made possible due to the elimination of exchange rate risk and, speaking more generally, high credibility of the country. Foreign financing was of a particular importance in the situation of a consumption boom and negative savings rates of households. High capital inflows – together with high domestic demand - contributed to inflationary pressures under the currency board regime.

The economic growth of Estonia before the crisis might be labeled "capital inflow and domestic spending led growth". The country's net international investment position deteriorated substantially, from -48.2% of GDP in 2000 to -81.8% in 2009. (ECB, 2010) This was not necessarily leading to a deep international division of labour and strong export so that the openness of the Estonian economy was not eventually impressive in terms of the share of foreign trade in GDP, also in comparison with Hungary. Of course, such a development path was unsustainable in a longer run. This proved particularly acute when the international financial crisis started, investors became more risk aware and averse. Estonian economy had to adjust and to become less dependent on foreign financing.

The developments in Estonia before the crisis seem to match the paradigm of a cycle typical for many fixed exchange rate regimes and currency unions. The cycles are presented in the literature in Kiguel, Liviatan (1992), Calvo, Vegh (1992), Santaella, Vela (1996), Khamis (1996). Blejer and del Castillo (1996) present the role of private consumption patterns in the cycle leading to the Mexican crisis of 1994; private spending was also an important reason for large current account deficits in Estonia. The typical cycle starts with economic boom, inflation and rising current account deficits (due to real appreciation and capital inflow) and ends up with a currency crisis or stagnation/recession due to a necessary correction of high current account deficits. In the case of Estonia this second phase coincided with or was triggered by the financial crisis which made the economic downturn particularly acute. As a result Estonia experienced a boom and bust cycle in spite of its generally very responsible economic policy. This kind of a cycle can be also traced in some other countries of the European Union, Italy, Spain, Portugal (Basto, 2007) in particular.

What concerns a theoretical background of the phenomenon these cyclical macroeconomic developments which can be ascribed to fixed rates/currency unions are completely beyond the theory of optimum currency areas, which is a very weak, incomplete and inconsistent theory of monetary integration (Koronowski, 2007). The mechanism of nominal and real divergences in a monetary union, and more generally of the cycle typical for many fixed exchange rate regimes, is theoretically explained with a model presented in (Koronowski 2009). The same paper presents an empirical illustration of the divergences leading to a boom and bust cycle in the eurozone. The dynamics of the processes in the monetary union are also well recognized in a paper by Blanchard (2006) who cast an idea of "rotating slumps" and by Wylosz (2006) elaborating on "diverging tendencies of competitiveness".

Hungary did not applied the recommendations of the optimum currency areas and did not try to join the euro zone. In spite of its poor economic policy, in particular high public deficits and pro-cyclical fiscal policy, its economy was more stable than in Estonia. The exchange rate provided a useful balance of payments adjustment mechanism, no matter what was the character of the shock to be absorbed. It does not seem, either, that inflationary cost of depreciation have been high. Hungary being less credible than Estonia (and the forint less credible than the krone) paradoxically avoided the boom and bust cycle typical for – mostly credible, at least at the beginning - fixed exchange rates.

The external shock that both countries experienced was capital outflow (changing sentiments and perception of risk) rather than a decline in their exports. Even though one might argue that this was a speculative, non-fundamental change it anyway forced both countries to sharply adjust to this new situation in the balance of payments and to cut excessive current account deficits. In such a scenario Estonia should be more affected than Hungary if we believe that a flexible exchange rate is an effective shock absorption mechanism. Estonia also had to adjust its external position much further than Hungary due to its higher pre-crisis deficits. These deficits could not be financed any longer, at least without a major threat to the country's credibility. The loss of credibility would be particularly costly in the case of Estonia. For Hungary even a certain temporary loss of credibility did not have major negative consequences. In fact, the bail-out program for Hungary helped the country to adjust more mildly, with less acute consequences for necessary cuts in domestic spending, declining GDP and rising unemployment or – generally speaking – at a lower economic cost.

In this context it is interesting to quote Wylosz (2010): "Had Greece not been part of the eurozone, it would have long undergone a major currency depreciation, like in Hungary in November 2008. The euro protects Greece." In fact, this "protection" seems to be a major part of the problems which countries most hit by the crisis face. The euro not only has led to major balance of payments problems of some eurozone countries (Koronowski 2011) and as a consequence – more often than not - to a sharp deterioration of the fiscal stance during the crisis but it also inhibits any viable solution of the problems. "Countries which have big external debts, excessive current account deficits, accompanied by high public deficits and public debts have no easy solutions to their problems in the monetary union. Fiscal "consolidation" may be a reasonable postulate but the reason for which the problems are so severe in some countries is not their particularly strong fiscal expansion; fiscal "consolidation" is certainly not the remedy. Their weak fiscal stance is rather an effect than a cause of the economic downturn and external imbalances. The trouble is that these countries which face negative, asymmetric developments have no economic instruments to deal with their problems; they gave up individual monetary and exchange rate policy. Moreover, it would not be easy to cut spending or raise taxes now when these economies are deeply in the crisis." (Koronowski, 2011) Fortunately for Hungary when it had to cope with major imbalances it still had its own currency.

Having suggested the sources of major instability in the case of Estonia and having pointed out the exchange rate mechanism of shock absorption in Hungary we haven't yet explained (beyond the differences in investment rates) why Estonian economy was – on average – growing faster. In my opinion, foreign capital inflow in Estonia is crucial in this respect. Even though it was sometimes excessive, it fuelled the boom and bust cycle and it substituted rather than supplemented domestic savings eventually it helped the economy to grow fast. It was possible only due to high credibility of the country and its policies, including the exchange rate which thus promoted – strangely enough - both instability and high growth. In Hungary the effects of poor policies and external shocks could have been absorbed easily but it was not enough to give some positive dynamics to the economy; the situation was not conducive neither to abundant capital inflow (also because of the exchange rate risk) nor to domestic capital accumulation (big public deficits!) which could finance and boost investment.

This is not, however, the end of the story. Estonian economy shows astonishing strength during the present recovery phase which makes it quite exceptional (Economist, 2011). Countries caught in the trap of the second phase of the cycle under a fixed exchange rate usually ended up with a currency crisis (as, for example, Mexico in 1994 or Argentina in 2001) or were condemned to pertaining recession as in the problematic euro zone countries (where situation is much aggravated by their fiscal problems). None of that happened in Estonia. High credibility of the country certainly matters and this might be at least some reward for its responsible economic policy. However, other factors may play crucial role in this respect. It seems that the Estonian economy preserves fairly high nominal elasticity, in particular wages do adjust to the economic situation (Sippola, 2011). Sticky wages and prices are the constitutive assumption of the theory of optimum currency areas; if wages were elastic there would be no need for the exchange rate mechanism. In fact unit labour cost reacted to the crisis quickly and strongly in Estonia; they first fell down in the second quarter of 2009 (as compared with previous quarter) and were declining till the end of 2010, sometimes by considerable ratios (-6"% in the fourth quarter 2009) (http://stats.oecd.org/Index.aspx?DataSetCode=ULC_QUA). Only Ireland underwent a comparable adjustment. In most of the problematic euro zone countries unit labour costs remained generally stable in the period 2009-2011. It was also the case of our "benchmark" country – Hungary.

Summing up, Estonia before the crisis experienced a period of high but unsustainable growth led by capital inflow and booming private spending. This ended up abruptly when the crisis forced a sudden adjustment in the balance of payments. The fixed exchange rate (currency board/euro zone membership) was propitious to overheating of the economy before the crisis and then it could not adjust and cushion the shock; the fixed rate caused major instability of the economy. However, it also busted investment and economic growth which – before the crisis and eventually on average - remained high. In this sense both high instability and high growth might be triggered by the same factor. Fortunately, responsible fiscal policy in Estonia was important as it did not reinforce the excessive boom in the private sector and it eased the adjustment process during the crisis. Moreover, the case of Estonia is fairly exceptional due to high elasticity of wages that could to a degree do the job which otherwise demands devaluation ("internal devaluation" took place). In Hungary the exchange rate of the forint, very unstable itself, was an effective adjustment - or shock absorption - mechanism. It also helped to mitigate the effects of poor economic policy. However, poor policy and volatile exchange rate have not been favourable to high investment (in particular foreign capital inflow) and fast growth.

Hungarian economy was much more stable than the Estonian one – no doubt the exchange rate helped in this respect – but poor policies had bad impact on general credibility of the country and its currency and constrained economic growth. In face of major imbalances Hungary was fortunate to keep the forint and its flexible exchange rate. Whether Estonia could achieve better results under a system of a flexible exchange rate will remain an open question.

5. Conclusions

This paper compared economic policies and their effects in Estonia and Hungary before and during the recent financial and economic crisis. Both economies exhibit major similarities but their economic policies have been quite different. In particular, Estonia and Hungary applied opposite exchange rate regimes; a currency board and flexible rates respectively. Consequently, monetary policies were also different. Moreover, Hungary, in opposition to Estonia, had a rather lax and pro-cyclical fiscal policy.

When it comes to policy results it turns out that the Hungarian economy was more stable in terms of volatility of unemployment, inflation, GDP growth rates and current account. Hungary in the period analyzed recorded lower average unemployment rates and current account deficits but economic growth was faster and average inflation was lower in Estonia. It is paradoxical that the Hungarian economy in spite of its low credibility and poor policies was much closer to internal and external equilibria than the Estonian economy. It may also seem rather strange that Estonia recorded faster economic growth, anyway.

Before the crisis Estonia had exorbitant current account deficits which mirrored excessive private spending. The deficits were financed with high capital inflows. This spurred both economic growth (high investment) and inflation. Abundant foreign financing was possible due to high credibility of the country and its economic policies, including the fixed exchange rate. However, such "capital inflow and domestic spending led growth" was unsustainable and when the financial crisis hit it turned into another phase characterized with economic contraction and balance of payments realignment without the easing impact of a flexible exchange rate. The Estonian economy was "dynamic" both in terms of fast growth in booming years and high volatilities of major economic data in the whole period. In Hungary the economy had not been so overheated before the crisis and the current account deficit was less acute. The economic cost of balance of payments realignment was lower (in spite of pro-cyclical fiscal policy) thanks to the flexible exchange rate of the forint. However, even though Hungarian economy took advantage of the realignment mechanism of the flexible exchange rate and it avoided a boom and bust cycle, it never developed right incentives for and a milieu propitious to high investment and growth.

The comparison of Estonia and Hungary is an example which can bring to mind doubts concerning the alleged benefits of having a fixed exchange rate and eventually the common currency, even when fiscal order is preserved.

Although it is not the case of none the analyzed countries it seems that a combination of credible and anti-cyclical fiscal policy, conservative but active monetary policy and a flexible exchange rate would be optimal. Neither good policies can substitute for a flexible exchange rate as a mechanism that prevents build-up of unsustainable external positions and – eventually – a mechanism of balance of payments realignment, nor a flexible exchange rate can fill in for good, credible policies.

However, it is my judgment that Estonia did not get expected rewards for its virtues and Hungary escaped a painful punishment for its profligacy.

References

Basto, R. B. (2007). The Portuguese Experience with the Euro – Relevance for New EU Member Countries, Bank i Kredyt, nr 11-12/2007

- Blanchard, O. (2006). Is There a Viable European Social and Economic Model, MIT Department of Economics Working Paper Series 06-21.
- Blejer, M. I., Castillo, G. (1996). "Déjà Vu All Over Again" The Mexican Crisis and the Stabilization of Uruguay in the 1970s, IMF Working Paper WP/96/80.
- Calvo, G. A., Vegh, C. A. (1992). Inflation Stabilization and Nominal Anchors, in R.C. Barth, C.H. Wong (ed.) Approaches to Exchange Rate Policy, IMF.
- The Economist. (2011). Estonian exceptionalism
- European Central Bank (ECB). (2010). *Convergence Report*. [Online] Available: http://www.ecb.int/pub/pdf/conrep/cr201005en.pdf
- European Commission. (2010). Convergence Report, European Economy, no 3.
- European Commission. (2011). Public Finances in EMU 2011, European Economy, no 3
- Khamis, M. (1996). Credit and Exchange Based Stabilization, IMF Working Paper WP/96/51.
- Kiguel, M. & Liviatan, N. (1992). The Business Cycle Associated with Exchange Rate Based Stabilizations, The World Bank Economic Review, vol. 6, no 2.
- Koronowski, A. (2007). *Real and nominal divergences in a monetary union an approach beyond the theory of optimum currency areas*, Bank i Kredyt nr [Online] Available:http://www.bankikredyt.nbp.pl/home.aspx?f=/content/2007/2007 10/koronowski.html
- Koronowski, A. (2009). Divergent business cycles as an effect of a monetary union, International Economics and Economic Policy, vol. 6 no 2.
- Koronowski, A. (2011). On a Hidden Aspect of the Credibility Crisis in the European Union, Research in World Economy, Vol. 2, No. 1. [Online] Available:http://www.sciedu.ca/journal/index.php/rwe/article/view/190
- Santaella, J. A. & Vela, A. E. (1996). *The 1987 Mexican Disinflation Program: An Exchange Rate* Based Stabilization?, IMF Working Paper WP/96/24
- Sippola, M. (2011). Internal Devaluation and the Baltic Labour Market, papers presented at 3rd International Conference
 Economies of Central and Eastern Europe: Convergence, Opportunities and Chalenges, Tallinn School of Economics and Business Administration, Tallinn, 12-14
- Sohmen, E. (1971). *Currency Areas and Monetary Systems*, in *Trade, Balance of Payments and Growth*, ed. J Baghwati, R. Jones, R. Mundell, J. Vanek, North Holland Publ. Co.
- Wyplosz, C. (2006). *Diverging tendencies of competitiveness*. Briefing notes to the Committee for Economic and Monetary Affairs of the European Parliament.
- Wyplosz, C. (2010). *The Eurozone debt crisis: Facts and myths*, Vox, [Online] Available: http://www.voxeu.org/index.php?q=node/4583

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estonia	12.6	10.3	10.0	9.7	7.9	5.9	4.7	5.5	13.8	16.9
Hungary	5.7	5.8	5.9	6.1	7.2	7.5	7.4	7.8	10.0	11.2

Table 1. Unemployment rates in Estonia and Hungary, 2001-2010

 $Source: http://www.eestipank.info/dynamic/itp2/itp_report_2a.jsp?reference=503\&className=EPSTAT2\&lang=en, the standard standard$

http://english.mnb.hu/Statisztika/data-and-information/mnben_statisztikai_idosorok

Table 2. Annual inflation rates (CPI) in Estonia and Hungary, 2001-2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estonia	5.8	3.6	1.3	3.0	4.1	4.4	6.6	10.4	-0.1	3.0
Hungary	9.2	5.3	4.7	6.8	3.6	3.9	8.0	6.1	4.2	4.9

Source: http://www.eestipank.info/dynamic/itp2/itp_report_2a.jsp?reference=503&className=EPSTAT2&lang=en, http://english.mnb.hu/Statisztika/data-and-information/mnben_statisztikai_idosorok

-										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estonia	7.5	7.9	7.6	7.2	9.4	10.6	6.9	-5.1	-13.9	3.1
Hungary	3.8	4.1	4.0	4.5	3.2	3.6	0.8	0.8	-6.7	1.2

Table 3. GDP real growth rates in Estonia and Hungary, 2001-2010

Source: http://stats.oecd.org/Index.aspx?DataSetCode=ULC_QUA

Table 4. Current accounts of Estonia and Hungary, as % of GDP, 2001 -2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estonia	-5.2	-10.6	-11.3	-11.3	-10.0	-15.3	-17.2	-9.7	4.5	3.6
Hungary	-6.0	-7.0	-8.0	-8.6	-7.6	-7.6	-6.9	-7.3	0.4	2.1

Source: http://www.eestipank.info/dynamic/itp2/itp_report_2a.jsp?reference=503&className=EPSTAT2&lang=en, http://english.mnb.hu/Statisztika/data-and-information/mnben_statisztikai_idosorok

Table 5. Investment rates in Estonia and Hungary – gross fixed capital formation, as % of GDP, 2001 - 2008

	2001	2002	2003	2004	2005	2006	2007	2008
Estonia	26.4	29.7	31.6	30.9	32.1	34.9	34.5	29.3
Hungary	23.0	23.1	22.3	22.5	23.0	21.7	21.2	20.9

Source: http://stats.oecd.org/Index.aspx?DataSetCode

Table 6. Labour productivity growth in the total economy in Estonia and Hungary, annual change, %, 2001 - 2009

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estonia	6.8	6.1	5.8	6.4	6.3	5.3	6.1	-3.8	-2.7
Hungary	6.3	3.8	5.2	5.2	3.4	3.2	1.3	2.1	-3.1

Source: http://stats.oecd.org/Index.aspx?DataSetCode

Table 7. Households saving rates in Estonia and Hungary, % of disposable income, 2001-2008

	2001	2002	2003	2004	2005	2006	2007	2008
Estonia	-4.0	-6.5	-8.4	-11.7	-10.4	-9.6	-5.2	-
Hungary	8.5	6.4	4.3	6.8	6.1	7.5	4.6	3.0

Source: http://stats.oecd.org/Index.aspx?DataSetCode