# The Distributional Impact of Austerity Measures in Latvia

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For a country of its size, Latvia was mentioned in the last decade's macroeconomic discourse remarkably often: first, for its exceptional growth up to 2007, then – for a dramatic GDP contraction in the aftermath of the 2008 financial crisis, and for the so-called "internal devaluation" policy that was the cornerstone of Latvia's recovery strategy. Now, when GDP recovery is underway for 9 quarters, Latvia is held up as an example of a country that paved its way out of the crisis with decisive and timely budget austerity measures. The size of budget consolidation package was remarkable, reaching almost 17% of GDP in 2008-2011. Today, when there is so much talk about austerity in the context of the Eurozone debt crisis, Latvian consolidation experience is of particular interest. In this brief, we are looking at the distributional impact of selected implemented austerity measures, using a micro simulation tax-benefit model EUROMOD. Our results suggest that the impact of these measures is likely to have been progressive, meaning that rich population groups are bearing a larger part of the burden.

#### From Boom to Recession

The "Baltic Tigers" - a term coined to praise the Baltic countries for their dynamic development in the 2000s, especially after their accession to the EU in 2004. During 2004-2007, average annual GDP growth in the Baltics exceeded 8% (in Latvia average growth was 10%). The growth was to a large extent driven by an externally financed credit bubble, leading to overheating of the Baltic economies: inflation was skyrocketing, unemployment was at historically low levels, and current accounts posted double-digit deficits. Before the outbreak of the crisis, the Latvian economy was in the most vulnerable position: Estonia was better situated thanks to prudent fiscal policy implemented in the "good" times, whereas Lithuania was less exposed thanks to its private sector being relatively less indebted.

The growth slowdown in Latvia began in 2007 triggered and was initially by the government's adopted "anti-inflation plan" and the two of the biggest banks' actions at restricting credit aimed expansion. Altogether, this initiated a decline in real estate prices. By December 2007, the average price of a square metre in a standard-type apartment in Riga had fallen by 12% from its peak in July (Arco Real Estate, 2008). Construction, retail trade and industrial production growth slowed down in the second half of 2007. GDP quarter-on-quarter growth approached zero by end-2007 and turned negative in the 1<sup>st</sup> quarter of 2008. In August 2008, the second largest Latvian commercial bank, domestically owned Parex Bank, faced deposit run and was unable to finance its syndicated loans, and in November 2008, the Latvian government took the decision to nationalize the bank. By the 3<sup>rd</sup> quarter of 2008, GDP quarter-on-quarter contraction exceeded 6%. The budget revenues lagged behind the expenditures, resulting in a

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gradually growing budget deficit, which reached about 5.5% of GDP in the  $3^{rd}$  quarter of 2008 (see Figure 1).

Figure 1: Year-on-year growth of general government budget total revenues, tax revenues and expenditures, %; seasonally adjusted budget balance, % of GDP



Source: Eurostat, authors' calculations

In circumstances where the fiscal position was quickly deteriorating but world financial markets were frozen, the Latvian government was forced to seek financial assistance from international lenders. After tough negotiations in November and December 2008, Latvia received a 7.5 billion euro (about 1/3 of GDP) bailout facility from the IMF, the European Commission, the World Bank and the Nordic countries. Latvia received the funding in a series of tranches, with the transfer of each tranche being subject to implementation of a strict reform package agreed with the lenders. Given that introduction of the euro in 2014 remained the Latvian government's target, one of the key elements of the reform programme was maintaining the lat's peg to the euro. Therefore, the Latvian government had to accept especially strict and wide-ranging budget consolidation measures.

### **Budget Consolidation**

The total size of budget consolidation achieved in 2008-2011 was impressive: overall, the fiscal impact of the reforms is estimated at 16.6% of GDP (Ministry of Finance of Latvia, 2011). Under the pressure of international lenders, budget consolidation was front-loaded and was achieved astonishingly fast – the fiscal impact of the reforms implemented in 2009 reached almost 10% of GDP, whereas the impact of 2010 and 2011 year measures was much smaller – 4.1% and 2.6%, respectively (see Figure 2).

Figure 2: Size of the implemented consolidation measures and budget deficit outturn, % of GDP\*



\* Budget deficit in 2011 is the Bank of Latvia's autumn forecast. Source: Ministry of Finance, Bank of Latvia, Eurostat

Yet the way the consolidation was done was rather chaotic. The 2009 consolidation was mainly implemented by expenditure cuts, including strong wage and employment reductions in the public sector (public pay and employment cuts were continued in the following years, wages were cut by 15-20% in each round and most bonuses were abolished). On the revenue side, the government stuck to the goal of shifting tax burden from labour to consumption, thus the consolidation was mainly achieved by raising indirect taxes, while the personal income tax was reduced. Another line followed by the government at the time was to strengthen support to those affected by the crisis, for example, the duration of unemployment benefits was increased.

Nevertheless, by the time preparation of the 2010 budget started, it became clear that in circumstances of continuing GDP fall and peaking unemployment (in 2009, GDP fell by 17.7%, and the rate of unemployment reached 17.1%), the reduction in labour taxes could not be sustained while the social budget could not bear the burden of growing expenditures. Consequently, the reduction in the personal income tax was reversed (the tax rate was raised even above the pre-crisis level). To consolidate the social budget, the government implemented an across the board cut by introducing ceilings on the size of many benefits. In 2011, the tax burden on labour was further increased by raising the rate of mandatory social security contributions.

Budget consolidation was done under the pressure of the crisis and the reform package was designed in a great rush. What also may not be disregarded, is that the three years -2009, 2010 and 2011 - were election years in Latvia: in 2009, there were local government elections, in 2010 - parliamentary elections and in 2011 – parliamentary re-elections<sup>1</sup>. have arguably affected Elections the composition of implemented austerity measures. Thus, in June 2009, just ten days after local government elections, amendments to the Law on State Pensions were passed, which stipulated that old-age pensions should be cut by 10%, but pensions to working pensioners should be cut by 70%. This decision caused a strongly negative public reaction and on December 21, 2009, the Constitutional Court ruled that the government's decision was unconstitutional arguing that the state must guarantee peoples' right to social security. In the following budget consolidation rounds, even in the face of convoluted IMF recommendations to find a constitutional way of ensuring sustainability of the pension system (IMF, 2010), the government remained strictly opposing any pension cuts.

<sup>1</sup> In May 2011, eight months after elections, Latvia's president dissolved the parliament. The parliament was re-elected in September 2011. The mix of implemented reforms is crucial not only because it determines the effectiveness with which the budget consolidation is achieved. What is equally important is that the mix of reforms affects the distribution of costs of the crisis and shapes the economic recovery path. The consequences of the crisis - the dramatic rise in unemployment and wage reductions in the private sector - had a strong impact on incomes, yet policy makers can do little to directly affect this process. On the other hand, policy makers can offset or aggravate those effects by implementing reforms, such as those that made up the austerity packages. In this brief, we assess the distributional impact of selected austerity measures, which were implemented in 2009 -2011.

# Modelling Approach and Limitations

We use the Latvian part of the tax-benefit micro-simulation model EUROMOD<sup>2</sup> and follow a similar approach as that taken by Callan et al (2011). We limit our analysis to reforms in direct taxes, social contributions, and cash benefits<sup>3</sup>. In particular, the following austerity measures are included in the analysis:

- removal of income ceiling for obligatory social insurance contributions (in 2009);
- increase in the rate of social insurance contributions for employees, employers, and self-employed (June 30, 2011);

<sup>&</sup>lt;sup>2</sup> EUROMOD is a tax-benefit microsimulation model for the European Union (EU) developed by the core developer team based mainly in ISER, University of Essex, and financially supported by the European Commission DG-EMPL. For more information on the EUROMOD, see:

http://www.iser.essex.ac.uk/research/Euromod <sup>3</sup> Current version of the Latvian EUROMOD does not allow simulating austerity measures such as public sector pay cuts and indirect taxes. The authors plan to include them in a future analysis.

- reduction of tax exemptions (July 1, 2009);
- increase in the rate of personal income tax (2010);
- introduction of benefit ceiling for unemployment benefits (2010), maternity, paternity, and parental benefit (November 3, 2010);
- cuts in state family benefit (2010);
- cuts in child birth benefit (2010);
- reduction in the amount of parental benefit by limiting eligibility to nonworking parents only (May 3, 2010);
- making stricter income assessment criteria for guaranteed minimum income (GMI) and reducing amount of the GMI benefit for some groups (2010).

We assess the distributional impact of these austerity measures by comparing two alternative scenarios:

- (1) the baseline scenario simulation of 2011 tax-benefit policy system (with austerity measures implemented), and
- (2) the counterfactual scenario simulation of tax-benefit policy system that would have emerged in 2011 in the absence of austerity measures.

If a policy was changed as a part of the austerity package (e.g. income tax increase), we implement a pre-austerity policy (e.g., reduce the income tax to its pre-austerity level). However, if the changes in the policies were regular (e.g. an increase in minimum wage that was planned long before the discussion of austerity measures had started) or not related to austerity measures (e.g. increase in duration of unemployment benefit) we include them in the counterfactual scenario, as well as in the austerity package scenario. By defining the counterfactual scenario in this manner we focus on the impact of austerity measures only holding other things equal.

Despite Latvia is one of the countries where the size of the austerity package was especially large, the distributional effect of the implemented measures has not been analysed neither before nor after the policies had been implemented. Until recently Latvia didn't have a national micro-simulation model which could be used to assess the impact of taxes and benefits on household income. This paper is the first attempt to do this.

However, our analysis is subject to some drawbacks. First, EUROMOD's input data is based on the European Union Statistics on Income and Living Conditions 2008 (with the income data referring to 2007). We adjust 2007 incomes up to 2011 using updating factors based on the aggregate evolution of such incomes according to national statistics. However, we do not adjust for the changes in the labour market that happened during this period. Therefore, we estimate the effect of austerity measures on data that represent the population with pre-crisis labour market characteristics (e.g. relatively low number of unemployed people).

Second, the analysis is limited to the direct impact of the implemented measures, disregarding the secondary effects such as e.g. behavioural responses of people on the implemented policies.

# **Results**

The simulation results suggest that the impact of the analysed austerity measures was progressive with top income groups being the most affected (see Figure 3). The six countries considered in Callan et al (2011) show different degrees of progressivity: Greece demonstrated a clearly progressive impact, while Portugal was the only country where the effect was regressive. The result for Latvia is likely to be a consequence of introduced ceilings on contributory benefits, as well as the increases in income tax and social insurance contributions. While income tax in Latvia is flat (except for a relatively small untaxed personal allowance), the lowest income deciles contain proportionately more unemployed people and pensioners.

Figure 3: Percentage change in household disposable income due to austerity measures by income deciles



Source: based on own calculation using EUROMOD

Higher progressivity was observed for households with children (see Figure 4), which is explained by the introduction of ceilings on child-related contributory benefits. At the same time, the impact on the households with elderly was more even.

Figure 4: Percentage change in household disposable income due to austerity measures for different types of households by income quintiles



Source: based on own calculation using EUROMOD

While the introduction of austerity measures made all income groups poorer, progressivity of the impact reduced income inequality. The Gini coefficient of the counterfactual scenario is 1 percentage point higher than that of the base scenario. After implementation of the austerity measures, the poverty line decreases because the median income decreases. As a result, poverty rates using relative poverty lines decreased. The poverty rate of the elderly was affected the most, because pension income was not cut and pensioners became relatively better off as compared to other population groups. However, if measured against the fixed poverty threshold, the poverty rate increased in all population groups (see Table 1).

 Table 1: Poverty rates and Gini coefficient before

 and after implemented austerity measures

	Pop.	Children	Working Age	Elderly	Poverty line	Gini
Before austerity measures, %	21.2	24.9	18.4	27.8	193.6	0.35
After austerity measures (fixed poverty line), %	23.3	27.6	20.7	28.6	193.6	0.34
Relative change due to austerity measures (fixed poverty line), %	9.2	9.9	11.1	2.8		-2.9
After austerity measures (relative poverty line), %	20.2	24.9	18.3	22.1	181.4	_
Relative change due to austerity measures (relative poverty line), %	-4.8	0.1	-0.6	-25.6		

Source: based on own calculation using EUROMOD

#### **Concluding Remarks**

The austerity measures analysed in this paper have had a progressive impact, with the richest population groups likely to be bearing most of the costs. This result should be interpreted with caution. It should be taken into account that we do not model all of the austerity measures that were implemented in 2009-2011. E.g., we do not model the impact of changes in VAT rates, which is likely to have been quite strong and regressive.

Latvia is a society with extremely high income inequality. For example, the income quintile share ratio calculated by the Eurostat (S80/S20), which measures income inequality, in 2009 was the second highest in the EU (6.9 as compared with an EU average of 4.9). It is unlikely that the progressive impact identified in this paper will significantly reduce income inequality gap in Latvia relative to other European countries.

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