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Adjustment under a Currency Peg: Estonia, Latvia and Lithuania during the Global Financial Crisis 2008-09

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Abstract

The paper traces the Baltics' adjustment strategy during the 2008–09 global financial crisis. The abrupt end to the externally-financed domestic demand boom triggered a severe output collapse, bringing per capita income levels back to 2005/06 levels. In response to this shock, the Baltics undertook an internal devaluation that relied on unprecedented fiscal and nominal wage adjustment, steps to preserve financial sector stability as well as complementary efforts to facilitate voluntary private debt restructuring. One-and-half years on, the strategy is making good progress but not yet complete. Confidence in the exchange rate was maintained, the banking system was supported by its parent banks, external imbalances and inflation have largely disappeared, competitiveness is improving, and fiscal deficits are gradually being brought back towards pre-crisis levels. However, amid record levels of unemployment, further reforms are needed to foster a return to more balanced growth, fiscal sustainability, and a healthier banking system.

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I. INTRODUCTION[1]

The Baltics' experience during the recent crisis has drawn much attention. With cumulative output declines of 20–25 percent from their peak levels, Estonia, Latvia and Lithuania were more severely affected by the turmoil in global trade and financial markets than any other region in the world. They experienced a collapse of credit and demand, and a dramatic swing in the current account, yet their long-standing exchange rate pegs remained in place and an outright banking crisis was avoided. At the same time, unemployment has surged and earnings have fallen, highlighting the high social cost imposed by the crisis and subsequent adjustment.

The paper traces the Baltics' unique adjustment experience during the 2008–09 global financial crisis. The overall policy strategy in response to the crisis was similar in all three countries, notably a reliance on contractionary fiscal and nominal wage policies rather than nominal exchange rate adjustment. The paper highlights communalities but also differences (Table 1) between the three countries—often overlooked by outside observers—and how these increasingly played out in their policy response as the crisis evolved. It offers some very tentative conclusions about the factors that made their strategy possible. This may yield insights for other countries attempting such sharp adjustments under a currency peg or in a currency union.

Table 1. The Baltic Countries at the Eve of the Crisis, 2007
(Percent of GDP, unless otherwise noted)

	Estonia	Latvia	Lithuania
Population (Millions)	1.34	2.28	3.38
GDP (Billions of euros)	15.8	21.1	28.6
Real GDP growth (YoY percent changes)	6.9	10.0	9.8
Manufacturing sector	17.6	10.3	18.7
Inflation (YoY percent changes)	6.7	10.1	5.8
Fiscal balance	2.6	-0.3	-1.0
Current account balance	-17.6	-22.3	-14.5
Trade with EU (Percent of total trade)	78.6	77.4	68.3
Public sector debt	3.8	9.0	16.9
Credit of MFI to non-financial private sector	93.9	88.7	60.3
WEF Institutional strength ranking 1/	34	59	58
Exchange rate regime	Currency board vis-a-vis euro	Currency band vis-a-vis euro (+/- 1%)	Currency board vis-a-vis euro

Source: Eurostat; Haver; EBRD; World Economic Forum; and IMF staff estimates.
1/ Country ranking out of the 131 countries ranked in 2007. A lower rank implies a higher institutional strength.

II. FROM BOOM TO BUST—A CHRONOLOGY

A. The Early Transitions

Since regaining independence some 20 years ago, the Baltics have been early and avid reformers. Hit harder by the breakup of the Soviet Union than other countries in Central and Eastern Europe (CEE), they swiftly embarked on wide-ranging price and trade liberalization, and privatization. Their policy frameworks focused on structural reforms supported by

[1] The authors would like to thank Zhaogang Qiao for his research assistance, Stephanie Eble, Alvar Kangur and Alex Klemm for their input on the fiscal section, and Anne-Marie Gulde, Mark Griffiths, Uldis Rutkaste, Darius Abazoris, Andres Sutt and Alex Klemm for their comments.

generally conservative fiscal policies. Fixed exchange rate regimes were introduced shortly after breaking away from the Ruble zone and provided strong nominal anchors.[2] As a result, macroeconomic conditions stabilized and sound market institutions were established quickly (Knöbl and Haas, 2003). The political goals of NATO and EU membership were achieved in 2004.

The transition to a market economy was by no means smooth. During the 1990s, the Baltics saw large swings in output, inflation and external balances (the post-independence recession, stabilization and rapid recovery, and then the Russian crisis), as well as a two waves of bank failures. This hardened the authorities' resolve to stick to their policy framework, even if it defied conventional wisdom of what would be politically feasible.[3] Having seen relatively short-lived periods of crisis followed by prosperity may have also increased the populations' resilience to economic changes. The experience during the first 15 years of independence thus provides some context to recent policy choices and social tolerance to harsh fiscal measures.

B. The EU Membership Boom

As they joined the EU, the Baltics entered a new boom phase (Figure 1). Their economies quickly bounced back after the 1998–99 Russian crisis, supported by closer integration with the Nordic countries. Private sector confidence was further boosted by the adoption of the acquis communitaire and the prospect of imminent euro adoption following entry into the EU's exchange rate mechanism (ERM2) in 2005. The key drivers of this boom were bank lending and a corresponding acceleration of domestic demand. Credit demand was fueled by high permanent income expectations and very low real borrowing rates on euro-denominated loans, which quickly became the predominant form of borrowing. On the supply side, banks' lending was in large part funded by borrowing from their Nordic foreign parents who were eager to gain market share in these rapidly growing markets. But even domestically-owned banks in Latvia and Lithuania had little difficulties to attract funding through non-resident private deposits or to borrow on the global wholesale market. Credit growth and capital inflows (as a share of GDP) to the Baltics exceeded those to most other CEE countries and reflecting the role of parent-bank funding their loan-to-deposit ratios rose sharply (Figure 2).[4]

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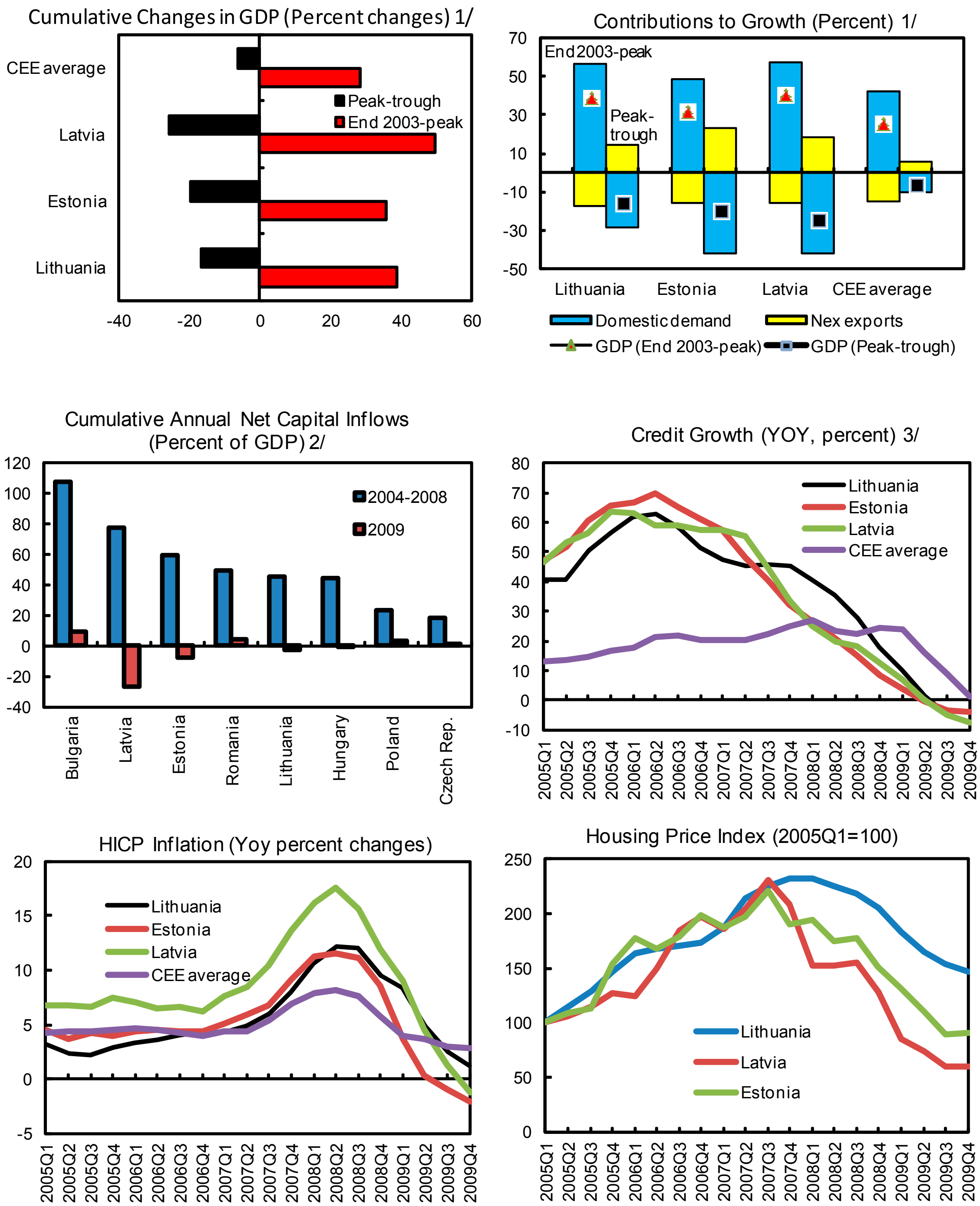
[2] For an analysis of the Baltics' exchange rate choices see Gulde-Wolf and Keller (2002). Lithuania and Estonia instituted currency boards, initially vis-à-vis the US Dollar in Lithuania, and to the Deutsche Mark in Estonia. Latvia chose a narrow exchange rate band against the SDR. By end-2005, all three Baltics had anchored their currencies on the euro.

[3] For example, the Fund initially advised against Estonia's decision in April 1992 to adopt a currency board arrangement on the grounds that the supporting fiscal policies would be too difficult to implement (Knöbl, Sutt and Zavoico, 2002).

[4] For a discussion of the credit boom in CEE countries see Bakker and Gulde-Wolf (2010). A Baltic-specific analysis is provided by Martin and Zauchinger, 2009.

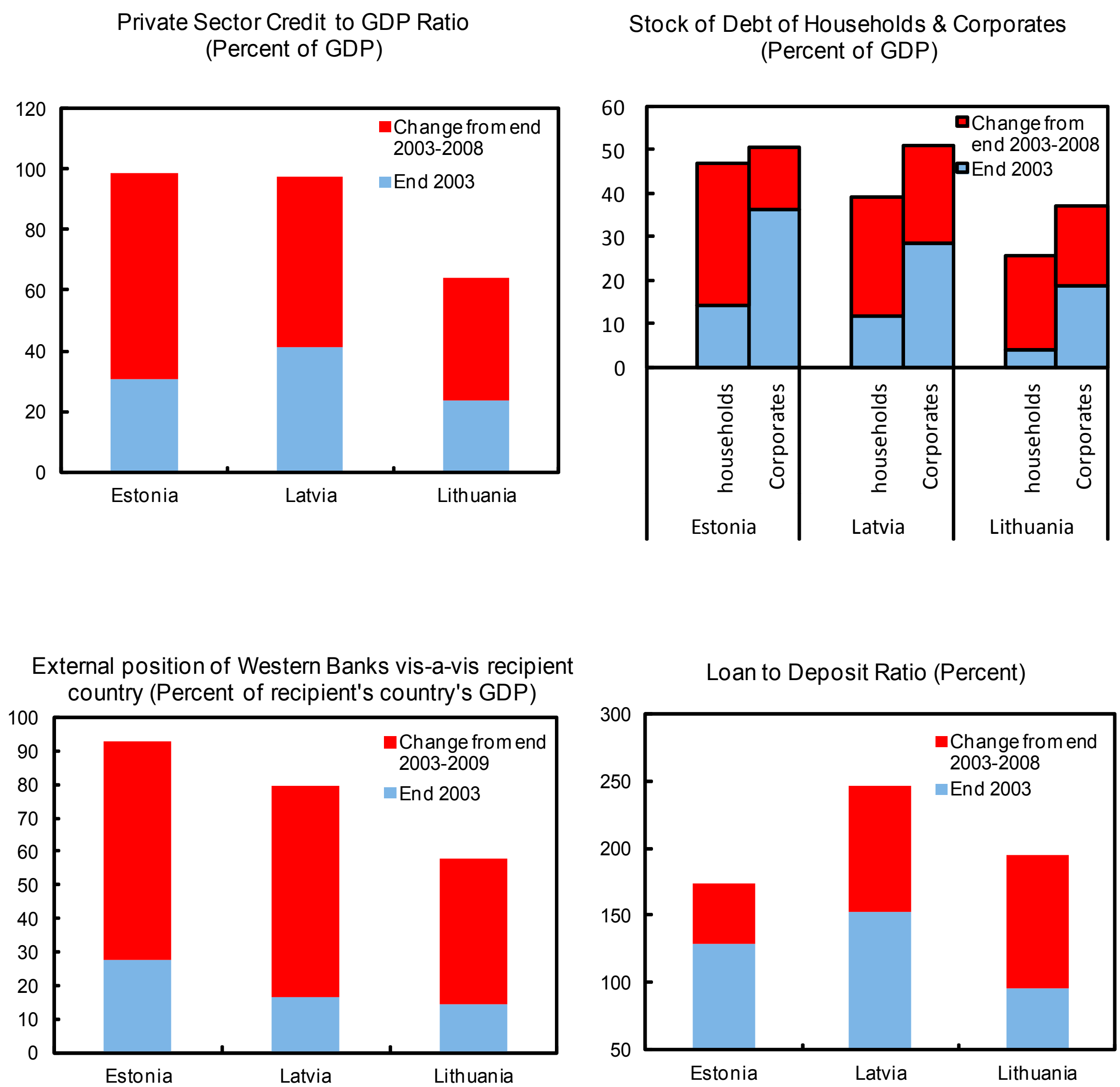
Figure 1. Baltic Boom and Bust, end 2003-09



Source: Haver; WEO; Global property Guide; and IMF staff calculations.

1/ CEE average is the average on Poland, Czech Rep., Hungary, Bulgaria and Romania. The peak differs across countries: 2008Q2 in Lithuania; 2007Q4 in Latvia and Estonia; 2008Q3 in CEE countries except for Hungary that is in 2008Q1 and Romania that is in 2008Q2. The trough is the latest available data in each country, except for Czech Rep., Poland and Bulgaria where the trough is as of 2009Q1.
2/ Net Capital Inflows refer to the financial balance which comprises total net FDI, net portfolio investment, and other net investment (excludes all EU-related funds).
3/ The CEE average is the average on Poland, Czech. Rep., and Hungary since data before 2007 on Bulgaria and Romania are not available.

Figure 2. Financial Sector Developments During the Boom, end 2003-08



Source: IFS; BIS, Locational Banking Statistics; Haver; and EBRD.

The economies eventually overheated, but more so in Estonia and Latvia than in Lithuania. Inflation surged to double digits, economy-wide wage growth exceeded productivity gains, and large external current account deficits emerged. Employment, credit and investment were increasingly directed towards the booming non-tradable sectors, specifically real estate, construction, retail and financial services. Increased absorption of EU grants may have also contributed to the boom (Rosenberg and Sierhej, 2007), as did cyclically loose fiscal policy. Overheating phenomena were most prominent in Latvia, where the authorities were also slowest to use the few policy tools at their disposal to cool the economy, such as fiscal and wage policy, or prudential regulations. The boom was least pronounced in Lithuania, partly reflecting the absorptive capacity of its larger economy but also the fact that corporate restructurings post Russian crisis resulted in larger productivity gains (IMF, 2010).

Growth started slowing in early 2008, before the onset of the global financial and real crises. The two main Swedish banks active in the region, recognizing the vulnerabilities associated with their rapidly expanded Baltic exposures, sought to engineer a controlled deceleration of credit growth from 40–60 percent per annum in 2005–07 to a targeted 20-25 percent. Confidence was also dented by S&P's change in the rating outlook and a short-lived currency run in Latvia (February 2007), political tensions between Estonia and Russia (May 2007) and first global financial market jitters (August 2007). Led by deflating equity and real estate bubbles, real activity started to decelerate in the first half of 2008, especially in Latvia and Estonia. Meanwhile, inflation remained high (partly due to the global commodity price boom, convergence and increases in indirect tax rates and regulated prices, but more so to excessive domestic demand), and wage growth continued unabated. The incipient end of the boom was recognized sooner in Estonia than in Latvia and Lithuania, where large pension and public sector wage increases were granted as late as mid-2008. In the late summer the Baltic economies seemed to be headed for a drawn-out post-bubble slowdown.

C. The Fallout from the Global Crisis

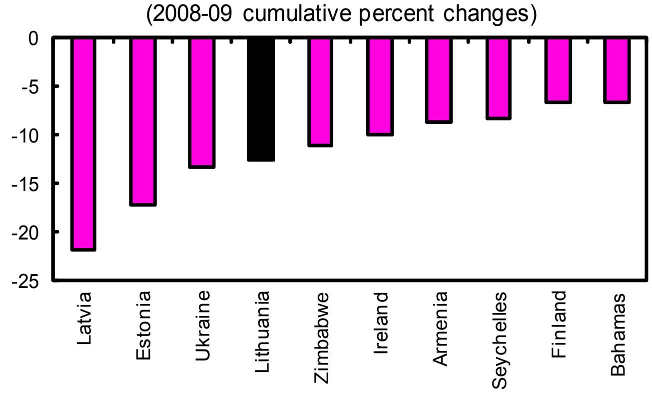
The Lehman's bankruptcy dramatically accelerated the downturn in all the countries and threatened to unhinge financial stability. Foreign-owned banks experienced varying degrees of loss of depositor confidence across the Baltics reflecting the freeze-up of global financial flows and concerns about the health of parent banks. But the drying up of global wholesale markets also impacted domestically-owned banks. The prime victim in the Baltics was Parex Banka, with a market share of 20 percent, Latvia's second largest bank: outflows of non-resident deposits, which had already started after the Russian-Georgian war in the summer of 2008, turned into a deposit run; moreover, large syndicated loans were falling due. In view of its systemic importance, the Latvian government in October 2008 took a 51 percent stake in the bank (later extended to 85 percent) and imposed partial deposit withdrawal restrictions. The Bank of Latvia also lowered reserve requirements and the policy rate in an effort to provide liquidity to the financial system.

In November 2008, the Latvian authorities sought balance of payment support from the IMF, the EU and Nordic countries. The package, which was approved in the IMF Board just before Christmas 2008[5] and by the EU's Economic and Financial Affairs Council (ECOFIN) in January 2009, provided the resources to meet Parex's external obligations and to bolster the financial system more generally, finance the rapidly increasing budget deficit and, by implication, support the currency peg. By establishing a financial safety net, it thus helped to head off a full-blown liquidity crisis in the other two Baltic countries which were also experiencing a run on the deposits (albeit at a much smaller scale than Latvia).

Even if an outright financial collapse was avoided, the global crisis had a profound impact on real activity. The cumulative output decline in 2008–09 ranged from 14 percent in Lithuania to almost 25 percent in Latvia—much higher than in other countries in the world (Figure 3). Real activity was primarily affected through two channels:

- ***Domestic demand***. In the last quarter of 2008, in response to the global liquidity crunch, banks' credit expansion—the engine of private demand during the boom—suddenly stopped. Consumer and investor confidence also plummeted, fueled by concerns about the stability of exchange rate pegs and banks, and the impact of the global recession. Retail sales for durables like cars came to virtual halt, investment projects were abandoned and credit demand dried up. Faced with a precipitous decline of tax revenues and unable to raise financing, governments sharply reduced spending which aggravated the contraction of aggregate demand. And as the crisis unfolded, unemployment rose sharply and nominal wages declined, further denting private consumption.

Figure 3. Output Declines in the World, 2008-09
(2008-09 cumulative percent changes)



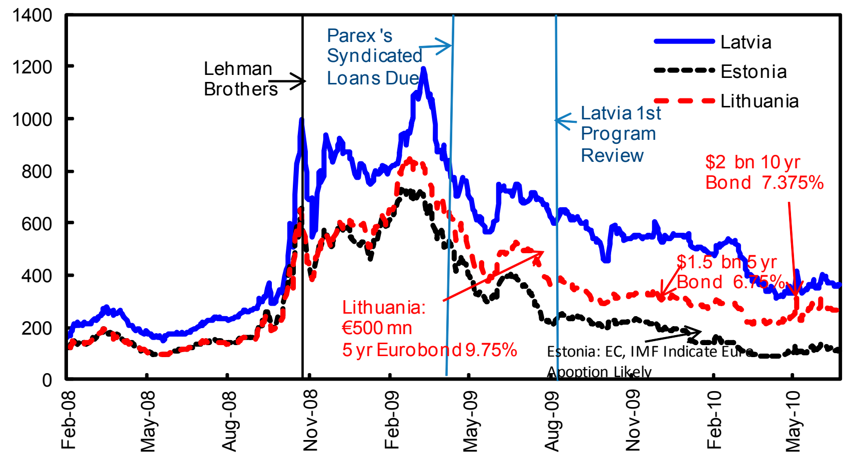
Source: April 2010 WEO.

- ***Exports***. The collapse of global trade severely impacted the Baltics because some of their primary trading partners—the Nordic countries and Russia—had also been disproportionally hard hit by the crisis. The Baltics's REERs appreciated as many trading partners' currencies depreciated sharply against the euro. While the decline of exports was steep (some 27 percent between Q3 2008 and Q3 2009), their overall contribution to the drop in GDP was less than domestic demand.

[5] The Swedish Riksbank provided a bridge loan while negotiations with international lenders were ongoing.

Confidence was further shaken through several waves of speculative pressures throughout 2009. These were mostly directed at Latvia, but contagion was felt in Lithuania and, to a lesser extent, Estonia. Market sentiment briefly stabilized following the Latvian program in late 2008. But pressures on CDS spreads, currency forwards and interbank lending rates soon re-emerged (Figure 4). The turbulence reached its peak in early summer 2009, when doubts arose about the new Latvian government's ability to pass a supplementary budget and secure continued external support under the IMF/EU program. Another brief period of tension followed in September-October 2009, again driven by questions surrounding Latvia's adherence to its ambitious adjustment program. Despite these episodes of stress, the closed nature of the Baltic currency markets, which made it very difficult for outside investors to take positions, enabled them to withstand these sporadic speculative pressures. More generally, the currency boards maintained their credibility.

Figure 4. Baltics 5-Year Credit Default Swaps (Basis points)



Source: Datastream.

The situation finally stabilized in the summer of 2009. A number of Baltic-specific factors added the improvement in global sentiment: Latvia's EU/IMF-supported program was brought back on track, Lithuania successfully had mobilized on several occasions private external funding at declining costs, and euro adoption in Estonia moved within reach. It also became clear that the Baltic governments were willing and capable to undertake necessary policy adjustments and that Nordic parent banks would stand by their subsidiaries. In the real economy, a rebound in global trade helped to pull-up exports and industrial production. But domestic demand and confidence indicators remained depressed throughout 2009.

III. The Baltic Adjustment Strategy

Beyond the immediate challenge of dealing with the crisis, the boom and bust had saddled the Baltic economies with severe legacies. The crisis not only set per capita incomes back to their approximate level around 2005–06. It also unveiled a number of underlying weaknesses built up over the early EU membership years (Figure 5). The severity of these challenges differed between countries. To varying degree, they included:

- ***Competitiveness*****.** The CPI-based economy wide-real exchange rate appreciated sharply during the boom, when economy-wide wage increases exceeded productivity gains, although the degree to which inflation in non-tradables spilled over to tradables sectors varied considerably across the three countries. A related feature was the concentration of resources in the non-tradable sector. Judging by the past increase in CPI- and unit labor costs real exchange rates, Latvia in late 2008 faced the largest competitiveness challenge.

- ***Public finances.*** Public expenditures had sharply increased during the boom years. With the crisis, this proved out of line with the tax base, which was likely to be permanently reduced following the crisis. In structural terms, fiscal imbalances going into the crisis at end-2008 were high across all three countries.

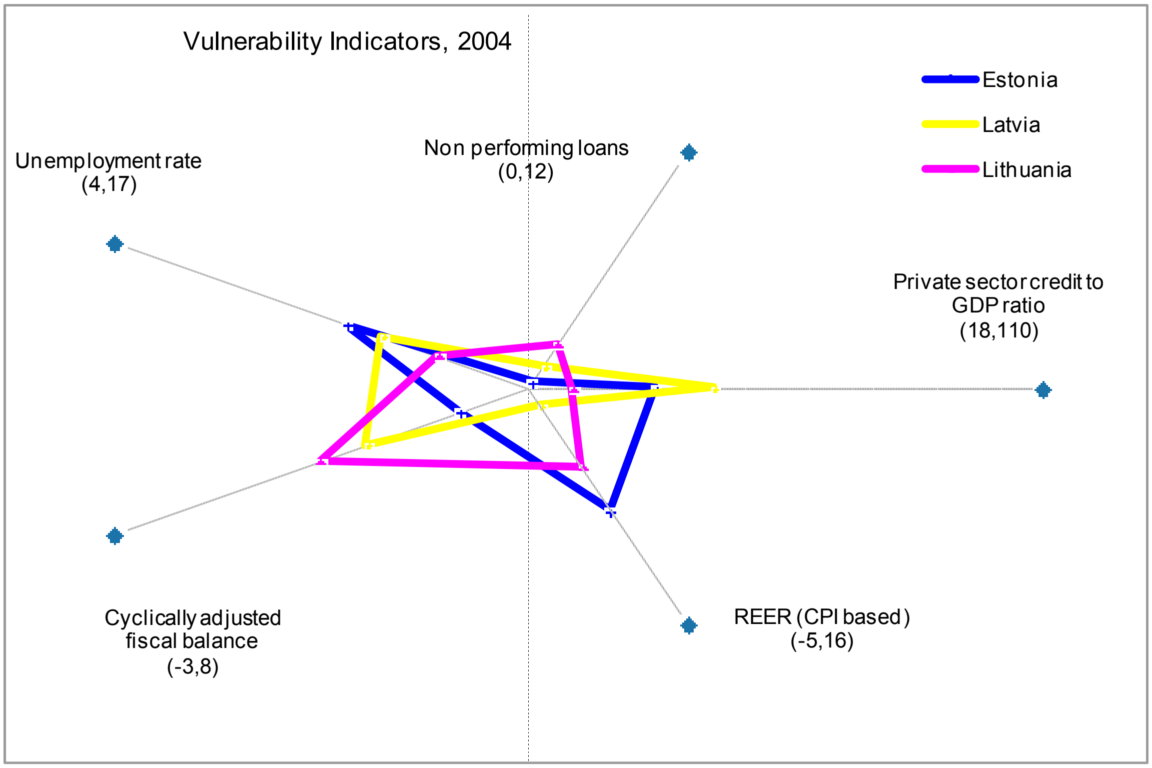
- ***Private sector debt***. During the credit boom, the indebtedness of households and corporates increased sharply, especially when measured against post-crisis incomes and assets. This debt overhang was most pronounced in Estonia and Latvia, while in Lithuania debt ratios remained low.

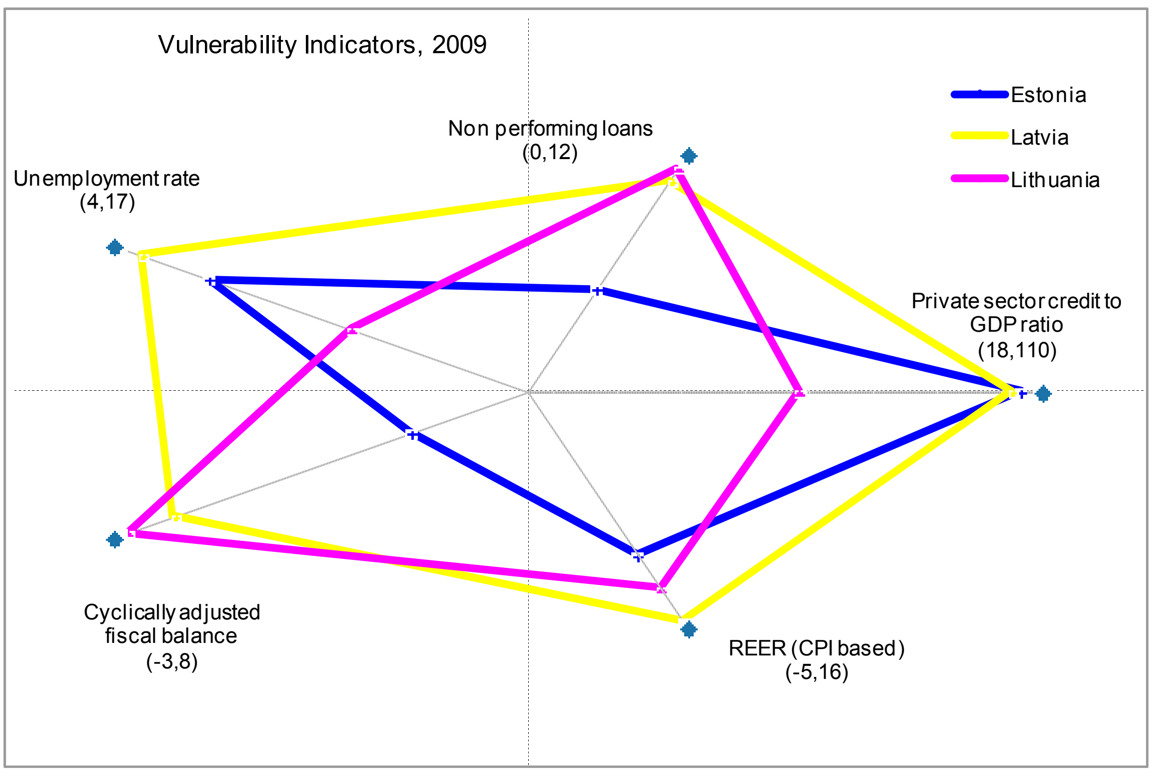
- ***Banking sector***. No major bank failed in the Baltics during the crisis, although some had to rely on extraordinary liquidity support from the state (Parex) or parent banks. But all of them saw a deterioration of their balance sheets through loan losses, impeding their ability and willingness to lend in the future. As measured by the level of reported non-performing loans, Estonia's banking system at end-2009 found itself in a considerably stronger position than Lithuania or Latvia.[6]

- ***Unemployment.*** Firms forcefully reduced employment during the crisis, and the unemployment rate in all three countries rose sharply. Some of this unemployment may, however, be structural as those workers employed in formerly booming sectors such as construction may find it difficult to find work. High inactivity levels also present challenges for social policy.

[6] The definition of NPLs and the degree to which banks are recognizing their losses may vary across countries.

Figure 5. How Policy Challenges Compare Across Baltics, 2004 and 2009[1/]





Source: GFSR; Haver; European Commission; INS; and IMF staff calculations.
1/ Non performing loans are the ratio of non performing loans to total loans; Cyclically adjusted fiscal balances are in percent of GDP; REER are measured as the deviation from the previous 5 years average.

The authorities' strategy to deal with these challenges was centered on maintaining macroeconomic stability including supporting the currency pegs. Their policy anchor was to maintain their present exchange rate arrangements until it was feasible to adopt the euro at the existing exchange rate parity and thus to exit from residual currency and liquidity risks. This fundamental policy choice commanded broad political and popular support in the Baltics. It was built on both economic and political arguments, mainly directed against the alternative strategy of nominal devaluation:

- With the vast majority of bank loans to corporates and households denominated in euros, a weaker exchange rate would dramatically reduce private sector net worth. It was feared that it would lead to a sudden and large increase in insolvencies and non-performing loans, with negative feed-back effects on the financial system and the economy as a whole.

- Moreover, devaluation would entail only small gains in competitiveness, as the exchange rate pass-through was assumed to be very high due to the large import content of exports and low margins. In any event, a quick export-led rebound of the economy was seen as unlikely during the global recession in 2008–09.

- The Baltic economies are exceptionally flexible, as proven during previous periods of stress, notably the Russian crisis. Even a large internal adjustment would therefore be feasible.

- The exchange rate pegs had been the anchor of macroeconomic stability for almost 20 years. Changing them, let alone moving to a more flexible exchange rate regime, was seen as seriously undermining confidence and macroeconomic stability. It would have also been perceived as a failure of the state and likely undermined popular backing for any supporting policies.

Adjustment was to be achieved by a mix of policies dubbed as "internal devaluation." Emphasis and content differed somewhat between the three countries, but they all more or less included the following four elements:

- ***Sizeable fiscal adjustment.*** The purpose was to (i) reduce fiscal funding needs, (ii) restore fiscal sustainability, (iii) bring deficits to the Maastricht fiscal limit of 3 percent of GDP as soon as feasible and, (iv) support a correction of the real exchange rate by containing domestic demand growth, thus keeping open the option of speedy euro adoption. The authorities were cognizant that the adjustment could deepen the recession, although in the end their effect was in large part mitigated by the countercyclical impulse from the increased use of EU funds.

- ***Adjusting nominal wages.*** Competitiveness was to be strengthened by reducing factor costs, both in the public and private sector. This was supported by the Baltics' traditionally high labor market flexibility, which made labor shedding and the modification of work contracts relatively easy.

- ***Preserving financial stability.*** In the first instance, the authorities' focus was on securing liquidity in banks, including through commitments from parent banks. As non-performing loans increased, attention turned to adequate capitalization. The authorities also started regulatory and legislative reforms aimed at strengthening banking supervision and crisis response capacity.

- ***Repairing private corporate and household balance sheets***. In line with non-interventionist traditions in the Baltics, this task was left to private agents as the authorities were reluctant to directly get involved in debt restructuring. They did, however, look into ways to improve legal frameworks to facilitate out-of-court restructurings and incentivize voluntary debt restructuring.

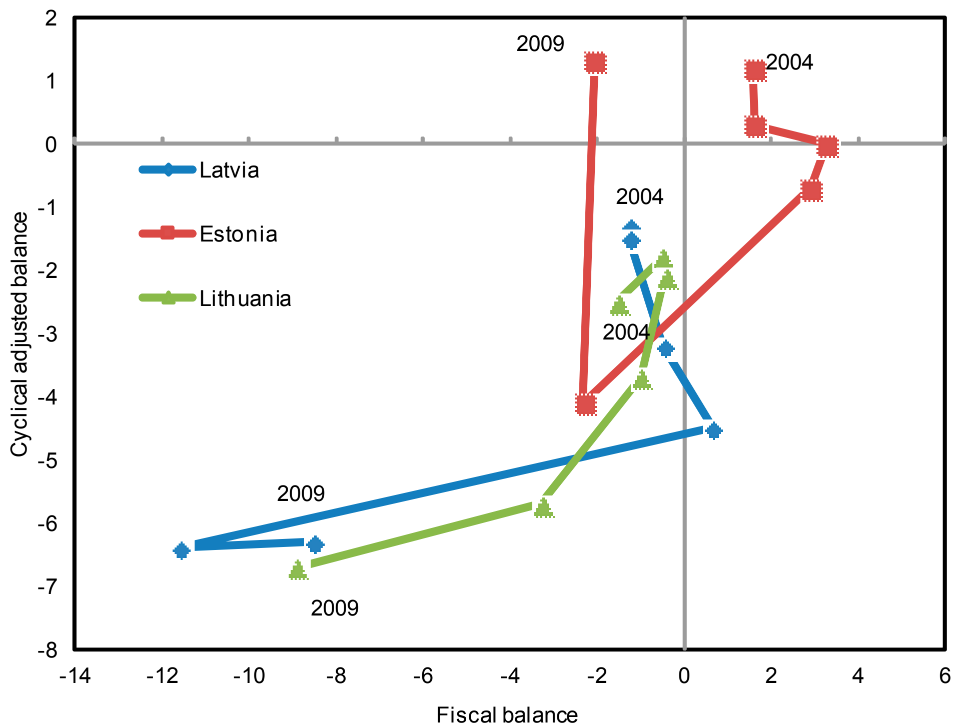
The Baltic authorities' strategy was supported by the international community. The issue came to a head early in the crisis, when IMF, European Commission and bilateral donors had to decide whether to commit financial resources to Latvia based on a program that would maintain the peg. Some, including at the IMF, saw possible advantages to a nominal exchange rate adjustment, which was expected to produce a more rapid turn-around of the economy, while also recognizing the potential large costs given the unprecedented level of euroization. In the end, however, the authorities' internal devaluation strategy won unanimous international support. In addition to the economic arguments mentioned above, a key consideration at the time was the risk of contagion: a devaluation in Latvia, it was feared, would unhinge other currency pegs in the other Baltics and in Southeastern Europe. Furthermore, immediate loan losses in Nordic banks that had invested in the Baltics could have hurt confidence in these banks which at the height of the crisis were already having difficulties to secure funding on global wholesale markets.

IV. Is It Working? Early Experience Implemneting the Baltic Strategy

A. Fiscal Adjustment

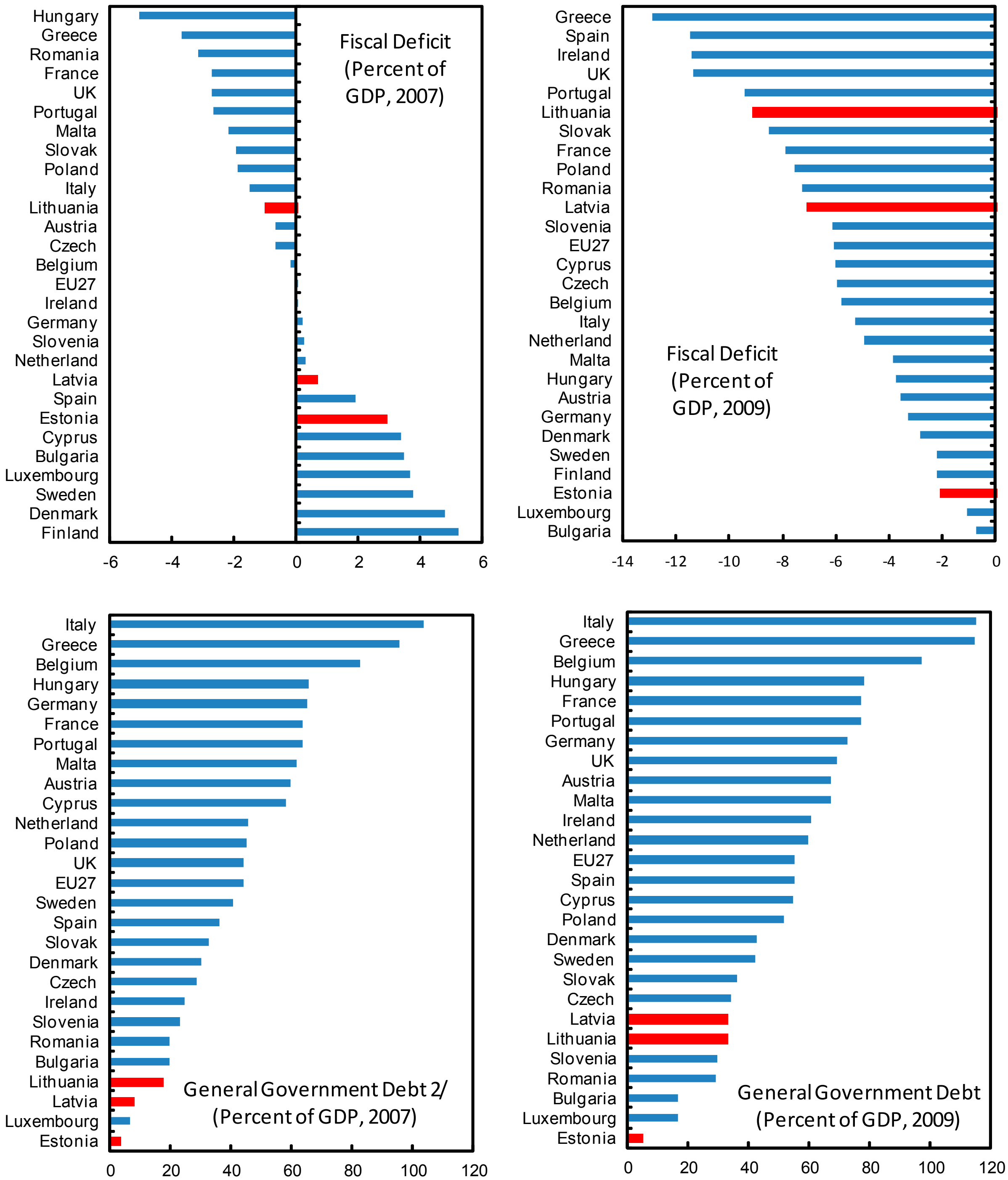
At first glance, the Baltics entered the crisis with comparatively favorable fiscal positions only to see their deficits and debt rise considerably (Figure 6). Why did the crisis impact fiscal positions so dramatically? In large part the answer lies in the past policies. While deficits appeared low in an international perspective and in line Maastricht deficit criterion, underlying imbalances were in fact growing in cyclically-adjusted terms and had reached between 5-7 percent of GDP by end-2008 in all three countries (Figure 7).

Figure 6. Developments in General Government Fiscal Balances, 2004-09[1/]
(Percent of GDP)



Source: WEO; and EC.
1/ Fiscal balance in Estonia and Latvia is measured on a cash basis but on an ESA-95 (accural) basis in Lithaunia. In 2009, the fiscal balance on an ESA 95 basis was -1.7 percent of GDP in Estonia and -9 percent of GDP in Latvia, and -8.9 percent of GDP in Lithuania.

Figure 4. Fiscal Deficits and Debt in Europe, Pre and Post Crisis [1/]

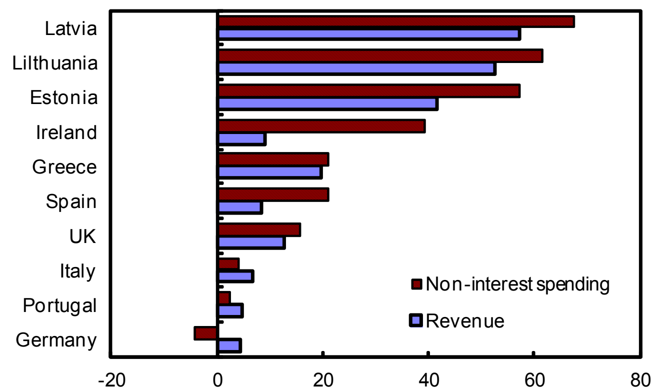


Source: WEO.
1/ Most of countries use cash-basis reporting. Lithuania is accrual based.
2/ General government debt data on Finland are not available for both years.

The crisis-related cyclical deterioration of the deficit interacted with the underlying structural weaknesses. Table 2 illustrates that structural weaknesses primarily manifested themselves through a spending overhang, while the dissipation of boom-related windfall revenues compounded the cyclical decline in revenue:

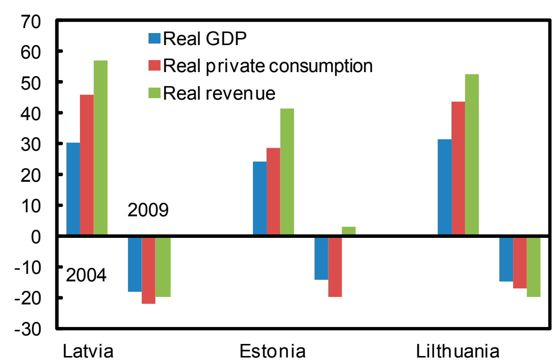
- ***The spending overhang.*** On the back of rising tax receipts, expenditure had risen rapidly the boom years, primarily on items that are typically more difficult to reverse (Figure 8). The growth of public sector salaries and social benefits far outpaced inflation. In Lithuania, for example, social benefit outlays rose in real terms by 44 percent between 2006–08, driven by a more than 60 percent increase in sickness pay, a near 40 percent increase in pension spending, and a doubling of spending on maternity benefits. Similar patterns were seen in Latvia and in Estonia through mid-2008. Consequently, when the crisis hit and GDP and tax receipts fell back to 2006 levels, spending remained at 2008 peaks. Table 2 shows that the spending overhang automatically triggered an almost 10 percentage point increase in the spending-to-GDP ratio in Latvia and Lithuania as nominal GDP fell, and this increase was further aggravated by benefits increases granted in late 2008. In Estonia, by contrast, the spending overhang, though substantial, was alleviated by the rolling-back of promised benefit and wage increases already in the fall of 2008, generating a positive dynamic in 2009 when these measures generated full year savings.

Figure 8: Government Spending Boom
(Cumulative percent changes, 2004-08)



Source: WEO

Figure 9. Revenue Buoyancy In Reverse
(Cumulative percent changes, 2004-08 and 2009)



Source: WEO.

- ***The dissipation of boom-related revenue windfalls.***[7] Revenue buoyancy went into reverse during the crisis as consumption, employment and wages fell from their boom-inflated levels (Figure 9). Table 2 which corrects for the changes in tax policies, shows that the revenue-to-GDP ratio fell by

[7] As documented by the European Commission (2010), Baltic tax systems rely on low and flat direct tax rates, which result in fluctuations in real wages and employment, having a proportionally larger impact on consumption.

some 4 percentage points of GDP in Latvia, and 2 percentage points of GDP in Lithuania, but moved broadly in-line with GDP in Estonia. The sharp declines in collections Latvia and Lithuania may also be explained by the draw-down of a substantial stock of unclaimed VAT refunds, relative weaknesses in tax administration,[8] as well as a deterioration in taxpayer compliance during the downturn.[9]

Table 2. Comparison of the 2009 Fiscal Positions Across the Baltics
(in percent of GDP, unless indicated otherwise)

	-/+ deficit increasing/reducing factors	**Estonia**	**Latvia**	**Lithuania**
I.	**2008 fiscal balance (cash basis for Estonia and Latvia, ESA 95 basis for Lithuania)**	**-2.3**	**-3.3**	**-3.3**
II.	**2009 fiscal balance (cash for Estonia and Latvia, ESA 95 basis for Lithuania)**	**-2.1**	**-7.0**	**-8.9**
III	2009 measures (net)	7.1	11.2	7.2
	Deficit reducing measures	8.8	13.9	**8.2**
	Deficit increasing measures	-1.7	-2.7	-1.0
	2009 deficit before measures 1/	-9.2	-18.2	-16.0
III.	**Fiscal Deterioration in 2009 (I - II)**	**0.3**	**-3.7**	**-5.6**
IV.	**Automatic Effects**	**-8.6**	**-16.2**	**-11.6**
	Automatic change in expenditure due to change in GDP	-6.4	-9.5	-9.1
	Additional spending on social assistance	-1.2	-2.1	-0.3
	Change in revenue due to macro factors and compliance 2/	-0.9	-4.0	-1.9
	Additional interest spending	-0.1	-0.7	-0.4
V.	**Deterioration (-)/improvement(+) (III-IV) net of automatic effects**	**8.8**	**12.5**	**6.0**
	Possible explanatory factors (VII + VIII)	7.4	10.7	6.0
VI.	2009 measures (net)	7.1	11.2	7.2
	Deficit reducing measures	8.8	13.9	8.2
	Deficit increasing measures	-1.7	-2.7	-1.0
VII.	Full year effect of 2008 measures 3/	0.3	-0.5	-1.2
VIII.	**Unexplained residual 4/**	**1.4**	**1.8**	**0.0**
	Memorandum items:			
	2008 fiscal balance (ESA 95)	-2.7	-4.1	-3.3
	2009 fiscal balance (ESA 95) 5/	-1.7	-9.0	-8.9
	Implicit automatic stabilizers	-7.2	-14.4	-11.2
	Nominal GDP (percentage change)	-14.3	-18.6	-16.9
	Private consumption (percentage change)	-20.8	-19.9	-13.2
	Wage bill (percentage change)	-15.7	-33.5	-11.2
	Inflation (avg. in percent)	0.0	3.3	4.2
	Change in the unemployment rate (in % of total employment)	7.0	8.5	7.7

Source: IMF Staff Estimates

1/ Passive 2009 deficit-to-GDP ratio is derived implicitly as the sum of measures and 2009 deficit outturn.
2/ Non-grant revenue projections are based on the econometric regressions, the relevant bases and net of 2009 tax measures.
3/ In Lithuania, increase in base pensions Aug 1 2008 and extension the maternity leave by 1 more year at 85 percent replacement rate.
4/ The residual in Latvia and Estonia reflects possible underestimation of the full-year effect of the 2008 expansionary measures, the gap between estimated 2009 yield of measures and actual outturns, and the impact of arrears and other accrual versus cash adjustments.
5/ In Latvia, the higher accrual deficit relative to the cash deficit reflects 0.5 percent of GDP for pension liability that arose from the Constitutional ruling, 0.6 percent of GDP in adjustments for greenhouse emission sales as well as other cash to accrual adjustments to revenue. In Estonia, the difference between the cash and accrual measures of the deficit reflects cash to accrual adjustments in excise revenues.

The fiscal deficit risked to balloon, threatening financing and confidence. Under unchanged policies, the 2009 deficit would have been around 16–18 percent of GDP in

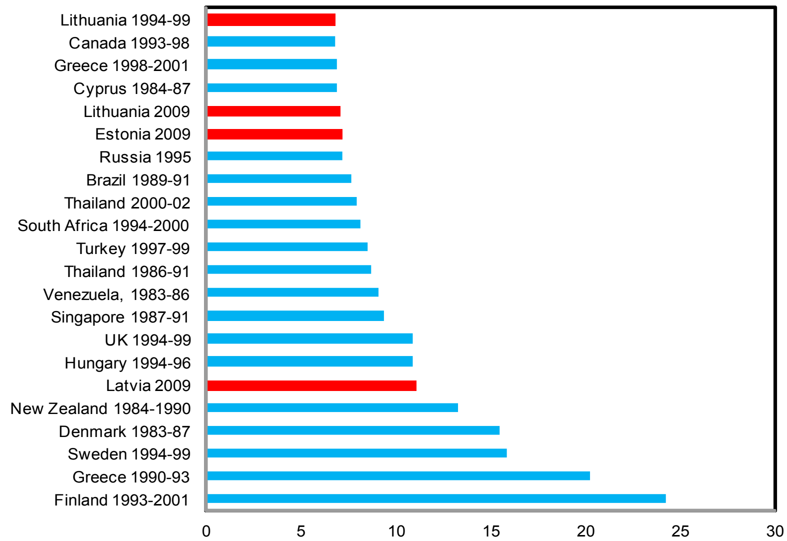
[8] For example, effective VAT collections (amount VAT collected relative to the taxable base compared to the statutory VAT rate) are much higher in Estonia than in the other two Baltics (see Reckon, 2009).

[9] The stock of unclaimed VAT refunds amounted to 4 percent of GDP in Latvia and 1 percent of GDP in Lithuania. See Sancak, Velloso and Jing, 2010 for a discussion of how tax revenue and compliance responds to the business cycle.

Latvia and Lithuania and exceeded 10 percent in Estonia. Financing such large fiscal gaps would have been extremely challenging given the extreme stress in international financial markets and the limited capacity of domestic debt markets. Even more importantly, deficits of such magnitude would have undermined confidence and called into question the longer-term compatibility of fiscal policies with the exchange rate pegs and eventual euro adoption.

The Baltics therefore had little alternative but to implement sizeable fiscal consolidation that was unprecedented by historical and international standards (Figure 10). Including the original and subsequent supplementary budgets in 2009, the net fiscal adjustment was by far the largest in Latvia, comprising just over 11 percent of GDP on a net basis in just a single year. As a result, the headline deficit ended 2009 at a substantially better than expected 7 percent of GDP on a cash basis (9 percent of GDP in ESA 95 terms). However, only in Estonia did the adjustment prove sufficient to more than offset the structural and automatic effects discussed above, allowing it to keep its fiscal deficit well below the 3 percent of GDP Maastricht level and thus paving the way to euro adoption in 2011.

Figure 10: Large Scale Fiscal Adjustments
(Change in the Primary Banance, percent of GDP) 1/



Sources: Fiscal Adjustment Database, Fiscal Affairs Department, IMF.
1/ For the Baltics in 2009, adjustment is measured relative to unchanged policies and, net of the impact of rate reductions in PIT and CIT or of spending increases. Gross adjustment was larger.

The adjustment strategies were expenditure-led. As Table 3 shows, expenditure savings comprised a large part of the adjustment effort in 2009, ranging from about half of the total in Estonia and Latvia to more than three-quarters in Lithuania. The focus on the expenditure side was appropriate given the increase in spending that occurred over the boom that is no longer in-line with new revenue outlook. It is also in line with international experience that shows large scale fiscal adjustments are most successful when driven by spending measures. The composition of adjustment also reflected a long held-preference, shared by all three Baltics, to maintain low levels of taxation. Overall, measures fell into four categories:

Table 3. Size and Composition of Fiscal Adjustment Across the Baltics, in percent of GDP[1/]

	Estonia	Latvia	Lithuania
	2009	2009	2009
Gross Adjustment 2/	8.8	13.9	8.0
Net adjustment	7.1	11.2	7.0
Net Revenue Measures	2.7	2.4	1.7
Durable net revenue rate and base increases (net of tax cuts)	0.8	0.2	0.7
o/w VAT and excise increases	0.5	1.3	1.5
Other revenue measures (e.g. reversible, one-off dividends, pillar II diversion to Pillar 1, etc) 3/	1.9	2.2	1.0
Net Spending measures	4.4	8.8	5.3
Structural spending reductions	1.4	2.5	1.9
o/w structural reform (e.g. health, education, benefits) 3/ 4/	1.4	0.7	0.6
o/w wage measures 5/	n.a.	1.8	1.4
Reductions in current spending or investment plus other temporary measures	3.0	6.3	3.4
Memorandum items			
Adjustment reversible (i.e. no underpinning structural reform, or measure is legislated to lapse e.g. Pillar 2 diversions that are legislated to be reinstated)	4.9	8.5	4.4
Share of adjustment potentially reversible 5/	68.5	75.7	62.5
Share of Adjustment spending based	61.5	78.5	76.1

Source: IMF Staff reports and staff estimates based on country authorities budgets

1/ Yields in year of implementation, thus if measures are implemented mid-year, the full-year yield is larger than shown. Estimates of yields based on authorities' original estimate or program estimates updated for actual outturns where feasible. In Latvia, the tax yield is calculated as the difference between the actual 2009 outturn versus an estimate of a baseline under unchanged policies. In each country, the estimates may over or understate yields to the extent that issues e.g. changes in tax compliance, may have also impacted the actual outturn.

2/ Gross excludes impact of deficit increasing measures such tax cuts and non-interest spending increases.

3/ Includes diversion of pillar II contributions to pillar I: worth annually 0.6 percent of GDP in Estonia, 1.2 percent of GDP in Latvia, and 0.5 percent of GDP in Lithuania. For Lithuania, also includes the 5 percentage point 2009 increase in the corporate tax rate that was then reversed from January 1 2010.

4/ In Estonia reduction in pension benefits of 0.6 percent of GDP and in sickness benefits of 0.5 percent of GDP were permanent. In Latvia, spending reductions included a 0.7 percent of GDP structural/permanent reduction in health and education spending, but the cut in pension levels worth 0.7 percent of GDP was subsequently ruled as unconstitutional and need to be repaid in 2010-12. In Lithuania, the 2009 reduction in sickness benefits was made permanent in July 2010. The 2010 budget reductions in maternity, child benefit, and pensions were worth 1.7 percent of GDP and require parliamentary approval to extend beyond 2012. In Lithuania, the constitutional court ruled in mid-2010 that the cut in pensions needed to be compensated, but left the government discretion as to the timing and amount of compensation. The government has determined that compensation will only be made once the deficit is bought back to sustainable levels and the economy recovers, and the compensation will be partial.

5/ Wage reductions in Latvia initially were subject to review every 6 months. In Lithuania, reductions in place until end-2010, but in July 2010 parliament approved the extension of these cuts through 2012. Assumed not reversible in calculating share of adjustment that is reversible because defacto the cuts have be kept in place for 2 years in Latvia (2009 and 2010 budget) and for 3 years in Lithuania given the extension through 2012.

- *Across-the-board reductions in current and non-EU financed capital budgets.* Restraining cash budgets and reducing budget allocations were an effective means to increase the incentives for line ministries to reduce existing inefficiencies and generate savings particularly where means of more direct control were wanting. In Latvia, the reductions were particularly deep, with for example the education and health ministry budgets being reduced by one-half and one-third. On the investment front, governments switched increasingly to EU funding, access to which was facilitated by new EU rules that permitted the front loading of disbursement. Non-EU financed capital spending was slashed.

- *Reductions in government wage levels both to secure savings and complement the on-going wage adjustment in the private sector*. Government wage bills comprised a substantial share of total spending and in many cases public sector employees were earning substantial premiums compared to private sector counterparts—especially after wages in the private sector began to fall. In all three Baltic countries, reductions in the wage envelope comprised outright reductions in base and bonus pay, increases in unpaid leave, and also reduction in staffing levels. Cuts were initially concentrated on administration but in Latvia and Lithuania over the course of the year they were broadened to include workers in education, health, law enforcement, and the judiciary. In Lithuania, higher-paid government workers bore the largest reductions, often in excess of 20 percent, which were agreed as part of a national agreement with social partners. Nonetheless, in both Latvia and Lithuania wage reductions were envisaged to be temporary. In Latvia, there was an initial requirement to review them every 6 months that was later replaced by a new wage grid, while in Lithuania parliamentary approval was needed to extend them beyond end-2010 (in June 2010 the parliament and the president approved the extension of these reductions for an two additional years).

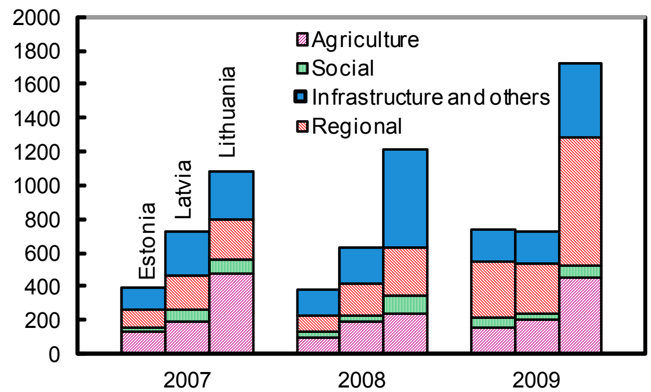
- *The phasing-in of structural reforms to ensure a more sustainable reduction in spending to affordable levels.* To be sure, many of these were necessary irrespective of the adjustment pressures emanating from the crisis. In 2009, Estonia and Lithuania introduced reforms to sickness benefits, and Latvia introduced modifications to certain social entitlements, including pensions, although the latter was subsequently ruled to be unconstitutional. In the final quarter of 2009, the 2010 budgets were passed in Latvia and Lithuania enacting additional reforms to social entitlements systems, while in 2010 the Estonian government raised the retirement age. While in both countries many of these reforms were subject to an expiry or sunset clauses, in June 2010 the Lithuania Parliament made several of these reforms (e.g. to sickness and disability benefits) permanent, and in response to a ruling by the constitutional court on the legality of the 2010 reduction in pension levels, the government announced it would partially compensate the 2010 reductions in pensions only once the economy recovered and the fiscal balance was restored to sustainable level. The World Bank played an active role advising both Latvia and Lithuania on structural policies.

- *Protection of most vulnerable groups.* All three countries took care to shield, within limited budget means, those parts of the population most effected by the crisis. As described in Section B below, Latvia and Lithuania increased access to unemployment benefits, while in Lithuania and Estonia EU funds were targeted to help support job creation and training. Program targets under the EC-IMF Latvia program were increased to avoid sharp cuts in benefits and spending that benefitted the poorest groups in society by guaranteeing a minimum level of income and by introducing new scheme to ensure free access to health care for the poor as well as those engaged in public works program. In Latvia and Lithuania, advice was also provided by the World Bank and IMF on how to expand social safety nets through better targeting of existing social assistance spending.

Revenue measures played a supplementary but important role in the adjustment effort. To help shore-up revenues as the downturn deepened, all three Baltics opted to raise the indirect tax burden. Estonia also relied to a great extent on one-off increases in dividends from state-owned enterprises. Standard VAT rates were raised,[10] VAT bases were broaden by eliminating (Lithuania) or raising preferential rates (to 10 percent in Latvia, and to the standard rate in Lithuania), and removing VAT exemptions (Lithuania). All three countries also raised a variety of excises. However, in Latvia and Lithuania a reduction in personal income tax rates (by 2 percentage points) partly eroded these gains, although in Latvia this was subsequently reversed. The reliance on indirect taxation in the initial stages of the crisis was in part driven by necessity since these taxes comprise the backbone of the Baltic tax systems and could be implemented quickly. Moreover, there were concerns that raising the direct tax burden would aggravate the downturn and adversely impact mobile capital and labor tax bases, impair competitiveness, and deter investment in these highly open economies. Such concerns eventually prompted Lithuania to reverse in 2010 the 5 percentage point increase in its corporate income tax that it implemented in 2009.

Accelerated use of EU grants provided a welcome countercyclical stimulus. A large share of these transfers were channeled through national budgets, helping in particular to preserve capital spending and fund certain programs such as active labor market policies and support to small and medium size enterprises. As part of its crisis response, the EU in November 2008 modified its Cohesion Policy and allowed member states to draw additional advances on structural and cohesion funds. Absorption of EU funds accelerated, especially in Estonia and Lithuania, where there was a sizeable draw-down funds from the previous EU disbursement (Figure 11).

Figure 11. EU Funds (Millions of Euro)



Source: EU Commission.

Estonia's better starting position going into the crisis was a key factor in helping it keep its 2009 fiscal deficit below the Maastricht ceiling. Thanks to a smaller cyclically adjusted deficit, the somewhat earlier onset of the recession, and swift policy action already in late 2008, it kept its fiscal deficit well below the Maastricht ceiling, despite a cumulative output decline that was not much different from its Baltic neighbors. Institutional strengths, such as a very efficient tax collection system played a role, but there was also recourse to various one-off measures (dividends from state-owned enterprises and land sales). Moreover,

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[10] Latvia and Lithuania raised the standard rate by 3 percentage points to 21 percent, and Estonia by 2 percentage points to 20 percent.

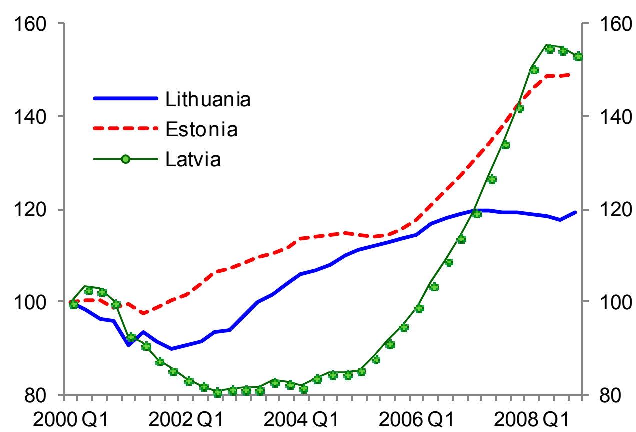
the government was able to draw on its ample fiscal reserves to finance the deficit, avoiding exposure to the higher interest costs that burdened Latvia and Lithuania.

Thus one year on, the crisis has left differing fiscal legacies across the Baltics. Latvia and Lithuania face the need to reduce high deficits to contain growing debt and fiscal financing requirements as well as to realize their euro adoption aspirations. This is hardly a unique challenge compared to many countries in the euro zone, but it leaves, in particular, Lithuania vulnerable to changes in investor sentiment regarding sovereign risk. While both countries have taken promising first steps in implementing structural reforms in the context of their 2010 budgets, a substantial share of the adjustment effort has been in the form of potentially reversible measures and they face considerable headwinds from high unemployment and growing debt service costs: the additional adjustment needed to reach the Maastricht fiscal deficit target is estimated to be in the range of 5½ percent of GDP in Lithuania and 6 percent of GDP in Latvia, assuming current temporary measures in both countries are extended. For Estonia, the additional adjustment required to stay with the Maastricht fiscal limits is more modest, assuming the sizeable temporary measures implemented in 2009 are made permanent.

B. Labor Market Adjustment

Prior to the crisis, labor markets in the Baltics were overheating. Between 2004 and 2008, wages rose at average annual rates of about 16 percent in Estonia and Lithuania and by 20 percent in Latvia. This contributed to generalized price pressures and rapid appreciation in the CPI-based real effective exchange rates and unit labor costs which eroded competitiveness (Figure 12). Aided by outward migration, unemployment rates had fallen to the 5 percent range, their lowest level post-independence (Figure 13). Although, the Baltic countries are generally considered to have relatively flexible labor markets, research by the ECB (see, Babecký et al. 2009) noted that Lithuania and Estonia exhibited less frequent downward adjustment in nominal wages that in EU peers, but this finding may have been a feature of the tight labor markets that prevailed in these countries during the boom when this survey was conducted. Meanwhile, the World Bank Doing Business Indicators pointed to a relatively high degree of de-jure rigidity in employment contracts as well as high non-wage costs in the Baltics.

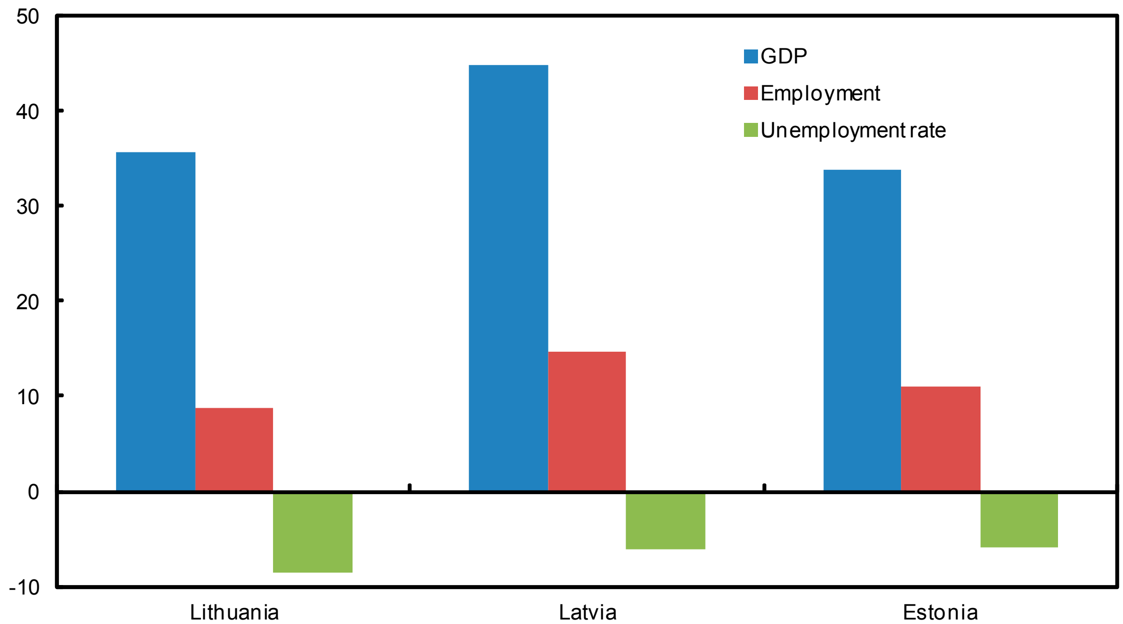
Figure 12: Manufacturing ULC-based REERs
2000 to 2008, Jan 2000=100



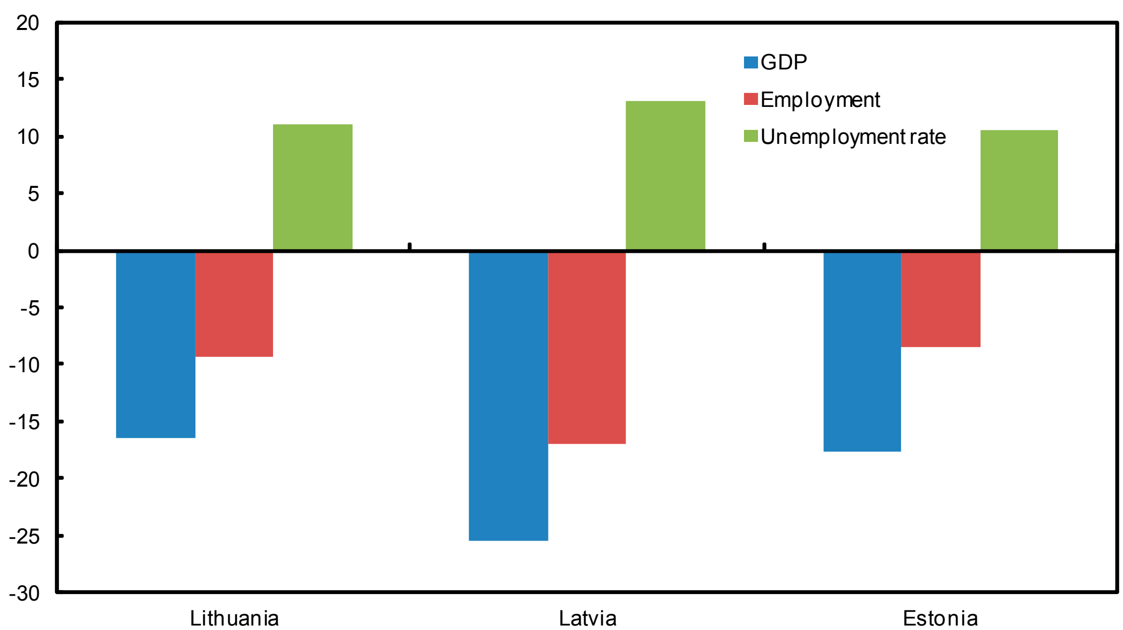
Source: ECOFIN and staff calculations

Figure 13 .Labor Market Trends in the Boom and Bust, 2004-08[1/]

Cumulative Changes in GDP and Employment, and Changes in Unemployment Rate, 2004 to Peak 2/ (Percent)



Cumulative Changes in GDP and Employment, and Changes in Unemployment Rate, Peak to End 2009 2/ (Percent)

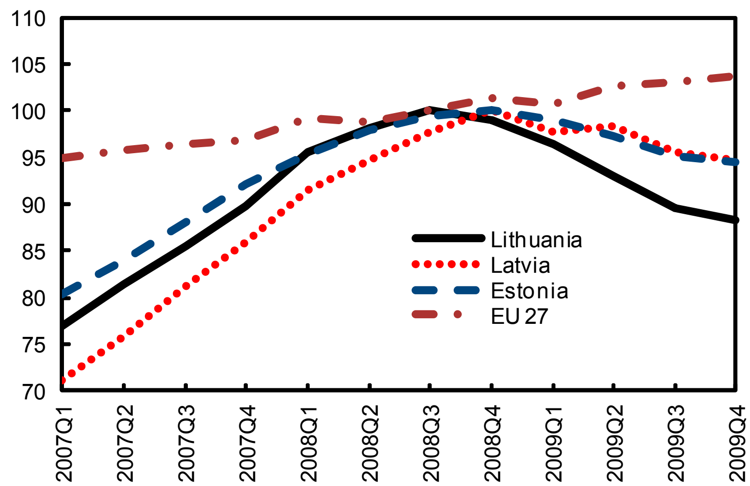


Source: Haver.

1/ The peak differs across countries: 2008Q2 in Lithuania; 2007Q4 in Latvia and Estonia.
2/ Please note that the change in unemployment rate is the difference in unemployment rates between the begin and end periods, while the cumulative changes in GDP and employment are percent changes in GDP and employment between the begin and end periods.

Baltic labor markets, however, have proven remarkably nimble in responding to the crisis. By end-2009, average economy earnings have fallen by 11 percent in Latvia, 9 percent in Lithuania and 6½ in Estonia relative to the peak of their booms. Looking to harmonized data which adjusts for working days, non-wage costs such as bonuses, and hours worked, the decline in wage costs in the Baltics and particularly Lithuania, are even more striking when compared to average costs in the EU (Figure 14). Nonetheless, despite the substantial adjustment in wage costs, unemployment rose sharply to almost one-fifth of the labor force—more than undoing the employment gains of the boom (Figure 13). Job losses have been most severe in Latvia, where unemployment had reached 20 percent by end-2009 but job losses in Lithuania and Estonia were also substantial.

Figure 14. Hourly Labor Costs (Peak=100)1/



Source: Eurostat.
1/ EU27 has not peaked, so we use the same peak as Lithuania.

There were however important differences within the Baltics on how and when labor markets adjusted. In Latvia, the public sector outpaced the wage adjustment in the private sector by wide margins (Table 4).[11] In Estonia and Lithuania, by contrast, the private sector led the adjustment effort with wage retrenchment intensifying in the second and third quarters of 2009. In fact, recent labor force survey data from Latvia suggest that three-quarter of private sector employers favored reduced employment over wage cuts, while in the other two Baltics there appears to have been a greater preference to hoard labor or protect jobs at least at the margin (see IMF, 2010b). Nevertheless, the adjustment in private sector employment accounted for the bulk of labor shedding, with losses most severe in the non-tradable sectors.[12] The public sector instead opted more for wage cuts and unpaid leave to contain job losses. The World Bank (2010) estimates that the rate of part-time employment—much of it involuntary—increased by 2½ percentage points in the Baltics, with the share of worker on part-time contracts in Latvia up by 23 percent since end-2007.

[11] This finding is consistent with that from other European countries where the size of government is small and the degree of unionization is low results in changes in public sector exerting lesser effects on private sector pay (see Pérez and Sánchez, 2010).

[12] For example, average wages in the construction sector had fallen by 25 percent Lithuania in 2009, while in Latvia jobs in the construction sector halved attributing to more than 40 percent of total job losses in 2009.

Table 4. Nominal Wage Adjustment in the Baltics (YOY, percent) 2004-09 Q4[1/]

	Lithuania			Estonia [2/]			Latvia		
	Overall	Public	Private	Overall	Public	Private	Overall	Public	Private
2004	5.71	7.58	4.46	4.59	11.49	8.64	9.75	8.32	11.62
2005	10.02	10.45	10.08	7.05	13.52	9.58	16.47	17.25	16.44
2006	16.70	16.26	17.41	11.25	12.45	14.11	22.89	23.14	23.80
2007	19.31	14.78	22.40	12.96	21.06	19.34	31.62	35.80	30.45
2008	19.31	22.70	17.29	3.15	18.07	13.05	20.57	18.93	21.15
2009	-4.44	-2.19	-6.37	-4.56	-4.30	-4.00	-4.02	-11.15	-1.31
2009Q1	1.94	6.44	-1.15	-1.54	1.94	-1.45	3.75	-0.26	4.10
2009Q2	-2.87	1.29	-6.08	-4.43	-2.17	-4.70	-0.63	-5.47	-0.38
2009Q3	-7.66	-4.93	-9.99	-5.93	-5.87	-5.15	-6.37	-13.38	-3.66
2009Q4	-8.66	-10.37	-7.96	-6.54	-10.58	-4.68	-12.00	-23.66	-5.00

Source: Haver; dx; and the IMF staff calculations.
1/ Since the public and private wage data are not directly available for Estonia, they are calculated by the sector breakdowns and therefore defined differently as in Latvia and Lithuania.
2/ The public sector wage for Estonia comprises public administration, defense and compulsory social security, education and health sectors; the private sector consists the rest of sectors by kinds of economic activities.

The Baltics also undertook various institutional reforms seeking either to enhance labor market flexibility or to cushion the impact of rising unemployment.

- In ***Estonia***, the June 2009 reforms to the labor law reduced lay-off costs. However, the originally envisaged corresponding increase of unemployment benefits was postponed due to fiscal constraints. Job matching and training programs have been widened using EU funds, and some municipalities stepped up public work programs.

- Given the sharp increase in unemployment, ***Latvia*** actively combined measures to protect the vulnerable parts of the population with active labor market policies. Under its Emergency Social Safety Net Strategy the duration of unemployment benefits was increased to 9 months, a minimum floor introduced (a quarter of the minimum wage), and eligibility criteria were relaxed.[13] A public works program provided full time work for 24,000 registered unemployed not receiving unemployment benefits at 55 percent of official minimum wage, while also granting free access to health care. To help promote reentry into the labor market European Social funds were used to boost training for job seekers and assist business start-ups.

- In ***Lithuania***, the July 2009 reforms to the Labor Law removed restrictions on flexible work arrangements (part-time, temporary employment, overtime, night work) and reduced the cost on firms of reducing their labor force through end-2010.

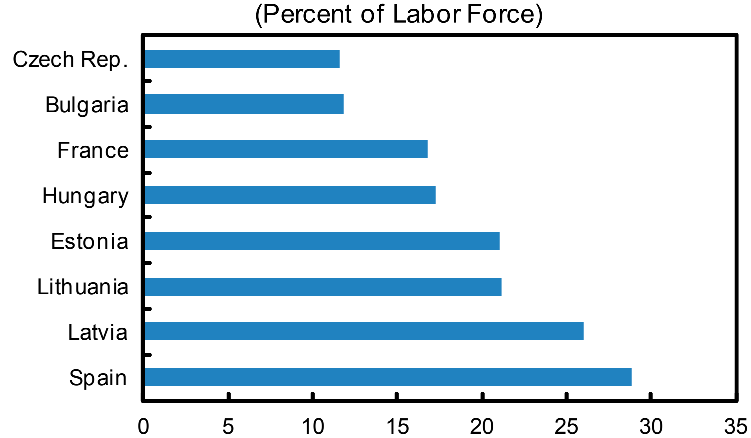
[13] The minimum period over which the compulsory social insurance contributions were paid was cut from 12 months in the last 18 months to 9 months over a period of one year. This measure is supposed to expire in December 2010.

Monetary hurdles to labor shedding, such as redundancy, furlough and severance pay, were also lowered. Unemployment insurance and employment support laws were revised to permit public sector work for a wider circle of employees. Retraining grants equivalent to 70 percent of minimum wage were made available. More recently, the government has put together a major program of job support schemes financed by EU funds with total financial support via various programs amounting to about 7 percent of GDP.

The rapid adjustment in labor markets has contributed to some improvement in cost competitiveness. By end-2009, CPI-based real effective exchange rates had fallen from their peaks by 3-5 percentage points, despite substantial depreciations in competitor countries. This was sufficient to unwind about one quarter of the appreciation in the CPI-based REER that occurred since end-2006 in Latvia and Lithuania and about 17 percent in Estonia.

An additional challenge going forward will be to prevent a permanent increase in structural unemployment. Job losses have translated into significant increases in long-term unemployment. The rates of unemployment amongst young people and males are particularly high, and outward migration is increasing (Figure 15). Against this backdrop, there is a risk that unemployment becomes more structural in nature. With the scope for financial support for active labor market policies constrained by the need for substantial fiscal adjustment, EU structural and social funds are becoming a key tool to retrain workers formerly employed in booming sectors like construction to fill new jobs in the tradable sector. Here a promising start has been made in Lithuania where in addition to the job support schemes financed by EU funds, the government reduced for one- year of social security contributions levied on employers to 7¾ percent (from the standard rate of just over 23 percent) for first-time hires to help promote the hiring of younger workers.

Figure 15. Unemployment Rate of Youth Aged 15-30
(Percent of Labor Force)



Source: Eurostat.

C. Maintaining Financial Stability

Financial sector strategies in the three Baltic differed according to the severity of liquidity pressures and the structure of their respective banking systems. Given the determination to preserve macroeconomic stability, including of the currency pegs, the authorities initially focused their efforts on backstopping liquidity. In particular,

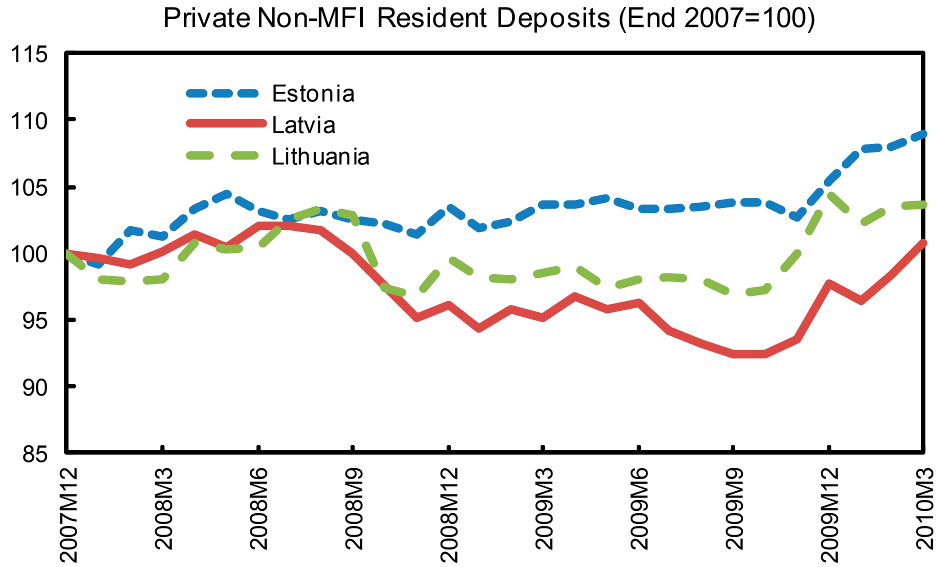
- Reflecting the near complete ownership of the banking system by foreign banks, ***Estonia*** relied on direct support of parents to meet any liquidity needs and negotiated a direct precautionary swap line with Swedish Riksbank (in place March-December 2009) to shore up banks' liquidity buffers under its currency board to insure against any risk of large scale deposit runs (Ingves, 2010). Moreover, high reserve requirements and a tax system that imposed high tax rates on dividends encouraged banks to maintain large capital and liquidity buffers.

- In ***Latvia***, the pressures on Parex forced a government takeover and a partial deposit freeze in that bank. Initially a €500 million swap line between Riksbank and the Bank of Latvia was put in place, soon supplemented by the substantial liquidity support provided through EC and IMF. The authorities also intensified supervision of the banking system while seeking financing commitments under the European Banking Coordination Initiative (ECBI) to ensure foreign banks maintained their exposure and engaged in orderly deleveraging process.

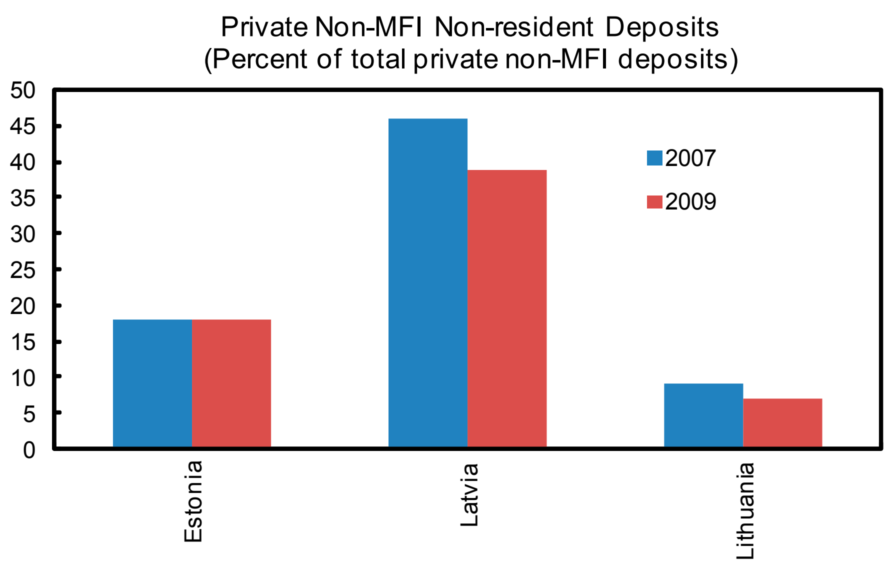
- ***Lithuania,*** in contrast, did not rely on external or domestic contingent funding lines. Responding to pressures on deposits, particularly in Swedish subsidiaries, the Bank of Lithuania reduced its revere requirement from 6 to 4 percent and the government raised the level of coverage under the deposit insurance scheme to €100,000. Parent banks provided their subsidiaries with the liquidity support to meet deposit withdrawals, particularly at the height of pressures in the fall of 2008.

As a result of these efforts, an outright banking crisis was avoided. Within a year, deposits had returned to pre-crisis levels (Figure 16). This was both due to improving confidence in the region as the risk of currency and banking collapse receded and higher interest rates (especially on local currency deposits), in line with some banks' strategy to replace external by domestic funding. Moreover, by end- 2009 the ratio of liquid-to-total assets was at a two year high of 24 and 13 percent in Lithuania and Estonia, respectively, and a one year high of 21 percent in Latvia.

Figure 16. Comparing Banking System Before and After the Crisis



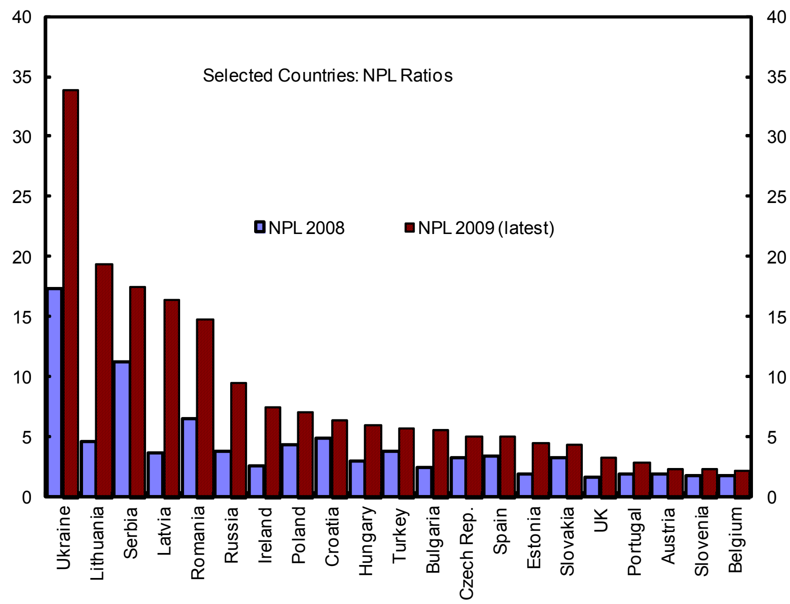
Source: Haver; and dx.



Source: Haver; and dx.

The downturn, however, took its toll on asset quality, prompting supervisory scrutiny and in the case of Latvia state-led recapitalizations. The combination of falling incomes, rising unemployment and corporate losses triggered a rapid deterioration credit quality. By end-2009, the level of non-performing loans in the banking system had reached almost 20 percent in Latvia and Lithuania (Figure 17).[14] In Estonia, by contrast, NPLs reached only 6 percent. The lower ratio in Estonia may reflect a combination of stricter risk management practices perhaps also differences in accounting standards. Supervisors in all three countries reacted to various degrees by initially requesting banks to retain earnings as early as 2008, and subsequently tightening provisioning (especially for foreign-owned banks) and requesting increases in capital. Only in Latvia were public funds used to recapitalize first Parex Bank (see above) and then the state-owned mortgage bank MLB, although total funds used were less than had been anticipated under the IMF-EU program. All three Baltics moved towards passing legislation to strengthen their bank resolution frameworks. In Latvia, for example, the authorities introduced into their legislative framework a bridge bank option, while in Lithuania the 2009 Financial Stability Law granted the government right to intervene a bank early prior to insolvency, as well as providing the government new tools including the option to undertake state purchases of bank shares and to guarantee inter-bank lending. However, these new powers were not used.

Figure 17. Non-Performing Loan Ratios in Select Emerging Markets



Source: GFSR.

Experience from other countries suggests the need to rebuild capital buffers and a large private sector debt stock will weigh on credit prospects going forward. By early 2010, the stock of credit to the private sector had fallen by some 5 (Estonia) to 10 percent (Latvia and Lithuania) from its peak in the final quarter 2008, with corporate credit particularly badly hit. While the loan retrenchment was the sharpest in Eastern Europe, it is in line with the

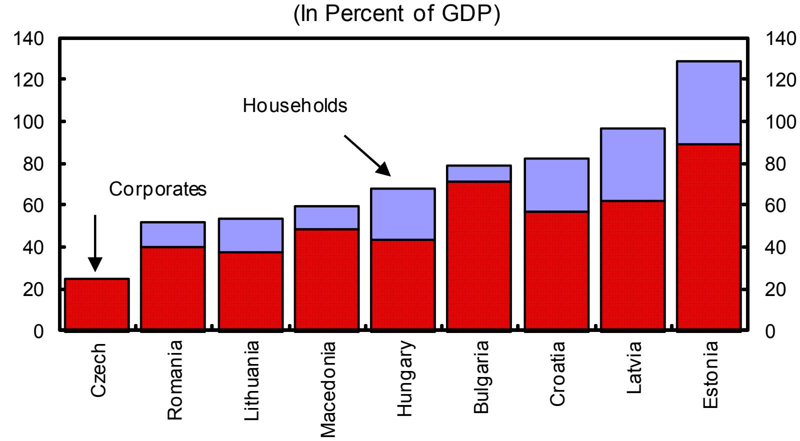
[14] Comparisons of NPLs are, however, difficult. In Estonia, loans are classified as non-performing when they are past 60 days due. In Latvia, the definition includes loans 90 days past due. In Estonia the definition includes only impaired loans that are past due by 60 days. In Lithuania, loans are classified as past due more than 60 days but not impaired plus any impaired loan.

empirical literature on post-crisis credit contractions (Aisen and Franken, 2009; McKinsey, 2010). Headwinds to credit from both the demand and supply side raise the prospect of a credit less recovery in the Baltics (Abiad and Dell'Ariccia, 2010). Parent banks' on-going commitment to provide liquidity and capital, and to absorb losses, will be key to the resumption of bank lending and to the economic recovery going forward.

D. Repairing Corporate and Household Balance Sheets

The boom-bust cycle left a sizeable private sector debt overhang in Latvia and Estonia, with much of it denominated in foreign currency (Figure 18). These two countries saw a massive increase in liabilities of the non-financial private sector, placing overall debt to GDP and NIP levels among the highest in Eastern Europe. Corporate leverage ratios in 2008 were higher than in the eurozone and most CEE countries, especially in former boom sectors such as real estate, wholesale and construction. Household debt, much of it mortgages denominated in euros and at variable interest rates, reached almost 50 percent of GDP. The debt burden appears even starker when compared to the non-financial private sector's assets and their current and future debt servicing capacity—all the more should interest rates in the euro zone start increasing. The deterioration of standard debt indicators was much less pronounced in Lithuania where the credit boom started later and never gathered the same momentum as in its Baltic neighbors.[15]

Figure 18. Gross FX Liabilities of Non-financial Private Sector
(In Percent of GDP)



Source: IMF staff estimates.

The authorities preferred to rely on voluntary solutions to address the debt burden. Although the drop of euro borrowing rates initially helped, the level of insolvencies rose quickly over the course of the year[16] and banks began proactively rescheduling debt. More generally, Baltic governments believed that debt resolution should be strictly left to debtors and creditors, reflecting their non-interventionist philosophy established in the years since

[15] Private sector debt developments are discussed in detail by Herzberg (2010).

[16] Most mortgages in the Baltics are at variable rates and indexed to 6 month EURIBOR, reset twice a year.

regaining independence. This contrasted with the more activist approach taken by governments in earlier crises in Latin America and Asia.

However, as more and more households and enterprises encountered payment difficulties, private debt restructuring issues came to the fore. There was a growing recognition that existing insolvency frameworks, rarely used during the boom, may be insufficient to facilitate speedy and orderly debt restructurings.[17] Policymakers in the Baltics therefore started to consider legal reforms that would facilitate liquidation and foreclosure process and strengthen incentives for out-of-court settlements. But only the Latvian authorities, committed under the IMF/EU program to develop a debt restructuring strategy, in late 2009 made changes to the existing insolvency and credit enforcement legislation. Latvia was also the only Baltic country to consider committing public resources to helping distressed mortgage holders, under a voluntary scheme that for a limited number of eligible households offered government guarantees in exchange for a partial debt-write off, but this idea was subsequently abandoned owing to lack of interest. More recently, Lithuania has begun to draft reforms to its bankruptcy framework, including proposals to introduce a personal bankruptcy concept, and Estonia is considering changes to its debt reorganization law. The governments in the region also resisted calls for more heavy-handed debt reduction measures, such as limiting borrowers' liabilities to the value of the collateral or debt moratoriums, for fear they would undermine the rule of law and confidence.

V. Early Policy Conclusions

Has the Baltic strategy been a success? One and a half years after the onset of the crisis, with adjustment still far from complete and new headwinds from the eurozone, it is obviously too early to pass judgment. The Baltics have already, however, defied many conventional wisdoms. Despite an unprecedented economic downturn, both devaluation and a banking crisis have been avoided, very large fiscal adjustments were undertaken without encountering large-scale social resistance. While the initial adjustment of external imbalances was more rapid than anticipated, the crisis has also left severe legacies for public finances, competitiveness, labor markets and financial systems. The Baltic strategy may have avoided an even more severe collapse that would have been triggered by devaluation, but the recovery is slow and thee has been very large increase in unemployment.

A number of Baltic-specific factors facilitated implementation of the strategy. First, these countries' economic structures, already having undergone fundamental changes in the last two decades, have proven quite flexible; there is early evidence that enterprises and workers are adapting quickly to the post-boom environment. Secondly, the Baltics' financial markets that are small, and dominated by a few domestic players made it virtually impossible

[17] While banks, especially foreign-owned ones, did restructure loans, it is not clear if this entailed NPV reductions even for unviable debtors.

for outsiders to take speculative positions against their currencies. Thirdly, the close integration with Nordic neighbors, especially foreign bank ownership, added to stability as parents were willing and able to absorb losses rather than pulling out. Finally, a quick and sizeable fiscal adjustment, including needed but painful measures to reduce the level of wage, pensions and social benefits, was critical to sustain confidence in sovereign solvency (against the background of low initial debt levels), the governments' fiscal targets, and to create the conditions for euro adoption. The authorities in all three countries were also successful in conveying the need to the public for fiscal adjustment. This special set of circumstances may explain why so few other countries have in the past been able to achieve such large-scale adjustment under a currency peg.

Differences between the three countries also hold some lessons. Broadly speaking, the crisis was deepest and most consequential in Latvia, probably because imbalances during the boom were largest and the banking system proved particularly vulnerable to a sudden stop. Estonia, in contrast, contained pressures on its public finances and its financial system better than its neighbors and succeeded to gain EU approval for adopting the euro in 2011; this remarkable achievement was due to timing (the recession started earlier and policies reacted more swiftly as a result) and institutions (that generated sizeable fiscal surpluses in the boom and fostered a tradition of strong tax compliance) as well as the fully foreign-owned banking system that lent strong capital and liquidity support both via banks parents and through swap lines with Riksbank. Estonia's experience shows that strong institutions and prudent policies during the boom can put the country into a somewhat better position to deal with a shock. Nevertheless, the size of initial imbalances matters; this is evidenced by Lithuania where delayed (and smaller) boom may have played into to its favor with respect to prospects for regaining competitiveness, although fiscal challenges loom as large as in Latvia.

Ensuring the continued success of the Baltic strategy will demand resolute implementation of reforms on several fronts. Slow growth and high unemployment represent critical economic and social challenges. Strained banking systems and continued dependence of government budgets on external financing present a potential vulnerability, especially at times of pressure on European financial markets. And fiscal sustainability in Latvia and Lithuania may become an issue in the absence of further fiscal and structural reform. The eventual return of growth and stability will depend on steadfast policy implementation, a very flexible private sector, a speedy recovery in trading partners, continued external support where necessary (both through both the official and private sector, including coordinated action by foreign-owned banks), and credibly maintaining eventual euro adoption as a policy anchor.

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