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Is the Catching-up Process in Central and Eastern Europe Sustainable?

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Abstract

This paper focuses on the experiences during the global financial crisis of the ten new eastern members of the European Union. It investigates their fiscal sustainability and likely growth path. It arrives at two major conclusions. First, fixed exchange rates prompted the greatest fiscal and structural adjustments because neither devaluation nor external liquidity were viable alternatives. The crisis resolutions of the Baltic countries and Bulgaria have proven that internal devaluation is a possible and viable option. The fixed exchange rates of the currency board countries have not impeded adjustment but facilitated radical adjustment. Second, the crisis has forced all countries to trim their public sectors and improve their already well-functioning economic systems, rendering them even more competitive. Most factors point to a renewed, sound economic growth, especially in the Baltics, though it will be constrained by less credit expansion because of deleveraging and slow economic growth in Western Europe, the dominant export market of Central and Eastern Europe.

This paper focuses on the experiences during the global financial crisis of the ten new eastern members of the European Union that joined the Union in 2004 or 2007.[1] They are from north to south: Estonia, Latvia, Lithuania, Poland, the Czech Republic, Slovakia, Hungary, Slovenia, Romania and Bulgaria. Together we call them Central and Eastern Europe (CEE).[2]

After an initial transformation recession in the early 1990s, these countries saw a period of considerable catching-up with the members of the European Union, especially during the boom from 2000 until 2008. During the global financial crisis 2008-10, however, several countries, notably the fast-growing Baltic countries, suffered substantial setbacks.

They all came out of the financial crisis quite well within about two years. This paper investigates their fiscal sustainability and likely growth path. It tries to answer the question whether the CEE crisis countries have only exited the financial crisis or whether their economic convergence with the old members of the European Union will restart as well. Their European convergence is likely to continue, though at a somewhat lower pace than before 2008. This paper deals entirely with the purely economic side of the crisis and leaves all politics and considerations of political economy aside.

In a first section, I shall review the main features of the financial crisis. The second section reviews the resolution of the financial crisis. A third section is the focus of this paper. It investigates the outcomes: what the crisis resolution meant for competitiveness and future growth. As a means of comparison, I use the PIGS – Portugal, Italy, Greece and Spain, the weakest and least developed part of the EU also in crisis.

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[1] I am grateful to Natalia Aivazova for excellent research assistance.
[2] This book draws on our two recent books Åslund (2010) and Åslund and Dombrovskis (2011).

Finally, we conclude what this might mean for future convergence of the ten new eastern members of the EU with the old members.

The main conclusion is that the three Baltic countries have undertaken very major structural changes and are likely to achieve among the highest growth rates within the EU for the foreseeable future. But also the other CEE countries have carried out sensible changes and are likely to see their economic convergence with the EU to continue.

Since our interest in this paper is the effects of policy, not the impact on the economy as a whole, all averages are unweighted. The statistics used are primarily from Eurostat and the IMF World Economic Outlook databases.

The Nature of the Financial Crisis in Central and Eastern Europe

The East European financial crisis of 2008-9 was a standard credit-boom-and-bust cycle leading to a current account crisis quite similar to the East Asian crisis of 1997/8. It was overheating arising from excessive success. Large private capital inflows had mounted to too much credit and private debt. The pace of their expansion had been dangerously rapid, and increasingly the capital inflows consisted of short-term bank loans, which were increasingly spent on consumption and real estate investment, but investment was also high. Wages and real estate prices skyrocketed, rendering these countries ever less competitive, which further undermined their current account balance. Output plunged and unemployment soared.

The causes of the financial crisis in CEE were a combination of three factors: very loose global monetary conditions, an open, attractive investment environment, and exchange rate policies that allowed the global monetary overflow to boost domestic

money supply. Yet, their leverage was limited, and the credit volumes were moderate in relation to GDP. With the exception of Hungary, none of the Central Europeans suffered from a large fiscal deficit or excessive public debt at the outset, and they had no conspicuous systemic flaws (Darvas and Pisani-Ferry, 2008).

The dominant policy issue was exchange rate policy. The ten East European countries had three different exchange rate regimes. Only two countries, Slovenia and Slovakia, had been allowed by the EU to adopt the euro in 2007 and 2009, respectively. Four countries had fixed exchange rates based on currency boards – Estonia, Latvia, Lithuania, and Bulgaria. Formally, Latvia did not have a full-fledged currency board, but it operated its financial system as if that was the case. The remaining four countries - Poland, the Czech Republic, Hungary and Romania – had floating exchange rates and essentially pursued inflation-targeting. Because of the dominance of the exchange rate debate, we have grouped the countries in these three groups in all figures.

Latvia, Estonia and Lithuanian saw the biggest output plunges from peak to trough of 25, 20 and 18 percent, respectively (IMF forthcoming). Countries with the euro or floating exchange rate and decent fiscal policy did better. Poland stood out as the luckiest economy with economic growth in 2009. Also the Czech Republic, Slovakia and Slovenia did reasonably well. Only three countries needed IMF standby programs: Hungary, Latvia and Romania, but we consider also Estonia, Lithuania and Bulgaria crisis countries, since they required substantial fiscal adjustments.

The four countries that had fixed exchange rates (Bulgaria, Estonia, Latvia and Lithuania) had no means to sterilize the large capital inflows, as they were caught in the "impossible trinity:" With fixed exchange rates and free capital flows, they could not

pursue independent monetary policy. If they were to raise their domestic interest rates, they would only attract larger capital inflows (Oxelheim 1980). They had hardly any bonds. Their only policy tools were fiscal policy, tax policy and bank regulation, which could and should have been used more, but few did so during the boom. Bulgaria did try to tighten monetary regulation before the crisis, but lending escaped abroad (IMF, forthcoming). Of the countries with fixed exchange rates Lithuania and Latvia had almost balanced budgets, while Estonia and Bulgaria maintained steady budget surpluses, which explained why they could manage without IMF programs.

The crucial cause of these sharp output falls was a "sudden stop" as capital inflows that stopped and were reversed.[3] The severe squeeze of the international liquidity from September 2008 until spring 2009 made the floating exchange rates plummet. In early 2009 worries prevailed that Central and Eastern Europe would suffer a devastating bank crisis, but it never happened. West European banks owned most of the banks in Central and Eastern Europe and the fear was that they would withdraw from the region, but not a single Western bank departed from any CEE country during the crisis. The ECB and other central banks in Europe flooded their commercial banks with cheap liquidity, and the EU stipulated that their banks should not be forced to sell their foreign subsidiaries. The IMF and the EBRD demanded coordinated commitments from the banks concerned not to cut and run from the east. From April 2009, the credit crunch eased, and the floating exchange rates recovered. In the end, most loans were rolled over and the feared financial withdrawal from Eastern Europe never occurred.

The countries that had the euro, or currencies pegged to the euro, faced the more publicized problem of an overvalued euro exchange rate, though it has been somewhat

[3] This notion was coined by Dornbusch, Goldfajn, and Valdés (1995), Calvo (1998).

exaggerated. A review of the exports in 2009 suggests that industrial structure was far more important than exchange rate. Slovakia with the euro saw the biggest decline of 16.5 percent, but it was also greatly dependent on car exports, as was its neighbor the Czech Republic, whose exports contracted similarly by 15.8 percent, although it had a floating exchange rate. By contrast, nearby oil exporter Russia with a greatly depreciated exchange rate faced a drop of 36 percent in its exports. The exports of Lithuania and Latvia contracted less, 15.5 percent 13.9 percent, respectively (Bakker and Gulde, 2010, p. 22). Naturally, the high euro exchange rate in the midst of the crisis was bad for the eurozone and countries with euro pegs, but the damage was comparatively limited.

The US Fed provided many emerging and developed economies with credit swaps (Obstfeld, Shambaugh, and Taylor 2008). But non-euro CEE countries received no swap lines from anybody. The ECB offered Hungary and Poland repurchase agreements in October and November 2008, respectively, but they required highly liquid euro assets, rendering them insignificant. Hungary drew on its credit line, in an illusory game of pretence, exchanging euro assets of similar liquidity. Poland preferred to turn to the IMF being the first customer of a precautionary "Flexible Credit Line" facility of $20.5 billion in May 2009,[4] which was similar to a swap credit.

Public ECB statements about Eastern Europe are few, but the ECB policy was exceedingly clear. In January 2009, at the height of the liquidity squeeze, Yves Mersch, the governor of Luxembourg's central bank and an ECB governor told to the *Financial Times* that the ECB did not have "a mandate to be a regional United Nations agency."[5]

[4] "IMF Executive Board Approves $20.58 Billion Arrangement for Poland under the Flexible Credit Line," IMF Press Release no. 09/153, May 6, 2009.
[5] Ralph Atkins and Stefan Wagstyl, "ECB Set to Rebuff Non-Euro Nations," *Financial Times*, January 23, 2009.

Well, it was an EU agency, owned by all the member states, not only by the members of the eurozone. The ECB disregard for financial stability in the EU countries outside of the eurozone is difficult to understand. The central bank did nothing to mitigate the wild exchange rate moves in the fall of 2008 and early 2009 between the euro and EU countries with freely-floating exchange rates, although this endangered the banking system in the eurozone.

Crisis Resolution

The great positive surprise was that after two years, the crisis in the region had abated and all countries returned to economic growth thanks to decisive and successful crisis resolution. As these were forceful and radical they are well worth studying. Among the six crisis countries, the most radical cures were carried out by the Baltic countries, on which we shall focus, since they offer the starkest case studies, though also Hungary, Bulgaria and Romania undertook radical changes. Their cures have several characteristic features, although they were not shared by all.

As the width of the financial disaster was becoming evident, the first question was whether international financial assistance was needed or not. In spite of the tremendous economic shocks and prior imbalances, only Hungary, Latvia, and Romania required IMF standby programs. Also the European Commission, the World Bank and Latvia's neighbors contributed substantially. The reasons are illustrative. In Latvia, the biggest domestically-owned bank, Parex Bank, went under. For Hungary a government bond auction failed in October 2008, while no specific reason but a multitude of partial causes brought trouble to Romania. Estonia and Bulgaria could hold their own thanks to multi-

year fiscal surpluses. The biggest surprise was that Lithuania could manage without international financial support.

Several countries, including Lithuania, Latvia, Hungary and Romania, changed governments as the crisis started to bite, and the new governments were invariably bent on dealing with the financial crisis head on. These government changes were facilitated by the parliamentary system with coalition governments. These governments quickly adopted radical crisis programs and budgets for 2009. The approach was quite radical, as the crisis demanded. But as the economic decline proceeded, even more radical measures became needed, so a supplementary budget with further cuts were adopted in the second quarter of 2009.

Surprisingly, none of the four countries with pegged exchange rates—Latvia, Lithuania, Estonia, and Bulgaria—devalued. In a small and open economy with great euroization, devaluation would have offered little relief. The main argument for devaluation would have been to boost exports, but these countries stayed competitive and could hardly have expanded their exports faster than they did. A devaluation would have bankrupted many banks and enterprises, but only one significant bank bankruptcy occurred in Latvia. Another problem avoided was a sharp rise in foreign indebtedness. Moreover, devaluation would have boosted inflation, as many prices are internationally set.

Instead, they pursued "internal devaluation," cutting wages and public expenditures, which rendered their cost levels competitive and allowed them to turn their large current account deficits swiftly into substantial surpluses. A corollary is that depreciation is a much over-advertised cure in current macroeconomic discourse.

Regardless of exchange rate policy, monetary policy and bank regulation, no small open economy can safeguard itself against sudden capital inflows and outflows. In fact, no country changed exchange rate policy, suggesting that exchange rate policy might be less essential than commonly thought.

Especially the three Baltic countries, but also Bulgaria, Hungary and Romania, undertook very radical fiscal adjustments in early 2009. They were remarkable in three regards: they were radical, they were highly front-loaded, and they consisted to three-quarters of expenditure cuts rather than revenue measures. If policies had not changed, the IMF assessed that in 2009 Latvia would have reached budget deficits of 18 percent of GDP, Lithuania 16 percent and Estonia more than 10 percent of GDP. Therefore, these countries undertook in that very year gross fiscal adjustments of 13.9 percent of GDP in Latvia, 8.8 percent of GDP in Estonia, and 8.0 percent of GDP in Lithuania (Purfield and Rosenberg, 2010, pp. 17-18).

Large cuts in public expenditure facilitated beneficial structural reforms. The most popular reforms were cuts in the state apparatus. All did that, but Latvia went the furthest, cutting the number of state agencies by half, the number of public servants by 30 percent, and the average public wage by 26 percent, while prohibiting double earnings by public servants. The ministers set an example by accepting salary cuts of 35 percent (Åslund and Dombrovskis, 2011). Lithuania cut wages by 20 percent.

A hard and unpopular measure was to cut wages throughout the economy. In general, private sector wages cuts were smaller than in the public sector. By the end of 2009, average earnings had fallen from the peak by 11 percent in Latvia, 9 percent in Lithuania and 6.5 percent in Estonia (Purfield and Rosenberg, 2010, p. 24).

Social benefit expenditures had risen excessively throughout the region during the boom years 2005-8. Now, the governments had little choice but to trim sickness, disability, maternity and pension benefits, often in a progressive fashion to safeguard the most vulnerable. At the same time, eligibility requirements were tightened. Education and health care reforms are proceeding, but more gradually. Financing is being tied to output and quality rather than to institutions and moved from real estate to qualified professional services. In health care, financing is transferred from hospitals to primary care. Latvia has closed down many schools with too few students. Lithuania has launched a substantial higher education reform, tying state financing to students, so that institutions of higher education are competing to attract the best students and have obtained incentives both to economize on resources and to raise quality.

Most of the CEE countries have reasonable business environments, but virtually all of them undertook substantial reform to improve it further during the financial crisis. The easiest reforms were deregulation of markets. The Baltic countries have largely liberalized their markets for goods, services and capital, but with the guidance of the World Bank index for ease of doing business they advanced further.

Several countries also carried out substantial liberalization of their labor markets, removing restrictions on flexible work arrangements, and unemployment has fallen fast from high peaks, for example, from 20.7 percent in Latvia in the first quarter of 2010 to 16 percent in the second quarter of 2011. Most governments have established substantial job support programs with EU funds. The two goals of increasing employment and social safety have been reasonably balanced.

The single big failure during the crisis has been reversal of pension reform. Public pensions have expanded at the expense of private pension schemes and their share of GDP has risen, as dictated by equity concerns and fiscal necessity. Pension cuts in Latvia, Romania and Lithuania were revoked by their respective Constitutional Courts. The country that advanced most with entitlement reform during the crisis was Hungary, which even decided to raise the retirement age in the midst of the crisis. Governments need to proceed with pension reform, restoring the funding of the second, private pillar of the pension system. In June 2011, the Lithuanian parliament legislated a gradual increase of the retirement age to 65 for both men and women, to render the public pension system financially sustainable (IMF, forthcoming). This has to be done throughout the region.

While the total tax burden increased marginally, the structure of the tax system changed considerably. In all the six crisis countries, taxes moved from labor and corporate profits to consumption, while tax bases were broadened. Many countries raised excise taxes and eliminated loopholes in the value-added tax (VAT). The worst hit crisis countries, Latvia, Lithuania, Hungary and Romania, were forced to raise their VAT by a few percent. Property taxes were raised in a few countries, notably Latvia and Romania, but the Romanian Constitutional Court aborted the Romanian property tax.

The flat personal income tax stays popular. When the crisis hit, six of the ten countries had flat income taxes, ranging from 10 percent in Bulgaria to 23 percent in Latvia. Now their number has expanded to eight as the Czech Republic introduced a flat income tax of 15 percent in 2008, and the Hungarian government adopted one of 16 percent in 2011. In general, personal taxes have gradually been reduced. Lithuania has done so most radically, slashing its flat personal income taxes from 33 percent in 2006 to

15 percent at present. Corporate profit taxes are similarly low, and the number of taxes is small. This tax structure offers people and entrepreneurship improved incentives for work.

The CEE countries have greatly benefited from larger EU funds, which they realized had not been fully utilized. Especially Latvia and Lithuania have sharply raised their absorption of such grants from 3-4 percent of GDP to 6-7 percent of GDP. Not least, several governments established substantial job support programs with EU funds. Yet, Bulgaria and Romania have had serious problems to access EU funds, being unable to fulfill all EU requirements.

Outcomes

We are interested is two kinds of outcomes. First, has CEE got their macroeconomic situation under control? Second, have they developed conditions for a return to high economic growth so that they can pursue economic convergence with the old EU-15?

Throughout the region, swift economic adjustment took place from the end of 2008. The East European current account crisis that erupted in the fourth quarter of 2008 was settled in the middle of 2010, when all countries had returned to economic growth. The region as a whole lost two-three years of economic growth, which was sad but no catastrophe, considering the excellent growth the region enjoyed from 2000 until 2008. In 2010, only Romania did not grow, while Latvia was on balance stagnant. In 2011, all the CEE countries are set to grow significantly (figure 1).

Seldom has the world seen such rapid changes of current account. The swing was the greatest in Latvia that went from a current account deficit of 13 percent of GDP in

2008 to a surplus of 9.4 percent in 2009 – no less than 22 percent of GDP in one single year. Estonia and Lithuania also shifted from big deficits to significant surpluses, while most other countries ended up close to balance. Only Bulgaria maintained a large current account deficit of 9.5 percent of GDP, but it was financed by continued large foreign direct investment. By 2010, no CEE country had a larger current account deficit than 4.5 percent of GDP, and the countries worst hit by the crisis displayed surpluses. Greece and Portugal, by contrast, had current account deficits of 10 percent of GDP (figure 2).

Inflation that had hit the double-digits in the Baltic states and Bulgaria in 2008 fell sharply in the deflationary climate of the global recession because of minimal credit issue. In the Baltic countries, the change was most extreme. Credit had expanded by about 50 percent a year in 2006 and 2007, but it started shrinking in 2009, resulting in 1 percent deflation in Latvia in 2009. In 2010 and 2011, most countries have moderate inflation of about 3 percent (figure 3). These countries can finally seize control of their price development. Yet, no other country than Latvia showed deflation for any year.

Budget deficits were limited in 2007 but increased because of the crisis, but not as much as in Western Europe. The average unweighted budget deficit of the CEE-10 rose from 2.8 percent of GDP in 2008 to 6.6 percent of GDP in 2009, and it contracted minimally to 5.6 percent of GDP in 2010. Most countries are intent on reducing their budget deficits to 3 percent of GDP by 2012. This stands in stark contrast with the PIGS (Portugal, Italy, Greece and Spain), where budget deficits swelled to 10.6 percent of GDP in 2009 and stayed at 8.6 percent of GDP in 2010 (figure 4).

Public expenditures rose as a share of GDP. Before the crisis, the EU-15 had average public expenditures of 46-47 percent of GDP. Central Europe had almost as high

public expenditures, but the average was boosted by Hungary. The three Baltic states saw their public expenditures rise as a share of GDP from 35 percent in 2007 to 45 percent in 2009, while Central Europe experienced a marginal rise to 46 percent of GDP. Bulgaria and Romania with far lower public expenditures, peaking at 38 percent of GDP in 2010 (figure 5). In the crisis year of 2009, public expenditure as a share of GDP rose sharply because of contracting GDP, rising pension costs and other social costs related to rising unemployment. Still, the East Europeans largely abstained from state aid so common in Western Europe during the crisis.

Based on these criteria, we can claim that CEE with the exception of Hungary has overcome the macroeconomic crisis. They have sound economic growth, although much lower than before the crisis. Current account is reasonably close to balance. Budget deficits are moderate and set to fall further. Only Hungary has a public debt that exceeds the Maastricht limit of 60 percent of GDP, while most CEE countries have public debts of about 40 percent of GDP. The only really worrisome feature is that public expenditure has risen far too high. In Central Europe and the Baltics, public expenditure as a share of GDP has risen to 45-46 percent, and it needs to be brought down to about 35 percent of GDP to allow for sound economic growth (Sachs and Warner 1996, Tanzi and Schuknecht 2000). Fortunately, most CEE governments have such ambitions.

Our second query is whether conditions have been created for high future economic growth. By and large, the CEE countries had already advanced further in structural reforms than other countries at their level of economic development, which was a reason for their fast economic growth (excepting only Hungary because of too large public debt and still the highest public expenditures).

A first measurement of structural reform is ranking on the World Bank ease of doing business index. Among the CEE countries, Latvia has taken the lead, advancing to no. 21 among 183 countries, while Estonia ranks no. 24 and Lithuania no. 27. Since Latvia and Lithuania rank about no 50 in the world in terms of GDP per capita in purchasing power parities, this indicates substantial capacity of further growth. Romania is doing the worst, ranking no. 72, but Italy ranks no. 87 and Greece no. 100 (figure 6). Typical recent reform measures have been to make it simpler to register property, to resolve insolvency, to pay taxes, to start a business and to enforce a contract.

As a consequence of improving business conditions, corruption is abating. Transparency International's Corruption Perception index offers a similar ranking, but it reflects the greater inertia of corruption than of deregulation. It ranks Bulgaria and Romania as poorly as Greece and Italy (figure 7), although the former two do much better on the ease of doing business index.

The large structural adjustments have had considerable, but varied, impact on real unit labor cost. It has been brought down both by nominal wage cuts and various forms of rationalization. The real unit labor cost has fallen in no less than six of the ten CEE states, most of all in Latvia where it fell by 16.4 percent from 2008 to 2011, flowed by Romania by 11.7 percent, Lithuania by 9.5 percent and Hungary by 9.1 percent (figure 8). Naturally, this means greatly improved competitiveness of these countries.

The real effective exchange rate (REER, deflated with unit labor cost) offers quite a revealing composite picture. The overall message is that nominal or internal devaluation can work, but labor costs must be checked either way. The differences from 2008 to 2010 are amazingly large. Two countries stand out, Latvia and Poland, whose

REER fell by 17 and 12 percent, respectively. Also Hungary, Lithuania and Estonia saw significant falls. By contrast, in Bulgaria, Slovakia and Slovenia, one country with fixed exchange rate and two with the euro, REER rose by 109, 105, and 105 percent, respectively (figure 9). Considering other factors, the three Baltic countries and Poland appear set for significant and steady economic growth, while Bulgaria, Slovakmia and Slovenia have ended up with too high a cost level, while Hungary suffers from other problems.

The most impressive effects of the crisis resolution are the most surprising. Exports have taken off in the four countries with fixed exchange rates. In the first half of 2011, the Baltic countries and Bulgaria increased their exports by stunningly 29-42 percent in comparison with the first half of 2010. Romania formed an intermediary case with a growth of 27 percent, while exports of the other five countries expanded by 14-20 percent. Spain Portugal and Italy all saw their exports grow at a similar rate of 15 percent like Poland or Slovenia (figure 10). The picture among the CEE countries is similar if we compare 2010 with 2009 with great expansion and similar differences between the CEE countries. Export expansion led the recovery of output in all countries and it was driven by a similarly rapid increase in manufacturing.

This result is surprising and it leads to one major conclusion: Depreciation is neither necessary nor beneficial for the kickstart of exports contrary to conventional wisdom. Paradoxically, the country with the largest real effective exchange rate decline – Poland, experienced the smallest export expansion.

A priori, this conclusion appears illogical. Depreciation should reduce export prices, and with normal price elasticity exports should increase. Such reasoning,

however, would be incomplete. The actual choice was not between depreciation and stable real exchange rate, but between nominal or internal devaluation. As we have discussed above, the countries with fixed exchange rates undertook far greater structural adjustments than those with floating exchange rates. Nominal devaluation salvaged Poland, Hungary and the Czech Republic from, the need to undertake more radical structural reforms.

Similarly, Slovakia and Slovenia, which enjoyed ample liquidity thanks to being members of the Economic and Monetary Union, did not face the same pressure to carry out major structural reforms and wage cuts as the countries with currency boards that had to defend their fixed exchange rates with little access to liquidity. This reasoning boils down to Janos Kornai's (1980) old argument about the impact of hard budget constraints. Export expansion was proportionate to the contraction of domestic demand, which was the greatest in the Baltic countries and Bulgaria.

The countries that have reached the highest export growth and GDP growth are Estonia and Lithuania followed by Latvia, while the three other crisis countries – Romania, Hungary and Bulgaria – have had slower recoveries. The first three have been the leaders in structural reform during the crisis which appears the most likely reason for their significantly better performance. The three latter focused more on austerity and less on structural reforms, which seems to have generated less growth. The pattern is clear. The countries with fixed exchange rates undertook both more fiscal adjustment and structural reform, which resulted in faster export and output growth.

This does not imply that fixed exchange rates without the euro is a desirable policy. On the contrary, it was the absence of ECB liquidity that rendered the crisis so

deep in the Baltic countries. The point is rather that they have exploited their profound crisis in the best possible way. With their elevated public expenditures, expenditure cuts were preferable to tax increases, and that was their choice. They did not only opt for austerity but also pursued structural reforms on a broad front, and they are already paying off. The sad observation is that major fiscal adjustments and reforms rarely occur without being prompted by a major crisis (Drazen and Grilli, 1993). Estonia was so determined to join the EMU, that it managed to do it already in January 2011, and Latvia and Lithuania are firmly determined to do so in 2014, while Bulgaria's EMU entry has been somewhat delayed by the crisis.

Among the CEE countries, a clear pattern is present. The biggest countries – Poland, Romania, the Czech Republic and Hungary – have opted for floating exchange rates and inflation targeting, while the six smaller economies have adopted fixed exchange rates or the euro. Similarly, the four big countries have had larger budget deficits on average during the last decade than the six smaller ones. Clearly, we are seeing different choices depending on the size of the economy, and they seem rational. Inflation targeting appears to have worked well in Poland and the Czech Republic, while it does not make much sense in very small and open economies, notably like the Baltics, which can hardly shield themselves from excessive capital inflow with any exchange rate and monetary policy. Since the small nations perceive more external dangers, they manage to maintain greater fiscal discipline than the more confident larger countries.

The existence of an IMF standby program does not appear important in itself. Latvia carried out substantial reforms under an IMF program, while Hungary and Romania did much less. The explanation is that the IMF is favorable to structural

reforms, but it does not necessarily demand them, whereas its conditions on fiscal and monetary policies are strict.

For future growth, investment in human and physical capital is vital. Given the level of development, an investment ratio in the order of 25 percent of GDP or slightly more would appear appropriate. At the peak of the boom, investment ratios were if anything to high, ranging from 23.5 percent of GDP in Hungary to 40 percent of GDP in Latvia. These ratios plummeted during the crisis from 37 percent of GDP in the Baltics in 2007 to 16.5 percent of GDP in 2009. Yet, with economic recovery investment is resurging, and seems likely to converge around 25 percent of GDP in the near future (figure 11). Investment will probably be sufficient to sustain a substantial growth.

Conclusions: Fixed Exchange Rates Brought More Adjustment and Economic Convergence Likely to Continue

When discussing CEE during the global financial crisis, it is important to remember that only six of these ten countries really experienced severe crisis, namely the three Baltic countries, Hungary, Romania, and Bulgaria. Slovakia and Slovenia were shielded by being members of the EMU, and Poland and the Czech Republic escaped most of the crisis through large depreciations. Two major conclusions arise from this paper.

First, fixed exchange rates prompted the greatest fiscal and structural adjustments because neither devaluation nor external liquidity were viable alternatives. The crisis resolutions of the Baltic countries and Bulgaria have proven that internal devaluation is a possible and viable option. The fixed exchange rates of the currency board countries have not impeded adjustment but facilitated radical adjustment.

The Baltic countries have undertaken much more radical spending cuts than most economists considered possible. The Baltic countries carried out fiscal adjustment of close to 10 percent of GDP in 2009 alone. Their experience has brought out the universal advantages of carrying out as much of the belt-tightening as possible early on with radical and comprehensive adjustment. As a consequence of strong and early fiscal measures, most performance indexes bottomed out in the first half of 2009, for example industrial production, consumer confidence, market interest rates and the stock market. Thus, the government could restore confidence early on. Unemployment, usually the last crisis variable to peak out, did so in early 2010.

Central and East Europeans have by and large bought the idea that it is better to cut expenditures than to raise taxes. Three-quarters of the early fiscal adjustment in the Baltics came through public expenditure cuts rather than tax hikes. Large selective cuts facilitate beneficial structural reforms. They do not only reduce the capacity of public services but also often improve the quality of public services through reforms of administration, health care and education. Alberto Alesina and Silvia Ardagna (2009) offer substantial statistical evidence for the thesis that "fiscal adjustments…based upon spending cuts and no tax increases are more likely to reduce deficits and debt over GDP ratios than those based upon tax increases. In 2011, the three Baltic countries belong to the fastest expanding economies in Europe with a likely growth of 5-6 percent. None of them suffered more than two years of output contraction. Their growth is driven by exports.

Second, the crisis has forced all countries to trim their public sectors and improve their already well-functioning economic systems, rendering them even more competitive.

The Baltics stand out for several wise choices. They acted fast with large, early adjustments. They chose to cut their elevated expenditures rather than raise taxes. They used the austerity for structural reforms on a broad scale that are likely to promote economic growth.

With regard to exchange rate regimes, our observations confirm the current state of economics. On the one hand, the role of exchange rate regime seems to be overdone. Maurice Obstfeld and Kenneth Rogoff (2001, p. 373) pointed out "the exceedingly weak relationship between the exchange rate and virtually any macroeconomic aggregates." Other policies are simply more important. On the other hand, Andrew Rose (2011, p. 663) noted: "Very small countries tend to fix," especially for countries with less than 2.5 million, which includes Estonia and Latvia, and Lithuania is only slightly larger.

Most factors point to renewed, elevated, sustainable economic growth for most of the region with the possible exception of Hungary and Slovenia that have undertaken less reform. Overall growth will be constrained by less credit expansion because of deleveraging and slow economic growth in Western Europe, the dominant export market of Central and Eastern Europe. Free market policies are not in danger, nor are democracy or social peace.

After a decade of very high economic growth, these countries encountered their first serious recession, but they took it on the chin. At the outset of the crisis it appeared as if the big issue to resolve was the exchange rate and monetary regime, but in the end no country changed exchange rate regime, suggesting that it was neither crucial nor necessary. There is no reason to suspect that these countries have got stuck in any middle-income trap (Eichengreen, Park and Shin 2011). They have competitive

economic systems and are likely to undertake sufficient investment in human and physical capital.

Before the crisis, all the CEE countries evidenced substantial economic convergence with the old EU-15, and they do so also after the crisis (figure 12). The three Baltic countries have undertaken very major structural changes and are likely to achieve among the highest growth rates within the EU for the foreseeable future. But also the other CEE countries have carried out sensible changes and are likely to see their economic convergence with the EU to continue, which is the second major conclusion of this paper.

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