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From Boom to Bust: Lessons from Lithuania

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1. Introduction

One could hardly find an emerging European economy which, after the accession to the EU, did not experience a period of economic, financial and asset price boom followed by a sharp economic downturn and the burst of an asset price bubble recently. Yet in the three Baltic states the credit cycle and economic swings seem to have been particularly hefty, which makes this case worthwhile a close examination.

Recent economic and financial developments in the Baltics serve as a clear reminder of how easy it is to succumb to the wishful thinking about sound economic convergence, nearly perfectly functioning financial and goods markets, and high resilience to macro-financial shocks. The explosive mix of global, regional and domestic factors first ignited, then overheated and in the end derailed economic expansion of the Baltic states. At present policy makers and the private sector face a difficult challenge of preserving the macro-financial stability and putting economies back on the sustainable growth track.

In this paper we provide a brief discussion of Lithuania's experience with the recent dramatic change in external and internal economic conditions. The essay gives a brief analysis of the reasons why Lithuania is among the countries that have been hit very hard by the credit crunch. We also discuss main economic policy measures that have been taken and speculate about what steps could have been more effective. We then characterize the state of the economy in the face of the falling exports, deflating asset bubble, credit crunch and contractionary fiscal policy. Finally, we reflect on some immediate macro-financial stability challenges

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and longer-term goals aimed at restructuring the economy and preserving competitiveness.

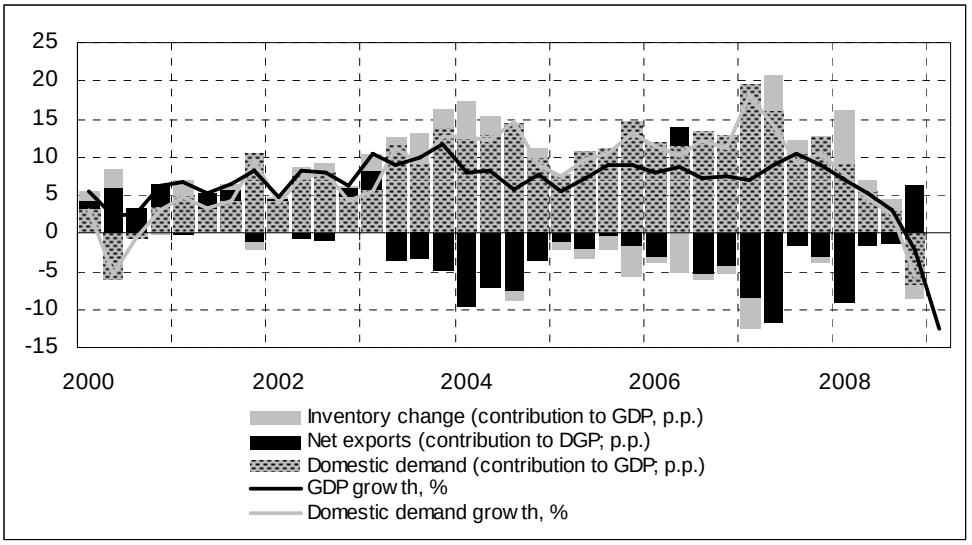
2. Determinants of the Boom and the Bust

For most of this decade Lithuania enjoyed a very strong economic boom: in the period from 2000 to 2007 the GDP grew on average by almost 8% (see chart 1), which is well above the potential growth. Our estimates of the average growth rate at which unemployment neither increases nor decreases point to the range of 5 to 5.5%.

However, in the second half of 2008 economic activity virtually stalled resulting in 3% growth for the full year. The latest economic data and forecasts of the Bank of Lithuania suggest that in 2009 a GDP drop of at least 15% seems to be unavoidable.

One of the main reasons behind the boom-and-bust cycle has been the credit-fuelled domestic demand. Its exuberant growth during the boom years provided a powerful stimulus for overall economic activity but it collapsed dramatically along with the burst of the house price bubble and the onset of the global economic crisis and local credit crunch.

Chart 1: Drivers of Economic Growth in Lithuania

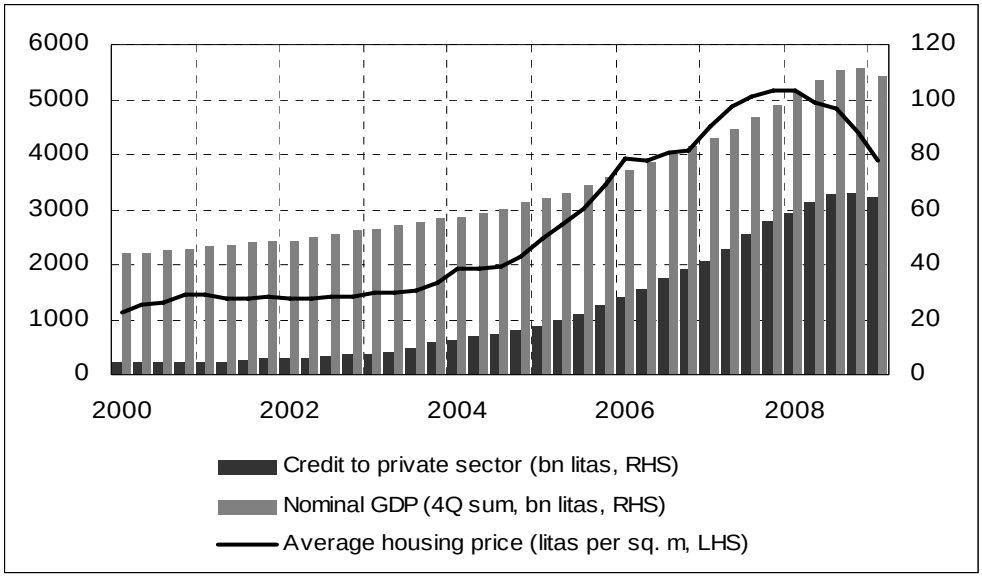


Source: Department of Statistics, Bank of Lithuania.

When analyzing this period one has to have in mind two interdependent processes: an economic and financial convergence process on the one hand, and the credit and

housing boom on the other. Starting from relatively low levels, credit to the private sector grew on average by 51% per annum in the period from 2003 to 2007, then showed signs of a stagnation and eventually – trend reversal. House prices more than tripled over the same period before market liquidity dried up in 2008 and house prices plummeted by some 25% from the peak (see chart 2).

Chart 2: Credit and House Price Growth



Source: Bank of Lithuania, Department of Statistics, Oberhaus.

3. Competing Narratives

The "convergence versus overborrowing in the emerging European economies" debate shaped the economic discussion among policy makers, business executives, domestic economic commentators and international observers. Unfortunately, Lithuania's undeniable progress on the economic, financial, and social fronts due to the European integration processes made lone voices warning of the coming housing bubble (e.g., Kuodis, 2004, Ramanauskas, 2006a) and threats of overheating (e.g., Ramanauskas, 2005, 2006a) virtually inaudible.

The saying that "the proof of the pudding is in the eating" certainly held true in this case and with no rock-solid evidence of imminent threats to macro-financial stability it was difficult for policy makers and individual decision takers to collectively agree on unpopular precautionary measures, which would have implied foregone political popularity and short-term economic gains. With the benefit of

hindsight, it is getting obvious that the role of the convergence process was grossly over-stated and the inefficient over-borrowing for non-productive purposes was one of the reasons for the hard landing.

Let us examine in more detail how it all started and what went wrong later. The strong credit expansion started at the beginning of this decade when Lithuania began to recover after the Russian crisis and economic prospects improved considerably with the highly successful reorientation of Lithuanian exports to the stable and promising western markets and with the EU accession prospects.

One could argue that the credit market processes could be rightly regarded as financial deepening ("credit democratization"), which shared many attributes with the peer countries of Central and Eastern Europe. Credit supply was boosted as a result of the banks' privatization, financial liberalization, the advent of foreign (mostly Scandinavian) resource-affluent banks, new lending and risk management practices, and the environment of low nominal interest rates due to the credible peg of the national currency to the euro.

Credit demand was fuelled by rosy income prospects, in particular after the accession to the EU, rising profits and wages, declining unemployment and the tax code, which favored housing loans and external financing of corporate investment projects. The combination of credit supply and demand factors plus favorable global economic environment, which emerged on the back of global credit easing, helped to pull the economy out of the stagnation in the aftermath of the Russian crisis.

4. Some Empirics

What did the empirical cross-sectional research of similar episodes in other economies have to say about this? Many empirical investigations suggested that there are clear risks associated with financial liberalization and ensuing strong credit expansion. For instance, Borio and Lowe (2002) suggest that periods of strong credit growth, booming asset prices and high levels of investment almost invariably lead to stresses in the financial system. From their analysis of a broad sample of countries, Fratzscher and Bussiere (2004) provide evidence of accelerated economic growth following liberalization and opening of capital account and a subsequent period of subdued economic activity due to the over-borrowing and over-investment. Tornell and Westermann (2002) assert that a typical lending boom ends in a soft landing but with a non-negligible probability of a crisis (in their sample it is 6% in a given year of a boom). The IMF (2004) examines emerging market credit booms[3], identifiable by strong deviation from long-term trends, and finds that they are synchronized across countries, last on

[3] Understood in their study as an excessive credit expansion that is unsustainable and eventually collapses of its own accord.

average for 3 to 4 years, often coincide with consumption or investment booms and end with very high probabilities in banking and currency crises.

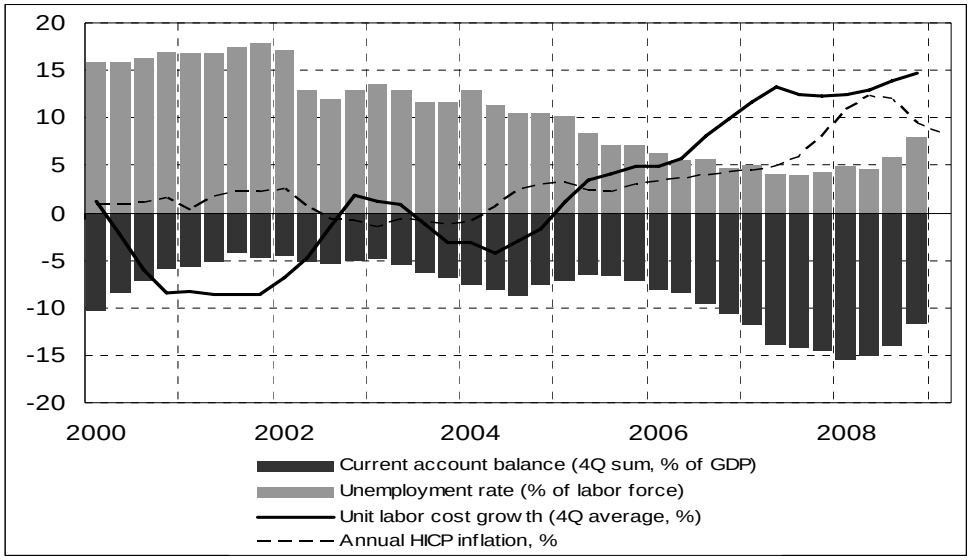
In contrast, there seemed to be many reasons to think that this time things were going to be different. In terms of financial convergence, Lithuania was traditionally regarded as a "late riser" (after a term coined by Cottarelli et al., 2003). At least until 2004 its credit-to-GDP ratio seemed to be well below the level justified by fundamentals (see, e.g., Backé et al., 2006, and Ramanauskas, 2007). Some studies, e.g. Kiss et al. (2006) and Sebastian (2005), claimed that fast credit growth in Lithuania could be fully explained by convergence. Some concerns related to strong credit growth were raised by Ramanauskas (2006a, 2006b) as he discussed the growing evidence of the strengthening financial accelerator and credit cycle.

Some authors, e.g. Ahmed and Bakker (2007), also pointed to the resemblance of the Baltic boom to the unsustainable Portuguese scenario due to possibly inefficient use of borrowed funds. However, it was generally perceived that risks to macro-financial stability were contained mostly due to low initial indebtedness, vested interests of reputable Scandinavian banks in Lithuania, banks' adherence to regulatory requirements, a well-developed institutional setting and the lack of clear indications of overheating (Bank of Lithuania, 2008).

With the benefit of hindsight, it is easy to track down that the first signs of the credit boom in Lithuania surfaced as early as in 2003, and starting from 2005 they were becoming more and more evident. Credit growth was becoming partly self-induced through the financial accelerator effect. Easing credit constraints and the associated surge of liquidity in the economy had a profound effect on asset prices. Steeply rising housing prices in turn spurred housing acquisition and development, and rising equity values via Tobin's q channel provided incentives to invest into the pro-cyclical sectors. All of this further simulated borrowing and created overheating pressures (see chart 3).

It is important to note that the booming real estate sector was the main gateway for the credit to pour into the real economy. At the end of 2008, the loans directly related to real estate acquisition and development constituted around half of outstanding bank loans to the private sector. However, despite this concentration of credit, its stimulating effects propagated throughout the whole economy and fostered seemingly broadly-balanced growth of output and incomes.

Chart 3: Some Important Indicators of Overheating Pressures



Source: Bank of Lithuania, Department of Statistics.

Large injections of "imported" liquidity into the economy simply could not leave wage and profit levels unchanged. A large fraction of credit-fuelled domestic demand automatically fed into higher incomes, especially in the non-tradable, pro-cyclical sectors, and contributed to higher capital and labor utilization rates. The grave problem with this is that the vast majority of economists, decision makers and foreign observers failed to take the interdependence between the real activity and incomes on the one hand, and the housing and credit boom on the other appropriately into account. The associated irrational exuberance eventually resulted in bank losses, excessive and inefficient investments, excessive indebtedness of the private sector, and overly optimistic projections of tax revenues.

Yet these assessment errors were not trivial, as the discussion of credit endogeneity was basically underpinned with the presumption of economic convergence. There were many analyses attempting to rationalize the strong economic growth accompanied by large external imbalances with the help of the neoclassical growth theory (see e.g. Bems and Jonsson, 2006, or Bems and Schellekens, 2007). These analyses suggest that active borrowing and large external imbalances are justified in the context of strong economic convergence provided that capital inflows raise productive capacity and expected future incomes.

It turned out that in the Lithuanian case the largest part of incoming capital flows were financing consumption and nonproductive, non-tradable activities

thereby invalidating the initial premise of convergence. Moreover, there are significant risks that due to the inefficient allocation of capital and labor and due to the excessive debt burden the long-term economic potential of the country may have been dented.

The whole boom-bust period was largely determined by compounded risk assessment errors made by various economic decision makers. But banks do stand out in this respect. Given the strong dependence of the economy on credit conditions and bank lending policies, the banks exerted immense influence on actual economic developments, and their risk assessment errors were detrimental for the overall economy. Individual borrowers and even companies acquiring bank financing for their business projects usually do not have sufficient expertise for the well-rounded assessment of micro- and macro-economic risks – banks' as financial intermediaries' primary function is therefore to resolve asymmetric information problems, assess and monitor investment risks and thereby ensure the efficient allocation of financial resources. In contrast, during the whole boom episode banks underestimated various risks, most notably credit risk.

Possible reasons for such inadequate assessments were rather standard in the regional context. They included overestimation of the role of collateral for ensuring portfolio quality, overestimation of the speed and sustainability of economic convergence, inadequate assessment of capital crowding-in, downplaying local risks from the foreign banking group perspective, market share buying, principal-agent problems in bank employee remuneration schemes, excessive profitability requirements set out by shareholders, etc.

5. Assessment of Economic Policy Measures

Arguably economic developments in Lithuania were slightly more moderate than in the two neighboring Baltic states, because the credit democratization process in Lithuania started later and lagged behind by a couple of years.

Nevertheless in the recent past Lithuania was persistently among those EU Member States that shared the most pronounced overheating pressures (i.e. well above potential GDP growth combined with large external and internal imbalances), and the unfolding economic contraction has been much worse than expected. For the sake of illustration of the magnitude of the seismic shift in economic conditions, note that downward revisions of the GDP growth forecast made by various institutions for 2009 amount to a staggering 10-20 percentage points compared to their earlier expectations.

One of the reasons of the strongly amplified economic cycle were economic policy failures. We claim that policy makers failed to curb excessive credit and house price growth and did not make effective use of fiscal stabilization tools.

There has been much controversy around certain issues of economic legislation, namely ill-devised income tax incentives for individuals taking housing

loans, the absence of the property tax (levied on natural persons) (see Kuodis, 2004). The (credible threat of prospective) introduction of a general property tax and the abolishment of the tax incentive, which effectively reduced mortgage interest rates by 33%[4], could have had suppressing impact on property prices. That would probably not have pricked the bubble but the damage would have been smaller.

Together with other above-mentioned factors, such government policy stance clearly fostered credit and house price growth. At the same time both central and municipal governments imposed heavy "red tape" constraints on housing development, which added to the distortions of the supply and demand balance in the housing market.

Finally, fiscal policy has been highly pro-cyclical in this boom-bust episode. The boom period was utilized by the ruling social democratic coalition for tax reductions and increases in government spending on social programs and wage increases in the public sector. Populist government succumbed to pressures to raise spending of boom-related tax revenues, especially in the context of the convergence saga and generally positive economic assessments from the EU and other international institutions. When the economy came to a halt in the second half of 2008, the newly elected center-right wing coalition had to dramatically cut public spending in the face of an imminent collapse of public finances, thereby exacerbating the economic slump.

Turning to monetary policy, it is important to note that it is based on the 15-year-long tradition of a currency peg (with the aim of the euro adoption as soon as possible) and on the commitment to free movement of capital. Within this monetary policy framework the Bank of Lithuania was basically left with only prudential oversight and administrative regulation measures to tackle any possible excesses in the credit market. The larger burden of the macroeconomic management should have fallen on the fiscal (tax) policy makers, but they failed to respond as we demonstrated above.

Arguably it is hardly a coincidence that the CEE countries that have their exchange rates fixed to the euro (most notably the Baltic states) tend to experience a more pronounced boom-bust episode than other CEE countries. Some authors suggest that a fixed exchange rate regime is an inherently risky policy option in the preparation for the euro adoption (see e.g. Zanghieri, 2004). The argument is that in the face of price convergence and capital inflows, a currency peg prevents the nominal exchange rate appreciation, thereby excess liquidity, price and current account pressures emerge, which may result in balance-of-payments, currency or banking crises.

The situation in the Baltic countries serves as a vivid illustration of such risks. Foreign banks, which control the lion's share of Lithuania's banking system,

[4] The statutory personal income tax tariff at the time when the incentive was introduced.

flooded the domestic market with relatively cheap and abundant external financing. Under the credible currency peg exchange rate risk was virtually eliminated, and euro-denominated loans were widely regarded as very close substitutes to litas-denominated loans. This resulted in extremely low (sometimes even negative) real rates of loans (denominated both in euros and litas), which stimulated investment, housing acquisition and consumption. At the same time, negative real deposit rates reduced incentives to save.

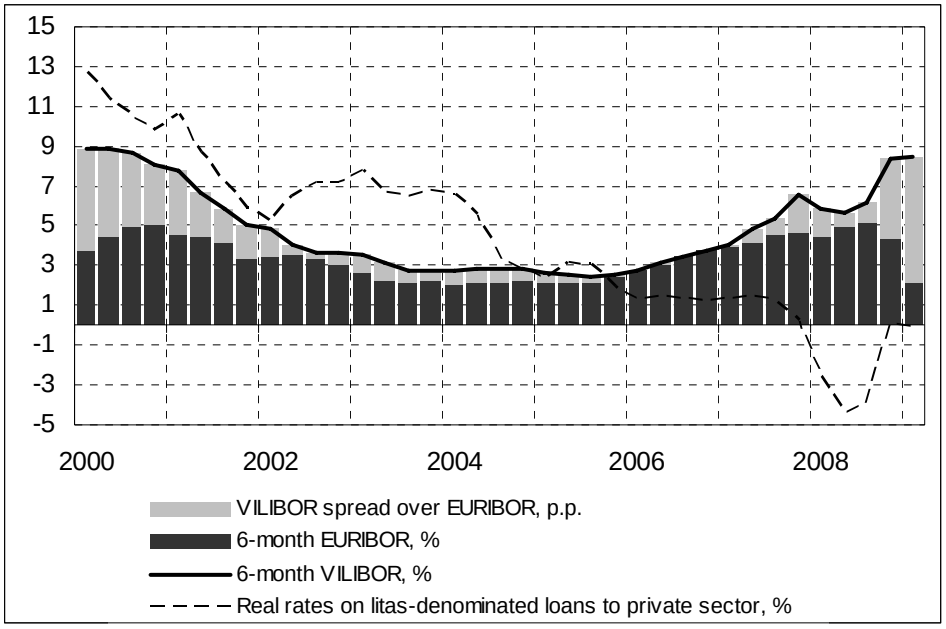
Such a situation is inherently risky because credit-fuelled domestic demand forms inflationary pressures, which result in even lower real rates, again stimulates credit and may create a vicious cycle leading to overheating and over-borrowing. Under the flexible exchange rate regime, currency depreciation risks should in theory rise once overheating pressures emerge, and this should hamper credit expansion[5]. In the case of the currency peg and in the absence of this automatic stabilization mechanism foreign banks should revise country's risk premia and should gradually become reluctant to provide financing.

There was a serious case to have *a priori* expectations of the almost inevitable transformation of too low interest rates into credit risks due to overheating. In the course of 2007 and 2008 banks were actively encouraged by the Bank of Lithuania to assess risks more conservatively but they were slow to react. They changed lending conditions – and did that dramatically – only when the domestic house price bubble burst and global bank financing conditions tightened (see chart 4).

If the currency peg added to overheating pressures, was there something that could be done about it? Against the background of overly favorable credit conditions rendered by imported policy rates and banks' exuberance, the Bank of Lithuania chose strengthening bank oversight and communicating risks as its primary financial stability enhancing measures. The Bank of Lithuania held the view that potential risks associated with credit growth would be best offset by the strong bank capital base and effective risk management (Bank of Lithuania, 2008). Prudential oversight measures included tightening rules of capital base formation, implementation of the Basel II accord, keeping relatively high reserve requirements (6%), conducting stress testing exercises, preparation for crisis management and strengthening regional cooperation of banking supervision.

[5] However, the experience of other CEE countries shows that this did not happen during the boom episode, which may just be another indication that the underestimation of credit risks (rather than, say, exchange rate risks) played a crucial role in this global boom-bust cycle.

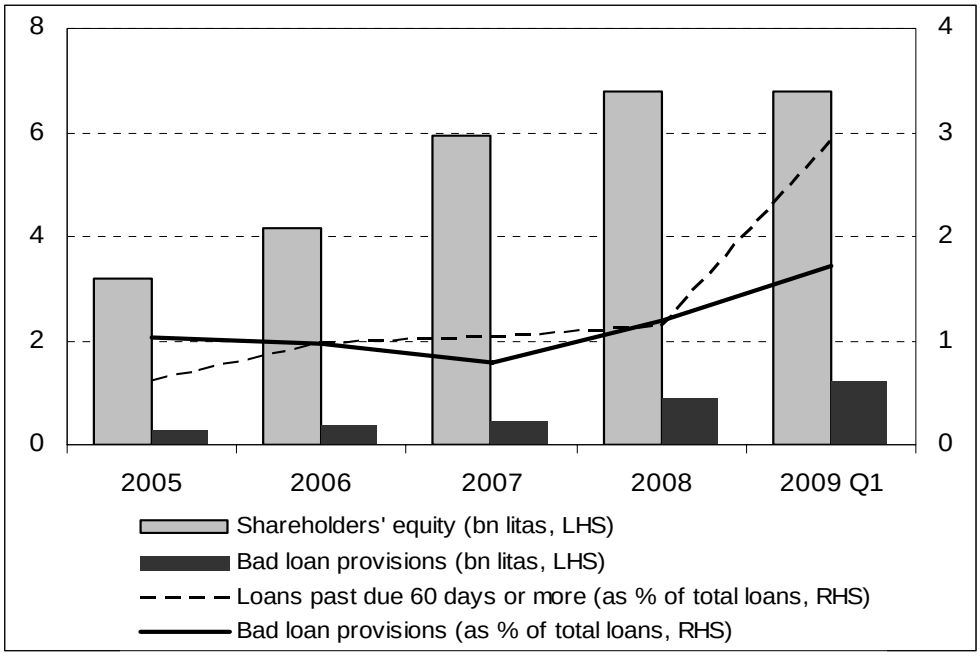
Chart 4: Lending Conditions



Source: Bank of Lithuania, European Banking Federation, authors' calculations.

Retrospectively, this approach proved to be insufficiently effective because the banking system did not have much trouble adhering to existing formal regulatory norms and yet the subsequent rapid deterioration of bank portfolio quality clearly reflects banks' excessive risk taking in the past few years (see chart 5). Despite excellent adherence to regulatory requirements, alarming signs of possible problems in the future included banks' practices to extend the maximum duration of housing loans up to 40 years, allow very small income buffers for borrowers (i.e. it was common to allow debt servicing to make up to 60% of household's income), require very small down-payments and tolerate loan-to-value (LTV) ratios of close to 100% and even up to 120%, etc.

Chart 5: Quality of Bank Loan Portfolio



Source: Bank of Lithuania.

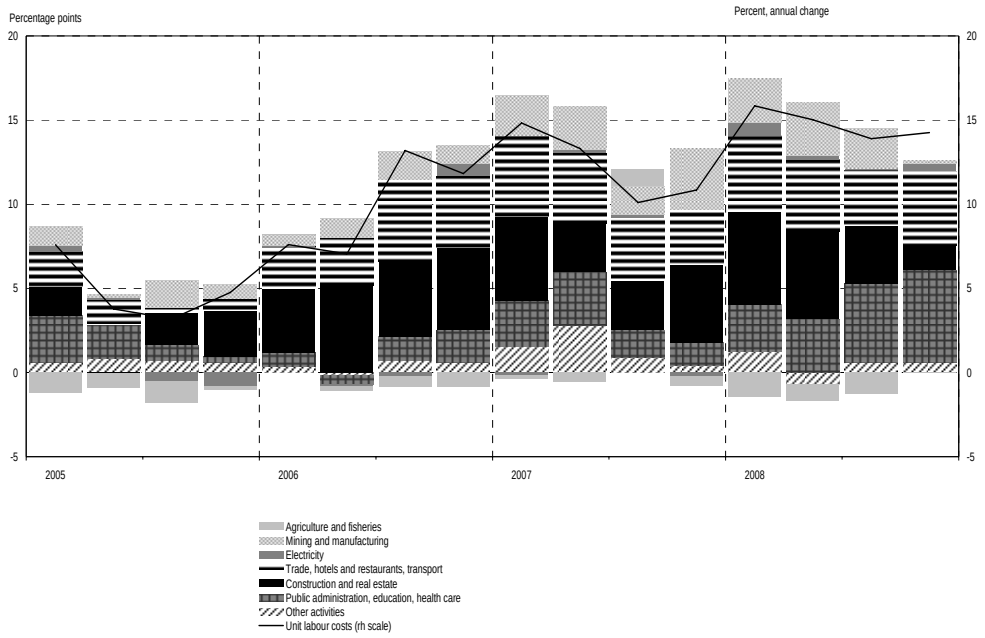
The prudential and administrative measures that may have smoothed the credit cycle and hindered excessive risk taking include imposing stringent constraints on the duration and size of housing loans, regulatory requirements for LTV ratios and down-payments, much stricter or possibly cyclically adjusted capital adequacy requirements or even outright taxation of excessive credit growth. Against the background of overwhelming optimism most of these measures were unfortunately dismissed as unnecessary, ineffective or contradicting the government's policy of supporting free movement of capital. On the other hand, the pro-active approach may have not worked due to the very strong economic incentives offering huge short-term gains against the backdrop of the global frenzy in financial and property markets. An important reservation regarding pro-active policy stance was possible regulatory arbitrage by foreign-owned banks that had branches in all three Baltic states.

6. Concluding Remarks

One of the main arguments we convey in this essay is as follows: retrospectively it is clear that economic overheating was almost predestined. The first-best policy

would have been to anticipate possible excesses and tackle them beforehand with a broad coordinated effort. The second-best policy would have been to try to minimize the damage from the boom. Lithuania's authorities in our view were not even close to the second best.

Chart 6: Decomposition of the Unit Labor Costs



Source: Statistics Lithuania and Bank of Lithuania.

The full extent of this damage remains to be seen. Thankfully, the increases in unit labor costs during the boom years were concentrated in the construction and related sectors (as a result of workers fight for "a fair share of the real estate price bubble"), the public sector and domestic services (see chart *6*). In the exporting industries wage developments were more or less in line with productivity advancements.

It should be emphasized that policy errors or economic agents' decisions were not the only reasons for the ongoing macroeconomic and financial distress. The global financial bubble and its regional repercussions and rosy expectations after the EU accession probably were simply too powerful forces to be counteracted effectively by even a very far-sighted government.

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