Financial and Economic Crisis in Eastern Europe

Rainer Kattel

Tallinn University of Technology, Estonia

Abstract

Eastern European economies act as if they were completely taken by surprise when the global financial crisis hit them in late 2008. This brief paper argues that the partially enormous imbalances in particular in the Baltic economies were however visible far and beyond. The foreign savings led strategy that relied on FDI, cross-border lending and exports created in 2000s almost a decade long carry trade of easy credit in Eastern Europe that, first, transformed domestic financial sector into largely foreign owned universal banks with weak linkages towards domestic productive sector; and second, burdened Eastern European consumer/producer with both interest and currency risks. The paper further argues that Eastern European economies are experiencing decreasing returns from integration into European production networks as they still seriously lag European core economies and East Asian catching up countries both in productivity and knowledge intensity. In essence, the credit and consumption boom helped to gloss over deeper structural problems during the 2000s. Thus, during the next years Eastern European economies continue to rely on European fiscal transfers but need to considerably step up their efforts in industrial and innovation policies in order to pave the road out of the current crisis.

Introduction

As the dust from the 2008 global crash in financial markets starts to settle, many in Eastern Europe (EE) are wondering how did they end up being hit the most by the meltdown. In particular the Baltic economies reported depression-worthy GDP contraction rates in 2008 and 2009, with growth unlikely to return in 2010. (Figure 1)

While hailed in 2000s as the rising global powerhouse (see Business Week's cover story in December, 2005) now the entire EE region is seen to be in the eye of the ongoing global crisis. From Roubini and Krugman to various ratings agencies and international financial institutions, all seem to agree that not only is the recession far from over in the European periphery (that is Eastern Europe plus Greece and Spain), but rather it is likely that depressed economic conditions continue to prevail in the EE region for quite some years to come. This is based on accumulated imbalances (most EE countries had high current account deficits throughout 2000s) and, in case of most EE countries, also on massive euroization of household borrowing, that engendered financial fragility in these economies.3

1 This draft is prepared for the conference on finance in Muttukadu, India, January 2010.
2 In the context of this paper, Eastern European countries are the member states of the European Union from the region: Bulgaria (BG), Czech Republic (CZ), Estonia (EE), Hungary (HU), Latvia (LV), Lithuania (LT), Poland (PL), Romania (RO), Slovenia (SI) and Slovak Republic (SK). Both former Soviet and Yugoslav republics are not dealt with here.
As will be shown below, these arguments are certainly valid; however, this brief paper argues that in addition to enduring financial fragility, EE countries face two compounding challenges en route to recovery and sustainable growth: first, the legacy of 1990s ‘killing the geese’ industrial restructuring and integration into global networks; and second, fragmented policy arena with weak capacity to devise responses to crisis. Most EE countries will be crippled by this triple challenge for the next decade and this will be one of the enduring imbalances within the European Union and one of the key factors impeding its growth. In addition, the paper shows that while up to the crisis EE countries exhibited in many ways highly similar patterns of development, the varying responses to the crisis will diverge also EE countries’ fortunes.

Financial fragility

The build up of imbalances in EE economies, particularly in the Baltics, during the 2000s was visible far and beyond. During the period 2004/5-2007/8, all three Baltic economies

---

4 2009 data for are forecasts.

and Romania and Bulgaria -- two most recent entrants into the European Union, in 2007 -- were all running current account deficits in double digits; all the other EE economies were having less impressive yet nonetheless high current account deficits, Poland and Slovenia having consistently lowest deficits around -1% to -5% of GDP.

These imbalances were driven, first, by massive inflow of foreign direct investments (FDI): EE region received during 2002-2007 close to 1/3 of all private capital flows to emerging markets, totaling more than 500 billions US dollars; only Asia received roughly 100 billion more during that same period. One of the key destinations for the FDI was the financial sector (see further below).

Yet, despite such high levels of net FDI inflows the external financing needs in the Baltics remained around 10% of GDP, and slightly lower in rest of the region, when crisis hit in the second half of 2008. This alone made in particular the Baltic economies look like Ponzi schemes waiting to happen. In other words, were the external financing to stop, the Baltic countries should have hit depression almost instantly. And this is indeed what happened.

Second key driver of EE imbalances was the fast rise in domestic household borrowing fueled by cross-border loans that, for instance, made up close to 2/3 of all domestic credit in the Baltic economies in 2007. (Figure 2)

![Figure 2. Credit to households as % of GDP, 2000 and 2007](source: EBRD)

---


Overwhelming share of this borrowing was done in foreign currencies (from euro to yen): for instance, the net foreign currency assets share as a % of GDP reached 51% and 47% in Latvia and Hungary, closely followed by Estonia and Lithuania with 35% and 38% respectively.\(^\text{10}\) Foreign currency loans as a share of total private sector lending reached from nearly 80% in Estonia to less than 15% in Czech Republic.\(^\text{11}\) One of the key receiving sectors of the lending was real estate, in particular in the Baltics. (Figure 3)

![Figure 2. Mortgage lending as % of GDP, 2003 and 2008\(^\text{12}\)](image)

<table>
<thead>
<tr>
<th></th>
<th>EE average</th>
<th>Baltics average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: EBRD

On the other side of the imbalances were European banks from Swedbank and SEB in the Baltics to Erste Bank, Raiffeisen, Unicredit and KBC in the rest of EE economies.\(^\text{13}\) Interestingly, some EE economies were able to avoid massive euroization, for instance Poland and Czech Republic.

The resulting rapid appreciation of domestic currencies and subsequent loss of competitiveness towards key European trading partners (Figure 4), in particular towards Germany where wage growth throughout 2000s essentially flatlined, turned the looming crisis into potentially very toxic mix for most EE economies as currency and maturity

\(^{10}\) Ibid.


\(^{12}\) Czech Republic data missing.

mismatches were bound to be massive and would force severe corrections through exchange rate depreciation, debt deflation and unemployment.

**Figure 4. Real effective exchange rates, 1997-2008; 1999=100**

Underneath, and with the emergence of, these imbalances EE banking sector was transformed from largely state-owned and strongly segmented banking sector (with multiple sectoral banks along functional lines, i.e. foreign trade, agricultural banks etc) into universal and mostly foreign owned financial institutions.\(^{14}\) (Figure 5) Adapting the banking regulation of the European Union played key role here as well.

Interestingly, for EE economies such high level of internationalization meant both that prior to the crisis the building up of the fragility in the system was very fast and, on the other hand, with the crisis actually happening, the high share of foreign ownership in EE banking sector played a stabilizing factor via stemming the reversal of cross-border financial flows. In fact, the latter aspect seems to have saved most EE economies, notably the Baltic countries, from outright default and run to the banks and currencies. However, it can be argued that both the increase in domestic foreign currency borrowing and development of the banking sector in 2000s represented in essence a massive carry trade with EE households and companies receiving both interest rate and currency risks in form of long-term debt.

In addition, the high level of internationalization of the financial sector in EE economies is compounded by both the general neoliberal economic policy focus (emphasizing macro-

economic stability and openness, low taxes and low government involvement in the economy) and aspiration to become eurozone members. The latter implies very strict public deficit (up to 3% of GDP) and inflation targeting measures (all EE economies have set inflation targets). This mix created economic environment that is automatically both very procyclical and somewhat allergic to government’s meddling with the markets at the same time. Accordingly, the response to the crisis has been relatively slow in EE economies. Yet, as the built-up and cumulative imbalances cannot simply vanish, they are being transformed into other forms of risks and imbalances: either increasing public debt or unemployment, or both.

![Graph showing share of state and foreign owned banks, 1996 and 2007](Figure 5)

Source: EBRD

Here, however, varying exchange rate regimes come to play key role. While Slovenia and Slovak Republic have already entered the eurozone in 2007 and 2009 respectively, the Baltic economies and Bulgaria use one or other form of currency board system and the rest of EE are on floating exchange rate systems.

Looking at developments during 2009, it becomes clear that while current account positions in all EE economies are significantly improving, particularly in the Baltic economies this happens because of the breakdown of capacity to import. (Figure 6) This brings such curious facts as Latvia becoming net exporter of cars in 2009 without having any car production at all.

This breakdown in domestic demand translates, in turn, into rapidly rising unemployment. (Figure 7)

Indeed, it seems that in particular the Baltic economies are experiencing the correction almost solely through the labour market. Yet, with significant cuts in public spending, Estonia’s accession into the eurozone in 2011 seems by now highly likely.
EE economies with floating exchange rates regimes have experienced devaluation of their currencies, the Baltic economies on the other hand are crippled by rapid drops in real wages (more than \(-5\%\) in 2009). However, in both regions the corrections are not even close to the levels suggested by the loss of competitiveness in Figure 4 above.

While both Hungary and in particular Latvia have received financial help from the IMF and the EU,\(^\text{16}\) all EE countries receive annually significant sums from the EU in what are for all intents and purposes fiscal transfers. (Figure 8)

Indeed, without these transfers almost all EE countries would face public deficits (or much worse unemployment figures) close to double digits, that is very much like Greece with its 12-13\% public deficit in 2009 (Greece receives EU transfers as well). In essence, the EU fiscal transfers allow EE countries, in particularly those with most massive imbalances, ‘export’ some of the accumulated imbalances back into the EU and in addition attempt to free-ride on stimulus packages enacted in rest of the EU.

\(^{15}\) GDP growth rate data for are forecasts.

The bill for contracting demand is presented to the EU tax payers and to the future domestic tax payers in form of high unemployment. Key EE countries, however, like Poland, Czech and Slovak Republic, also Slovenia seem to be faring significantly better than the Baltic economies, Hungary and also Romania and Bulgaria.

---

17 GDP growth rate data for are forecasts. Unemployment figures are from September 2009.

18 Fiscal transfers from the European Union are annual transfers through the so-called structural funds. Here, the EU fiscal transfers include funding from Cohesion, Rural Development and Fisheries Fund; calculations by the author. Unemployment figures are from September 2009.
The above suggests that most EE economies play a wait-and-see game with the crisis and are betting on the pre-crash FDI and export markets to simply re-appear at one point. In essence, EE countries wait for the exports to pick up again and drag them out of the pit. Here, however, most EE countries fail to take into account that the high levels of integration into global, in particular into European production networks might turn out to have decreasing returns. This may well turn out to be so as the industrial structure EE countries inherit from the ‘crazy’ 1990s is dominated by low value added activities with weak domestic linkages. Thus, exporting your way out of the crisis may well turn out to be unattainable for most EE economies even if exports were to rise rapidly as domestic linkages are weak and competitiveness towards the EU core economies is still relatively weak (and the price for higher competitiveness would be higher public deficits or unemployment or both). This results in significantly lower productivity than in the ‘old’ EU economies. (See below, Figure 11) In addition, there are no significant reasons for domestic demand to pick up quickly again -- unless there is significant return of both pre-crash drivers: FDI and cross-border lending. This, however, would also signal the return to or even deepening of the financial fragility inherited from the 2000s. Thus, the easy credit boom of 2000s only covered up deeper structural problems created through industrial restructuring in 1990s.

‘Killing the Geese’ industrial restructuring and Weak Policy Capacity

The flying geese metaphor for economic integrations first appears in a 1935 article by Kaname Akamatsu published in Japanese. The essence of the flying geese pattern of economic integration is that nations upgrade and catch up technologically by sequentially riding the same technological wave. It essentially describes the way East Asian nations grew. In 1990s, the EE countries followed essentially the opposite strategy of killing the geese: trying to restructure their economies, and in particular industries, through a very rapid replacement (not gradual upgrading) of Soviet style companies.

Perhaps the key assumption behind how EE countries should go about reforming their economies in the late 1980s and early 1990s was the belief that globalization in the form of global financial markets and trade liberalization would greatly benefit EE countries. Globalization was seen as the main factor in delivering fast economic restructuring spurred by global capital in form of foreign direct investment (FDI) inflows. This enthusiasm was largely based on the classical Ricardian assumption of comparative advantage defined, in a classic textbook formulation, as follows: “trade between two countries can benefit both countries if each country exports the goods in which it has a comparative advantage.” Krugman’s work in the 1990s that included economies of scale into the Ricardian framework, assumed that the mutually beneficial trade takes place between countries possessing increasing returns activities. Thus, as EE countries exhibited high levels of industrialization at the end of the 1980s (comparable to East Asia), it seemed correct to assume that globalization would indeed greatly help these economies to restructure the industry and to become vastly more efficient in production through trade and increased competition.


20 See, e.g., ibid., pp. 110-146.
However, the augmented Ricardian framework failed to take into account at least one key phenomenon: the 1990s saw the onslaught of what has been termed a new techno-economic paradigm that completely changed the nature of industrialization and essentially stripped many maturing and increasingly foot-loose industrial activities of significant (dynamic) scale economies. Indeed, in many cases the outsourcing activities do not exhibit the same dynamics that used to be associated with them in the originating countries: fast and sustained productivity growth, raising real wages, forward and backward linkages, but rather the opposite. The underlying cause why so many policy analysts and economists missed what is going on in these activities is hidden in the very nature of modularity in production. What is statistically captured as a high technology product may in reality be very different in nature: it can be touch screens for iPhones or it can be assembled mobile phones for any brand mobile producer. Both show up as high technology statistics, yet the former is a product at the beginning of its life cycle and the latter has clearly reached maturity. Thus, the key assumption of comparative advantage trade models and theories fell away: even if high technology exports have been growing in developing countries, this does not mean that we deal with similarly dynamic sectors with significant increasing returns. Due to changing techno-economic paradigm, integrating EE (and other developing countries) has become in many ways an increasingly asymmetrical matter. Yet, from 1990 up to today policy environment for industrial restructuring and innovation in EE assumes the opposite and is based on the Ricardian assumption of symmetrical integration. This led to fast and furious industrial restructuring with three distinct unforeseen features:

First, while EE and other key developing countries experienced an exhilarating rise in FDI and exports, there is a stunningly obvious divergence in income growth between Asian economies, on the one hand, and EE economies on the other hand (Figure 9). While China and Korea have seen their GDP per capita multiplied at least 4 times since 1980, EE economies have struggled throughout the last decades to stay above the 1980 level.

While EE countries’ share in world trade grew from 0.73% in 1980 to 0.95% in 1995, East Asia’s share grew in the same period from 3.80% to 10.83%. This trend is particularly pronounced for science based industries: EE grew from 0.29% to 0.39% in the period from 1980 to 1995, East Asian economies grew from 4.83% to staggering 17.82%.

Particularly after the fall of the Berlin Wall, most EE and other former Soviet economies saw deep dives in their growth rates and in industry as well as service sector value added. It took more than a decade for most EE countries to reach the growth and development levels of 1990.

The main reason behind such a deep dive was, second, rapid deindustrialization and primitivization of industrial enterprises or even the outright destruction of many previously well-known and successful companies.

---


24 Ibid., p. 38.

25 Many post-Soviet economies such as Ukraine, Moldova etc, are still lagging behind their 1980s levels.
This happened because of the way Soviet industrial companies, and the industry in general, were built up and ran in a complex cluster-like web of planning and competition. A sudden opening of the markets and abolition of capital controls made these industrial companies extremely vulnerable. The partially extreme vertical integration that was the norm in such companies meant that if one part of the value chain ran into problems due to the rapid liberalization, it easily brought down the entire chain. However, foreign companies seeking to privatize plants were almost always interested in only part of the value-chain (a specific production plant, infrastructure or location) and thus privatization turned into publicly led attrition of companies and jobs. Liberalization of markets and prices meant that for many domestic companies demand was cut down, and thus companies with the highest relative fixed costs to variable costs (these tend also to be the technologically most advanced ones) were hit the hardest as their balance sheets worsened very quickly. If a company had a lot of machinery and equipment to be amortized, i.e. there have been recent investments into upgrading, then it is particularly harshly hit if its demand drops and if it is under financial stress because of liabilities to newly founded banks. Thus, by definition, the most advanced industries were hit by rapid liberalization first and also the hardest.

Third, such a drastic change made it relatively easy to actually replace Soviet industry: with the macroeconomic stability and liberalization of markets, followed by a rapid drop in wages, many former Soviet economies became increasingly attractive as privatization targets and outsourcing of production. Indeed, one of the most fundamental characteristics of EE industry (and services) since 1990 has been that the majority of companies have actually engaged in process innovation (e.g. in the form of acquisition of new machinery) in seeking to become more and more cost-effective in the new market place.
Figure 10 depicts how far EE countries lag the frontier countries such as the US and Japan in knowledge intensity of economies. However, what is even more impressive on Figure 10 is how South Korea has essentially caught up with the leading economies. To put this into perspective, on the eve of the fall of the Berlin Wall, EE countries were more or less on the same level with the East Asian economies.

![Figure 10. Knowledge intensity of selected economies](image)

Source: WIPO, World Bank WDI Online database; calculations by the author; x axis log scaled

In sum, the key to understand why EE countries seem to stand still or even fall behind when compared to Asian economies such as South Korea is the way many industrial companies were integrated into the world economy in the 1990s. EE strongly embraced the idea of FDI-led restructuring which worked, however, in a highly specific way because of the simultaneous change in the techno-economic paradigm, and brought specialization at the lower end of the value chain with grave difficulties of upgrading and, most importantly, strong enclavization, de-linkaging and primitivizing tendencies.

Importantly, the rapid replacement of the Soviet industry led to equally rapid asset destruction that created enormous problems for domestic banks and led to massive bailouts during the 1990s that reached in finals cost up to 30% of GDP in countries such as Czech Republic. Equally significantly, the rapid asset destruction led to severing linkages between domestic productive and financial sectors. This, in turn, enabled the

---

26 Data for patents is for 2006 and includes all filings around the world; data for royalties and licenses is for 2008 and includes both payments and receipts. Royalties and license fees includes international payments and receipts for the authorized use of intangible, non-produced, non-financial assets and proprietary rights (such as patents, copyrights and industrial processes and designs). Hungary is excluded from EE calculations as it has very high level of royalty and licensing fees in GDP (1.99%).

internationalization of the banking sector in EE to take shape through massive lending to households and to real estate development leading to huge imbalances and increased financial fragility.

Thus, it seems likely that because of lagging productivity growth and in fact emerging decreasing returns from global integration, most EE economies should have seen some sort of recessionary pressures emerge in 2000s. Compared to key European exporting economies such as Germany, Ireland or Finland, EE economies have been catching up with these economies in terms of manufacturing labour productivity but at a rather low space. (Figure 11)

Figure 11. Apparent labour productivity in manufacturing in EE and key EU exporters, 2000-2007; Germany = 100

![Graph showing labor productivity in manufacturing](image.png)

Source: Eurostat; calculations by the author

However, as shown above, the transformation of the domestic banking sector away from the domestic productive sector and orienting towards consumption and real estate enabled the actual growth rates in 2000s in fact to out perform the 1990s and consequently push structural reforms to the bottom of the agenda. Indeed, most EE countries would not have launched significant initiatives during 2000s in R&D, innovation and labour market policies if it weren’t for the significant amount of pressure from the European Union. Yet, in terms of policy capacity, these areas have been mostly neglected throughout the 1990s and early 2000s. This means that while EE countries face huge challenges in coping with the financial and economic crisis, most of these countries lack policy capacities to strategically devise response plans in order to launch structural reforms and in generating industrial, innovation and labour policies that would re-enforce catching-up processes.
**Conclusion: Way ahead**

The economic growth strategy followed by the EE economies in 1990s and 2000s can be described as foreign savings led growth in three senses: FDI, cross-border lending and exports. In hindsight it is relatively easy to see that when such high level of dependance on foreign savings takes place during increasing financial innovation and liberalization, and is coupled with simultaneous technological change in production that enables geographic dispersion without local linkages, financial and economic crisis in one or other form becomes an accident waiting to happen. It became a question of when, not if.

Thus, it should not come as a great surprise that EE countries became the epicenter for the global financial crisis. On the contrary, EE experiences in the last two decades seem to epitomize the problems created during these years globally. On the one hand, there is the fast and furious industrial restructuring driven by massive inflow of FDI; the rise of modularity in production means that large parts of restructured industry are oriented towards lower value added activities with low domestic linkages. On the other hand, equally transformative change in the banking sector essentially breaks the ties with domestic productive sector only to marry with help of enormous inflow of cross-border lending with domestic consumers. This led to loss of competitiveness through low productivity growth and through currency appreciations. All of this is accompanied by fragmented and hollowed out policy arena incapable of creating structural and innovation policies to further productivity growth. This kind of massive fragility in most EE economies was bound to lead to depression-like events in 2009 as witnessed in the Baltic economies.

However, it seems also fair to assume that EE economies with floating regimes and/or lower currency mismatches (Poland, Czech Republic, also Slovenia) are recovering more quickly. On the other hand, the Baltic economies with currency boards and resisting devaluations are headed towards persistently high levels of unemployment, low wages and public indebtedness (either now or down the road). Entrance into the eurozone will make the problems with lagging productivity and overvalued currencies not only even more glaring but would restrict policy options permanently. Thus, in particular the Baltic economies will in all probability face also emigration as jobs are bound to remain scarce.

Fiscal transfers from the EU are to remain highly important for all EE economies, yet without significant enhancement in policy capacity, EE economies will simply free-ride on EU transfers and stimulus programs and postpone much needed industrial policies even further into the future. This way, however, EE threatens to become a real burden on EU’s competitiveness.