FISCAL CONSOLIDATION IN THE MIDST OF THE CRISIS

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1 Introduction

We analyse the key aspects of the dramatic fiscal consolidation in Latvia in 2008-11 and the linkages between fiscal policy and short-term economic growth in a small open economy. Amidst financial turmoil and the unwinding of extreme imbalances, the Latvian economy contracted by almost 25 per cent from peak to trough. As the government undertook a massive consolidation (of over 15 per cent of GDP, kicking in mainly in July 2009), the economy bounced back more rapidly than anyone expected. After mid-2010, contraction yielded to sustained growth, while the ambitious fiscal targets under the EU/IMF Balance-of-Payments programme were consistently over-achieved. This experience of large-scale consolidation during a major economic correction provides valuable insights into the mechanism of fiscal adjustment.

Before identifying preconditions and contributing factors to such an outcome, we first need to correctly measure the changes in public finances which took place over the period. However, as a significant part of the adjustment is missed by standard measures of fiscal effort, a bottom-up approach is also needed. A review of quarterly GDP and budgetary results helps understanding the effective sequencing of fiscal adjustment and economic activity. We then review the composition of the consolidation and compare its implementation with the literature on the optimal mix of measures. Subsequently, using the European Commission's QUEST model, we review the short-term multipliers of the main measures undertaken in Latvia and discuss their potential longer-term effect on the economy. The results are compared with the effective economic outturn. To explain differences, we discuss the effects of the external environment, the use of EU funds (as a partial substitute for domestic financing) and confidence effects which could have altered multipliers in the midst of the crisis.

The chapter is organised as follows. In the next section we analyse how fiscal consolidation can be duly measured in periods of high volatility. Section 3 reviews the consolidation performance of Latvia, considering both its composition and timing, and compares it to its Baltic neighbours. Section 4 provides estimates of long- and short-term effects of the fiscal consolidation on the Latvian economy. It also looks at whether non-Keynesian effects may have occurred, offsetting the standard multipliers, and provides a tentative measurement of their relevance. Section 5 presents the main lessons we can draw from the Latvian experience. Section 6 concludes.

2 Measuring fiscal consolidation

In the recent case of Latvia, nobody can really argue about the fact that the budgetary adjustment over the period 2008-11 has been huge. However, nailing down a number to identify the amount of such consolidation is not easy. The problems of measuring fiscal effort have been extensively discussed in academic literature. There are two main approaches to determining the size of fiscal consolidation: one based on changes in the cyclically adjusted primary balance (CAPB),[1] also called "conventional" or "top-down" approach, and one based on policy action, also

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[1] Whenever data is available, using the change in structural balance (cyclically-adjusted balance corrected for one-off and temporary measures) is of course a preferable measure. The change in structural balance, measured following the methodology described in Giorno *et al.* (1995) and Girouard *et al.* (2005) is also used in the context of the EU fiscal policy surveillance.

Table 1

The Extent of Latvian Fiscal Consolidation, as Captured by Different Measures
(percent of GDP)

	2009	2010	2011
Change in cyclically-adjusted primary balance (CAPB), European Commission 2012 Spring Forecast	0.5	1.3	3.3
Change in structural primary balance, European Commission 2012 Spring Forecast	0.8	1.6	1.9
Consolidation measures as reported by the government (Convergence Programme April 2012)	9.5	4.0	2.3

Source: Commission Services.

called "historical" or "bottom-up" approach. These two methods have sometimes led to quite different results in terms of measuring the fiscal effort. For example, the following reasons for deviations are explored in IMF (2010) and Guajardo *et al.* (2011):

- the change in CAPB does not capture unrecorded one-off and temporary measures and their subsequent reversals (though this bias is removed when structural balances are considered);
- the cyclical adjustment methodology does not sufficiently capture changes in tax bases during periods of sharp contractions of economic activity, notably changes in stock and house prices, fall in consumption or wage bill as a share of GDP etc.

Moreover, the difficulty of determining the cyclical position in real time implies an additional uncertainty when calculating cyclically-adjusted fiscal figures. This is amplified in periods of significant adjustment in the economy, such as the past few years in Latvia.

However, even if measurement problems could be completely eliminated, there are still situations where these two approaches would produce diverging results. Firstly, the policy action approach measures the impact of discretionary fiscal policy against the unchanged policy scenario, while the cyclically-adjusted balance aims at capturing a non-cyclical increase or decrease in the ratio of revenue or expenditure to GDP. The results could in particular diverge for large expenditure items (like social benefits and public sector wage bill) when their recurrent indexation (not captured by policy action) leads to changing their ratio to GDP. Secondly, the cyclical adjustment is based on potential GDP and when the potential output itself (or its measure) changes, this could automatically lead to a change in the cyclically-adjusted balance due to the rigidity of expenditure (or revenue elasticity being different from unity). Thus, in the case of a falling potential output (or its statistical revision) a policy action might be needed just to keep the cyclically adjusted primary balance ratio stable.

Latvia is one of countries where these two measures give particularly diverse results for the period of fiscal consolidation, especially in 2009 (see Table 1),[2] therefore the potential sources of difference for that year are discussed in more detail below.

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[2] The discrepancy of a similar magnitude, amounting to 7½-9 per cent of GDP depending on the way of measuring the CAPB, was also recorded in Ireland in the same year, see Guajardo et al and European Commission (2011b).

A closer look at the developments in 2009 shows that the CAPB suffers from the following set of issues, related mainly to composition effects and changes therein not captured by the established methodology:

- it underestimates the effects on indirect taxes of an absorption boom and bust: The recent cycle was characterised in Latvia (as well as in other Baltic economies, see European Commission, 2010) by particularly large swings in domestic demand: in 2006-08 the domestic demand exceeded production by around 20 per cent and was reflected in a sizeable current account deficit. This trend reversed sharply in 2008-09 along with falling confidence and contracting credit supply. Unfortunately, the effect of this extreme domestic demand cycle is improperly captured by the cyclical adjustment of the general government's budgetary position used in the EU budgetary surveillance, which adjusts budgetary components based on fluctuations in *output* rather than *absorption*. The alternative measure, which would allow capturing also the effect of the cycle on the tax base for indirect taxes, is an "*absorption gap*" (see Lendvai *et al.*, 2011), which aims at capturing the effect of the current account being above or below the current account norm determined by fundamentals, similarly to the way output gap measures fluctuations of output around its potential level. For Latvia, such a correction of the cyclically-adjusted balance would imply higher underlying deficits in 2005-08, but lower underlying deficit in 2009. Overall, this adjustment could reduce the discrepancy between "top-down" and "bottom-up" measurements of the fiscal effort by **2.6 percentage points** of the difference. An alternative explanation is offered in Sancak et al (2010), where the authors analysed responsiveness of tax revenue and in particular VAT to the business cycle. They found that on average a one percentage point increase (decrease) in the output gap corresponds to 1¾ percentage point increase (decrease) in VAT revenue; the key channels through which the output gap affects the revenue are found to be shifts in consumption patterns towards goods and services with higher (lower) VAT rates and lower (higher) tax evasion during economic expansions (contractions). This approach could explain **1.4 percentage points of GDP** fall in indirect taxes in Latvia in 2009, which occurred against sizeable indirect tax increases in that year, but would still leave about 1 per cent of GDP unexplained, suggesting that the effect of these shifts in behaviour might have been even stronger in Latvia than for the panel of countries covered in the study.
- it underestimates the effects of a reversal in labour taxes: as already discussed above, the standard cyclical adjustment methodology, including the one used by the European Commission, takes into account variations in GDP but not variations between individual tax bases, therefore large fluctuations among the latter will be omitted by the cyclical adjustment methodology. In Latvia in 2009 a particularly large change was observed in the ratio of compensation of employees to GDP, which dropped from 50.8 per cent in 2008 to 46.7 per cent in 2009. It should be noted that in comparison to average historical levels of the ratio (43.1 per cent in 2000-10), both years reflected very high wage growth that took place at the peak of the cycle, but it nevertheless helps to explain why the decline in labour taxes is not fully captured by the adjustment. If the ratio of compensation of employees to GDP would have remained the same in 2009 as it was in 2008, this could have resulted in additional labour taxes in the magnitude of **1.2 percentage points** of GDP;
- it underestimates the cyclical impact of increase in social outlays: The change in unemployment benefits in response to changing cyclical conditions (captured by the cyclical component of expenditure in calculations of the cyclically-adjusted balance) suggests an increase in unemployment outlays in Latvia in 2009 by LVL 43 m or 0.3 per cent of GDP. However, actual data indicates that unemployment benefits increased by LVL 83 m (0.6 per cent of GDP) in that year. Moreover, the cyclical adjustment of expenditure only captures an increase in unemployment benefits, while expenditure on sickness and disability benefits similarly increased in 2009 by some LVL 50 m (0.3 per cent of GDP) above its level of 2008, which can

be only to a minor extent explained by discretionary policy changes. The possible explanation why the actual increase in crisis-related social spending surpassed the one predicted by the cyclical adjustment by some **0.5 percentage points** of GDP could lie in a behavioural change, as previously inactive part population started looking for job (and/or benefit) opportunities amidst plummeting confidence;

- it does not take into account one-off and temporary factors: As discussed above, the cyclically-adjusted budgetary indicators do not take into account one-off and temporary factors and exceptional costs, for which reason it is preferable to use – whenever available – the structural balance when measuring the fiscal effort. Indeed, there have been large exceptional costs related to the stabilisation of the financial sector in Latvia in 2009-11 related to Parex Bank, with overall impact of 0.9 per cent of GDP in 2009, 1.7 per cent of GDP in 2010 and 0.2 per cent of GDP in 2011. These costs were, however, partly offset by a government's decision to retain in the publicly managed pension system part of the social tax previously transferred to privately managed pension funds. The overall impact of temporary and exceptional measures resulted in a **0.3 percentage points** worsening of the general government balance in 2009.

On the other hand, it is also true that the **consolidation amount expressed by the government does not include all measures which should have been recorded as discretionary policy.** As discussed above, around half of the difference between the change in cyclically-adjusted primary balance and the policy action approach can be related to factors not fully captured by the conventional cyclical adjustment. However, there are also factors not covered by the government's estimate of discretionary policy that affect the cyclically-adjusted balance. Notably, non-cyclical social benefits (particularly pensions) increased considerably in 2009, by 2.3 percentage points of GDP (Republic of Latvia, 2009a). These increases covered sizeable indexation of pensions due a lagged effect of years of high wage growth,[3] an increase in pension supplement for pre-1996 years of service (which was initially intended only for lowest pensions but eventually extended to all pensioners),[4] as well as some other increases. The largest part of this increase – approximately two thirds – related to pension indexation and did not constitute a discretionary policy change, but the remaining third is simply omitted from the government's policy action estimate. At the same time, the cyclically-adjusted balance likely captures all of this increase in social spending that took place in 2009, offering another sizeable explanatory factor for the difference between two approaches. Moreover, given the limited and unsophisticated nature of the social safety net in Latvia before the crisis, it became clear as the crisis evolved that the system cannot fully cope with the cyclical impact. For this reason, ensuring adequate social safety net has been from the onset an important part of the stabilisation programme, with additional social safety net measures amounting up to 1 per cent of GDP in 2009 (Republic of Latvia, 2009b), although in practice their impact was somewhat lower in that year. The combined effect of these social benefit increases could thus account for approximately another **3 percentage points** of GDP of the difference between the two approaches. Overall, the possible sources of discrepancy between the change in cyclically-adjusted primary balance and policy action approach in 2009 are summarised in Table 2.

Overall, the evidence provided in this section points to the need to be very cautious in using CAPB as the only measure for the assessment of fiscal consolidation, and to duly consider also the

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[3] Until 2009, pensions were indexed in Latvia twice a year, in April and October, on the basis of CPI and social security benefits' trends. Particularly sizeable indexation of pensions took place in the course of 2008. As a result, an average old age pension in December 2008 was higher by 32 per cent than in January 2008 (according to data published on the website of the State Social Insurance Agency); following the introduction of supplementary pensions from January 2009 an average old age pension increased further by about 7 per cent. The pension indexation has been suspended from 2009 (until end-2013, according to current plans), although average pensions continue increasing somewhat as the share of new retirees, who tend to have higher pensions, gradually rises.

[4] The government tried to reverse part of this increase through the 2009 supplementary budget, but this was rejected by a Constitutional Court ruling, leaving social benefits at higher level.

Table 2

Contribution of Different Items to the Discrepancy Between Alternative Measures of Fiscal Consolidation

	Impact
Cyclical adjustment underestimating fall in indirect taxes	1.4 – 2.6 pps
Cyclical adjustment underestimating fall in labour taxes	1.2 pps
Cyclical adjustment not capturing behavioural changes in social benefits outlays	ca 0.5 pps
Exceptional financial sector costs net of other temporary measures	0.3 pps
Policy action approach "missing" expansionary elements	up to 3.0 pps
TOTAL	**up to 7½ pps**
+ uncertainties related to real time estimates of output gap, differences in measurement methodologies, etc.	…

Source: Commission Services.

"bottom-up" approach for the analysis and policy conclusions.

3 Fiscal consolidation in Latvia and comparison with the other Baltic countries

As established in the previous section, the Latvian authorities have implemented – in particular in 2009 and 2010 – a very substantial fiscal consolidation, although measuring its magnitude is a complicated issue due to very abrupt changes that took place in the Latvian economy over the period of economic adjustment. Some insights into the mechanism of consolidation could, however, be obtained by going into a more detailed analysis of the adjustments, and by comparing evolution of fiscal indicators in Latvia to those of the other Baltic economies, given that economic developments have been similar and all three countries have implemented a broadly comparable fiscal adjustment over the period of 2009-11.

As a starting point, one could observe that total-revenue-to-GDP ratio in Latvia stayed unchanged between 2007 and 2011, while the tax-to-GDP ratio actually declined despite numerous and sizeable tax measures. Broadly similar developments took place in Lithuania, while in Estonia both revenue-to-GDP and tax-to-GDP ratios increased over the same period. The expenditure-to-GDP ratio increased sharply in all three countries between 2007 and 2010, but only Latvia succeeded in bringing the level of government consumption back to the 2007 level already by 2010 (see Table 3). These developments are analysed here in further detail.

3.1 The revenue side of the fiscal consolidation

On the revenue side, it is important to note that the share of tax revenue to GDP declined in Latvia in 2009, compared to 2008, despite very sizeable tax measures that entered into force from the beginning of that year and amounted in total to 3.3 per cent of GDP (*ex ante* estimate), of which 2.6 per cent on the side of consumption taxes. While partly explained by falling revenue elasticities discussed above, this contrasts developments in Estonia, where the share of taxes, including consumption taxes, to GDP actually increased in 2009, even though main tax measures only entered into force from the second half of the year (see Figure 1).

Table 3

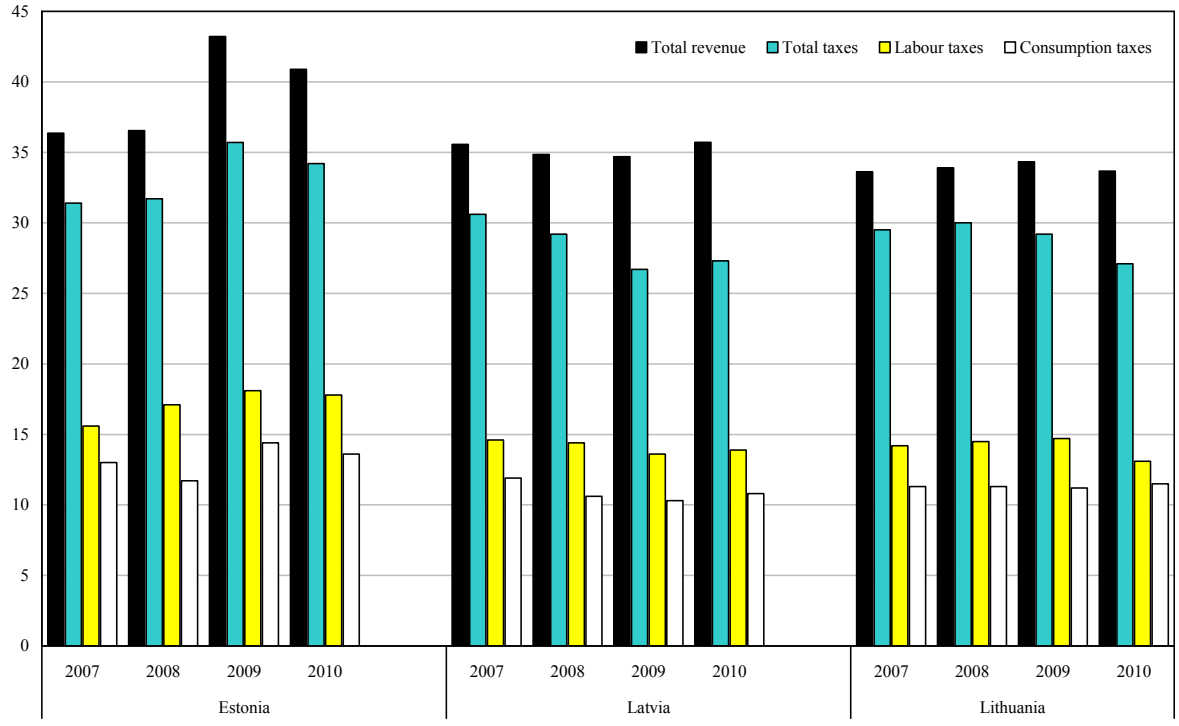
Evolution of Revenues and Expenditures in the Baltics
(percent of GDP)

	Latvia					Lithuania					Estonia				
	2007	**2008**	**2009**	**2010**	**2011**	**2007**	**2008**	**2009**	**2010**	**2011**	**2007**	**2008**	**2009**	**2010**	**2011**
Total revenue	35.6	34.9	34.7	35.7	35.6	33.6	33.9	34.3	33.7	32.0	36.4	36.5	43.2	40.9	39.2
o.w. tax burden	30.8	29.7	27.0	27.5	27.9	29.9	30.4	29.8	27.5	26.5	31.5	31.8	36.1	34.1	33.2
Total expenditure	36.0	39.1	44.4	43.9	39.1	34.6	37.2	43.8	40.9	37.5	34.0	39.5	45.2	40.6	38.2
o.w. gov. consumption	17.8	20.0	19.6	17.5	15.6	17.8	19.2	22.0	20.5	18.9	16.4	19.2	22.0	20.9	19.5
o.w. social transfers	7.1	8.1	12.6	12.5	10.8	9.1	10.9	15.2	13.0	11.2	8.5	10.5	14.0	13.1	11.7
General government balance (EDP)	**–0.4**	**–4.2**	**–9.8**	**–8.2**	**–3.5**	**–1.0**	**–3.3**	**–9.4**	**–7.2**	**–5.5**	**2.4**	**–2.9**	**–2.0**	**0.2**	**1.0**

Source: Commission Services.

Figure 1

Ratio of Total Revenue, Tax Revenue and Revenues from Main Tax Categories to GDP in the Baltics



Source: Eurostat, *Taxation Trends 2012*.

As already discussed above, the cyclical impact of falling tax elasticities could explain approximately half of "missing" consumption taxes in Latvia in 2009 (while in Estonia this effect seems to have taken place earlier, in 2008). Indeed, VAT compliance dropped very substantially in Latvia between 2007 and 2009 – considerably more than in other two Baltic countries – and still remains the lowest in three countries, even though before the crisis the indicator was above that of Lithuania; similar trends can be observed with regard to VAT C-efficiency.[5]

Labour tax developments in Latvia in 2009 are less contradictory and their fall in relation to GDP can be largely explained by wage bill dynamics discussed above; such a sharp decline in the ratio of wage bill to GDP was only observed in Latvia. Nevertheless, the fall in implicit tax rate on labour in crisis years (to some extent offset by retaining some of revenue that previously was redirected to the mandatory pension pillar from 2009) suggests that compliance rates have fallen with respect to labour taxes as well.

All these factors point to a considerable deterioration of tax compliance in Latvia in 2008-09, which occurred alongside sizeable measures to increase tax revenue. The resulting level of statutory tax rates is now somewhat higher in Latvia than in other two Baltic countries, but the tax efficiency appears the lowest.[6] To bring the level of statutory rates closer to those of other Baltic economies, the Latvian Parliament passed on 24th May 2012 changes to tax laws that foresee lowering VAT rate from 22 to 21 per cent from July 2012 and gradually lowering the personal income tax from 25 to 20 per cent over the three year period starting from 2013.

EU funds have also played a very prominent role as a revenue source particularly in last years, due to a combination of factors: firstly, major projects related to the 2007-13 financial perspective became operational with a few years lag and, secondly, intensifying the absorption of EU funds was a deliberate policy to support the domestic demand in crisis years in line with the conditionality of the EU Balance-of-Payments assistance programme. However, this also implies that while it should be possible to sustain comparable level of capital revenue in the short term, in the medium term the amounts will decline as respective financing is exhausted; this might already be the case for current transfers in the short term.

3.2 The expenditure side of the fiscal consolidation

Scaling back expenditure played the crucial part in the Latvian fiscal consolidation strategy – according to the authorities' estimates, savings on the expenditure side amounted to around 10 per cent of GDP over the period of 2008-11, of which 6.7 per cent of GDP in 2009 alone. The expenditure side consolidation was centred on cuts in government consumption, which mostly cover public sector wages and good and services procured by the government. At the same time, social benefits remained broadly intact throughout the crisis, with an increase in some categories.

Statistical indicators confirm that the magnitude of consolidation on the side of government consumption was unprecedented and constitutes the most remarkable feature of Latvia's fiscal adjustment, with government consumption contracting by a fifth in real terms between 2008 and 2010 and, even more shocking, by almost a third in nominal terms over the same period. Latvia was the only country in the Baltics to bring the ratio of government consumption to GDP back to the level of 2007 already in 2010, despite a substantial fall in economic activity, underlying that government spending was cut most substantially in Latvia among the Baltic economies (see

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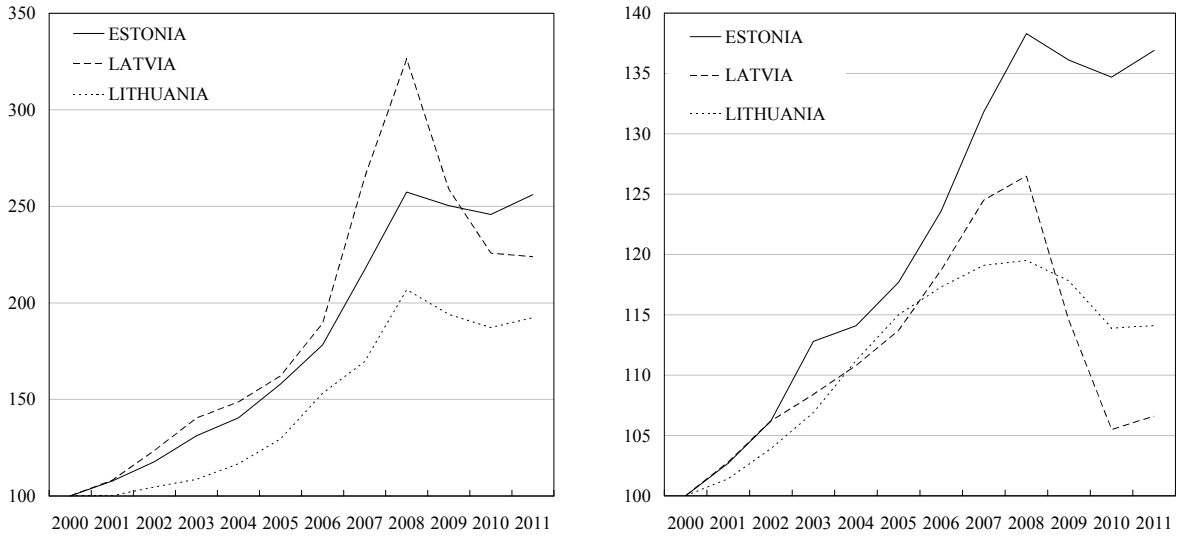
[5] VAT compliance ratio measures proportion of VAT actually collected in relation to theoretically possible collection, based on the value of private consumption and scope of application of standard and reduced VAT rates (using HICP weights). VAT C-efficiency uses only standard VAT rate and overall consumption, thus measuring both compliance and policy gap.

[6] Based on the analysis of consumption and labour taxes; taxation of capital cannot be easily compared across the Baltics, notably due to a different system in use in Estonia, where only distributed profits are taxed.

Figure 2

Evolution of Government Consumption in the Baltics
(left panel: values, right panel: volumes)



Source: Eurostat.

Figure 2). However, consumption also increased most during the boom years in Latvia, in particular on the side of prices. This unsustainable trend prior to the crisis – as well as the fact that very decisive measures were taken in 2009-10 to bring the government consumption back to sustainable levels – has been acknowledged by Åslund and Dombrovskis (2011). For example, according to the book half of 75 state agencies (in a country with a population of about 2 million) were to be closed down according to the 2009 stabilisation programme.

Among government functions, health related expenditure, defence expenditure and education expenditure stick out as areas most affected by the cuts in Latvia: between 2008 and 2010, health related expenditure declined by approximately 27 per cent (while "only" by 10 and 7 per cent in Estonia and Lithuania respectively) and education related expenditure declined by about 26 per cent (compared with a decline of about 10 per cent in both Estonia and Lithuania). However, in particular in education expenditure also increased most rapidly prior to the crisis in Latvia. The defence budgets were substantially decreased in all three countries, but again most notably – by almost a half – in Latvia, by over a quarter in Lithuania and by around tenth in Estonia. The provision of general government services also declined most notably in Latvia. At the same time, expenditure on economic affairs (which among other things reflect EU funds absorption) actually increased in Latvia over the period of 2008-10, while declining most notably in Estonia and to a lesser extent in Lithuania.

Both Åslund and Dombrovskis (2011) and World Bank (2010) shed some light on these exceptional developments with regard to healthcare and education sectors: both sectors were in a need of radical reforms to align the provision of services to demographic trends and to improve efficiency. These reform plans were available, but the implementation was delayed due to the lack of political support. The crisis – which revealed the need to bring public finances on a sustainable path – acted as a catalyst for reforms, which were implemented over a very short period of time. The World Bank (2010) later noted that "Latvia has achieved years' worth of difficult structural reforms in the short space of just a few months".

Another area where existing reform plans might have helped to implement the expenditure-side consolidation, was the administrative territorial reform enacted from 1 July 2009. As a result of this reorganisation, one administrative level was completely abolished and the number of territorial units declined from 548 to 119 (110 municipalities and 9 republican cities). The reform had no direct link to the consolidation strategy and had been prepared for years, but is nevertheless likely to have had a positive impact on local governments' finances. Similarly to developments at the level of general government discussed above, expenditure of municipalities increased fastest among the three Baltic countries prior to the crisis in Latvia, but also declined most abruptly in 2009-10.

3.3 The timing of the consolidation

Although fiscal consolidation officially started at the end of 2008, when the Latvian authorities turned to the EU, the IMF and regional neighbours for the financial assistance that resulted into the Balance-of-Payment assistance programme, it was not until the second half of 2009 that the bulk of consolidation actually took place. On February 2009, in fact, the government fell over concerns about its handling the economic crisis and its inability to impose the austerity measures agreed with the international lenders, leading to the formation of a new government in March 2009 whose explicit mandate was to implement the agreed fiscal austerity.

Given the deterioration of the economy during the first months of 2009 and the inability of his predecessor to actually implement the consolidation measures, the newly appointed government needed to act quickly and decisively to restore confidence and redress the situation. For this reason Prime Minister Valdis Dombrovskis and the international lenders agreed on the need to clearly front-load the consolidation and to adopt the necessary measures as soon as possible, adopting in the supplementary budget of June 2009 all the necessary measures to keep the government deficit below the 10 per cent of GDP, and to implement a progressive consolidation bringing the deficit below the threshold of 8.5 per cent in 2010 and 6 per cent of GDP in 2011, ultimately correcting the excessive deficit (i.e. bringing the deficit below 3 per cent of GDP) by 2012.

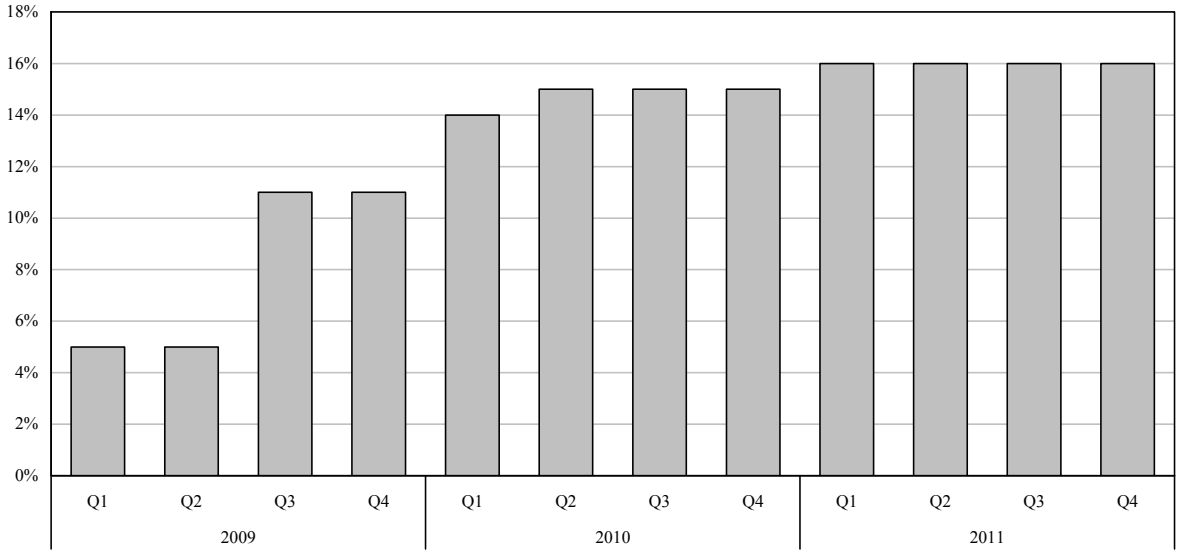
In June 2009 a massive set of measures of over 4 per cent of GDP were adopted with the supplementary budget 2009, and in July measures concerning the 2010 budget were already proposed by the government and negotiated with international lenders with a view to reassure about the subsequent steps. Finally, in November 2009 an additional package of fiscal adjustment was adopted, entering immediately into force and defining the key elements of fiscal consolidation in 2010. It can thus be said that the bulk of the consolidation (about 10 per cent of GDP) was actually designed and adopted in less than six months, in the course of the second half of 2009. This represented a strongly front-loaded and credible adjustment, which affected market's perception of the Latvian situation already from the beginning of 2010. In Figure 3 we report a tentative quarterly accounting of the effective entry into force of the measures, where the series has been built on the basis of government's *ex ante* commitments and expenditures have been checked against *ex post* reporting.

4 Fiscal consolidation and economic activity

In this section we analyse the interplay between fiscal consolidation and growth in Latvia. Fiscal multipliers of the above-mentioned measures are presented and compared to the actual GDP data. What is remarkable about the Latvian experience is that significant cuts in government expenditures and tax hikes coincided with a robust economic recovery, pointing to the existence of relevant non-Keynesian effects offsetting the contractionary Keynesian effects of fiscal consolidation.

Figure 3

Quarterly Accounting of Fiscal Consolidation Measures in Latvia
(percent of quarterly GDP)



Source: Commission Services.
Note: the series has been built on the basis of government's *ex ante* commitments and projections for revenues, with expenditures checked through *ex post* reporting.

4.1 Fiscal multipliers in the long and short term

Using the latest version of the Commision-developed dynamic stochastic general equilibrium (DSGE) model, QUEST (Ratto *et al.*, 2009), in this subsection we compare the fiscal multipliers of various budgetary measures and get some insights on the theoretical impact of composition of the Latvian consolidation measures. QUEST is a large-scale open economy new-Keynesian model used for policy analysis.[7] The model economy is described by optimal decisions of households and firms. There are three production sectors: a construction sector and two manufacturing sectors producing traded and non-traded final consumption goods.

The model features three types of households:

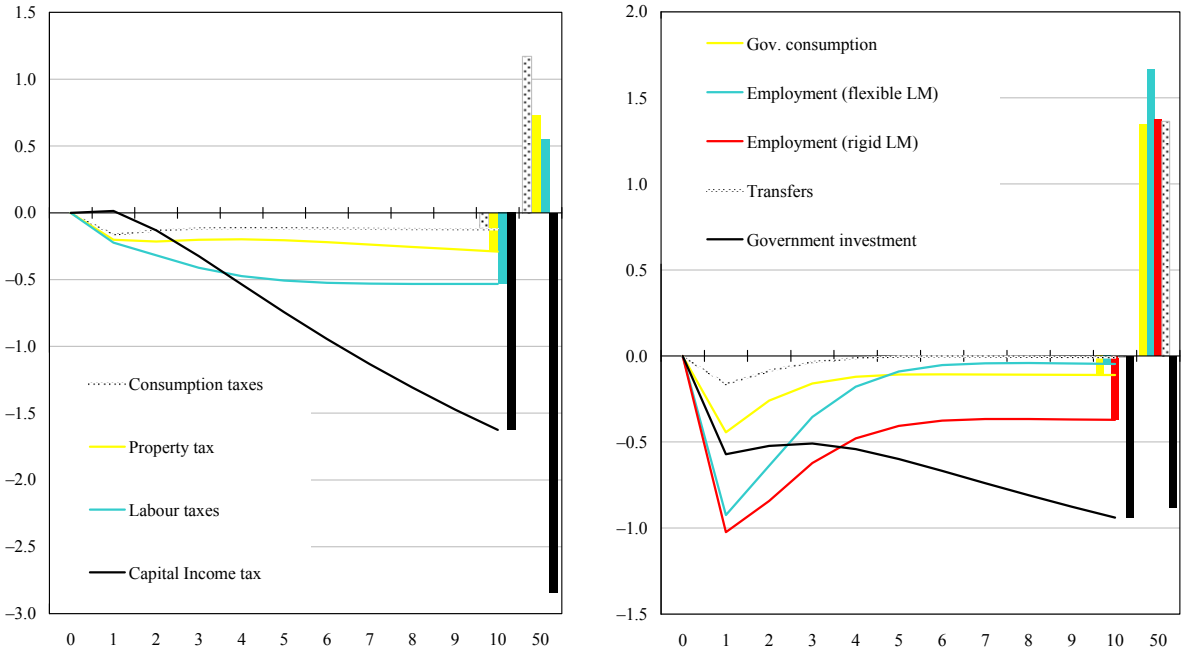
- A share of households are "Ricardian": they own capital and have unlimited access to financial markets; their consumption decisions are based on the life-time income hypothesis;
- Another share of households are "collateral-constrained": they have limited access to credit markets and can only get indebted against the value of their collateral (housing stock) up to an exogenously given level;
- The third type of households is so-called hand-to-mouth consumers: they do not have access to financial markets and consume their after-tax labour income and transfer earnings in every given period.

Fiscal policy is described by a rich set of fiscal instruments. The government can raise revenues by a tax on consumption (VAT), on personal income (PIT), on corporate income (CIT) or on immovable property, via social security contributions and finally via a lump-sum tax. The fiscal

[7] For a comprehensive review of alternative structural models used for policy analysis, see Cogan *et al.* (2010) or Coenen *et al.* (2012), where a comparison of IMF, ECB and QUEST models can be found.

Figure 4

Annual Impact Analysis of Different Tax Hikes and Expenditure Cuts Leading to a Permanent Budgetary Consolidation of 1 Percent of GDP, Simulated with QUEST II



Source: Commission Services.

authority spends on government consumption, government investment, unemployment insurance benefit payments, and transfers. Government consumption is further broken down into intermediate government consumption (unproductive expenditures) and compensation of employees (which equals government output following standard national account practices). The government budget does not need to be in balance every period. Fiscal deficits are financed by changes in the public debt. The model is closed down by a debt rule according to which one of the above instruments reacts endogenously to stabilise debt in the long-run at its target. The presence of non-Ricardian households allows for Keynesian transmission channels of fiscal policy.

The model incorporates various real, nominal as well as financial frictions to match the dynamic response of the economy to standard shocks. It was calibrated to the Latvian economy for size, openness, trade shares and relative size of each component of GDP. In addition, the monetary policy is characterised by a fixed exchange rate regime.[8]

To evaluate the economic impact of fiscal consolidation, this section looks at the multipliers of fiscal consolidation of a given size achieved by different instruments. In particular, Figure 4 displays the impact of different tax hikes and expenditure cuts leading to a permanent budgetary consolidation of (*ex ante*) 1 per cent of GDP using one instrument at the time. Given the model's assumptions about long-run real and nominal growth rates, a 1 per cent of GDP reduction in the fiscal deficit corresponds to a 27 per cent of GDP reduction in the long-run debt target. In the simulations in this section it is assumed that fiscal space gained by the long-run debt reduction is used to decrease labour income taxes over time.

[8] For a detailed description of the model see, e.g., Lendvai and Roeger (2010).

The simulations suggest that fiscal consolidations have a negative impact on economic activity in the short run. Over time, however, if the fiscal space is used to reduce distortionary taxes (labour income taxes in the simulations), the effect of the consolidation turns out to be positive for most of the instruments. Further, as can be seen in the figure, the results indicate that expenditure cuts may have a larger impact on GDP than tax hikes, although this effect tends to turn around very quickly. The model also confirms that VAT and property taxes are less distortionary than labour income tax, whereas tax on capital income leads to a reduction of the economy's capital stock over time and thereby leads to a significant reduction in production as well.

On the expenditure side, a reduction in transfers and unproductive government investment leads to the smallest short-run negative impact on GDP. Reduction in the compensation of employees (either via public wage cuts or by lay-offs in the public sector) may have significant negative effects on total GDP in the short-run. Over time, the reaction of the economy depends on the flexibility of the labour market (wages and movements of employees between sectors): the more flexible the labour market, the more private GDP will pick up in response to the reduction of public employment or public wages – and hence the less negative/the more positive the long-run effect will be. Finally, a reduction in productive government investment spending reduces productivity in the private sector and therefore turns out to be rather detrimental for overall economic activity over a longer horizon.

The simulations provide a benchmark that can be used to assess the impact of the composition of fiscal consolidation on growth in the short and long term (when fiscal space gained through the consolidation can be used to reduce distortive taxes). As the above discussion suggests, an optimal mix of measures would have implied higher consumption taxes on the revenue side and cuts in government consumption and employment on the expenditure side, especially as far as the long-term benefits are concerned. It is important to notice that the actual effects of the cuts in public employment depend on how flexible is the labour market and, more precisely, on how smoothly workers can move from the public to the private sector. In the case of Latvia one could safely argue that labour market institutions are rather supportive of high labour turnover and thus we can reasonably expect the flexible labour market multiplier to provide better guidance than the rigid labour market multiplier in forecasting the effects of consolidation on Latvian GDP.

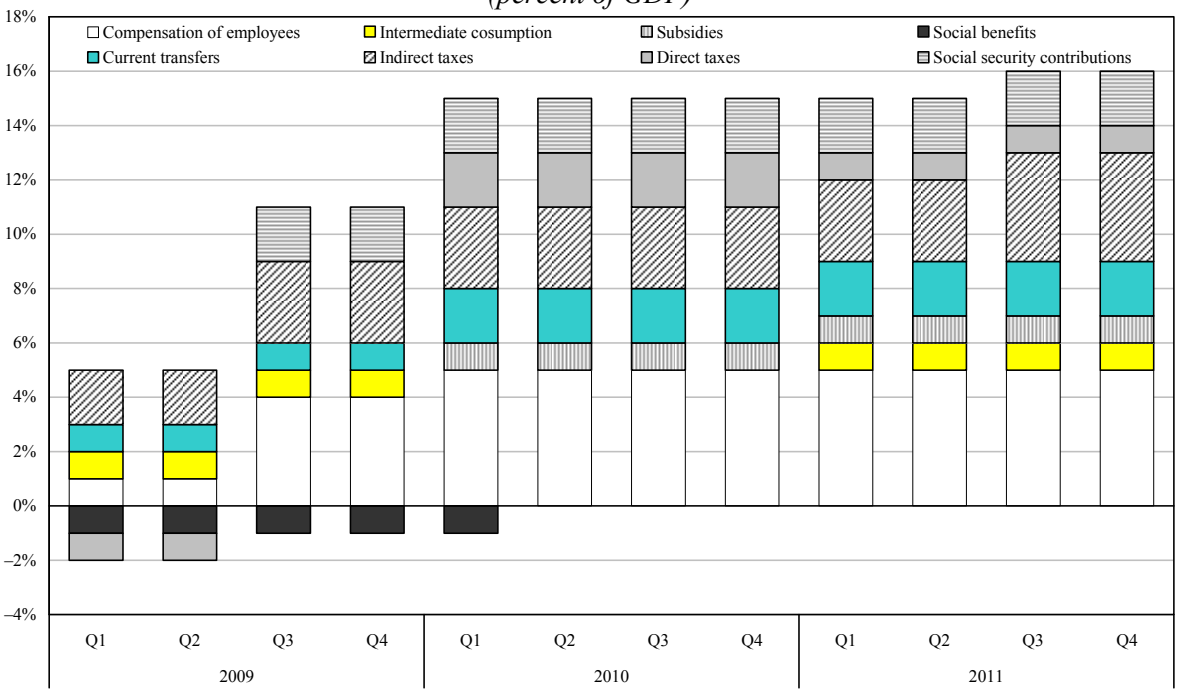
As we can see from Figure 5, those measures were indeed prominent in the actual composition of the fiscal consolidation undertaken by the Latvian government under the supervision of the international lenders. In particular, public employment (in the form of both wage cuts and reductions in the number of employees) stands out as the most important single item of consolidation over time, followed by indirect taxes (composed mostly of consumption taxes).

Latvia's fiscal consolidation was therefore clearly designed to maximise long-term gains, but what about the short term effects? A quarterly accounting of fiscal consolidation can allow us to identify how the fiscal multipliers associated with the timing of consolidation may have affected GDP growth in each quarter. It should be kept in mind, however, that it is virtually impossible to have a precise quarterly accounting of the fiscal measures, as it entails a certain degree of arbitrariness in the imputation of policies formally implemented during the year and for which is it not possible to monitor the effective implementation. This implies that also the multipliers' estimation may be affected and should be interpreted as indicators of the order of magnitude of the effects rather than as precise numbers.

Figure 6 illustrates the economic effect of the Latvian fiscal consolidation undertaken since 2009 based on simulations with the QUEST model. The simulation assumes that the consolidation takes place against a high deficit baseline which is assumed to be long-lasting before the consolidation is announced in 2009q1. Further, it is assumed that the entire set of consolidation measures is announced in 2009q1 and that it is believed to be permanent and perfectly credible.

Figure 5

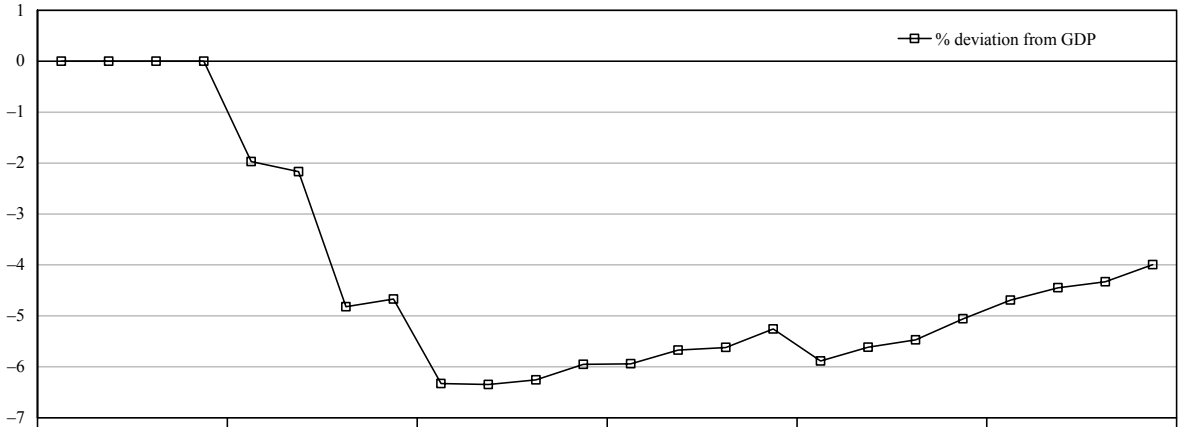
Quarterly Disaggregation of Fiscal Consolidation in Latvia, by Individual Measures
(percent of GDP)



Source: Commission Services.
Note: the series has been built on the basis of government's *ex ante* commitments and projections for revenues, with expenditures checked through *ex post* reporting.

Figure 6

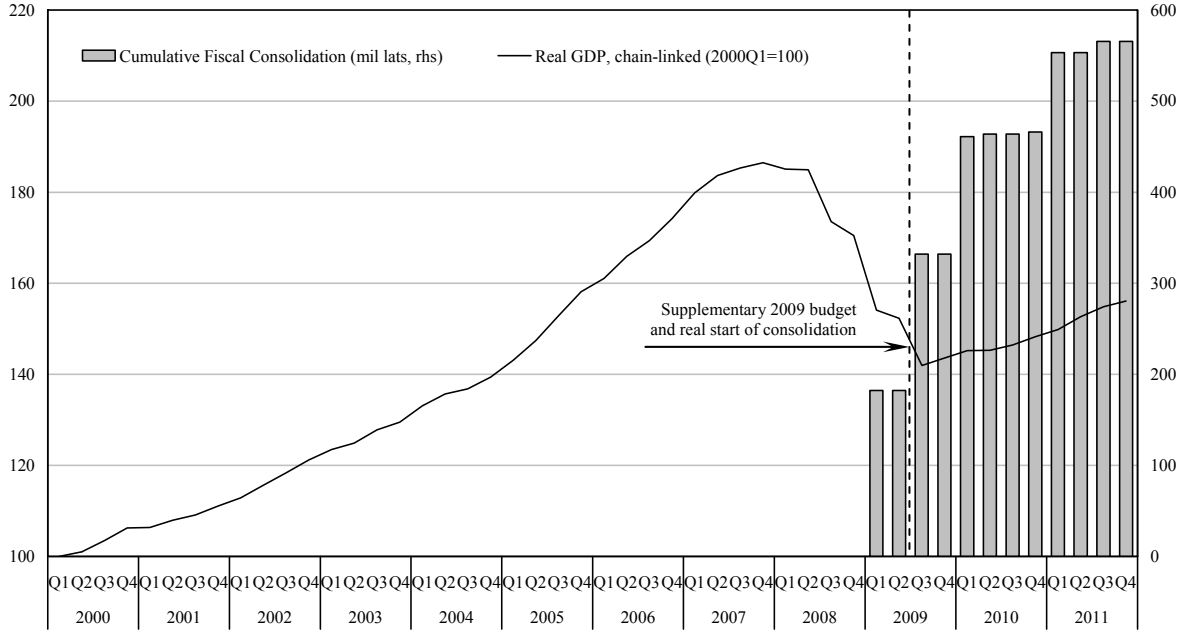
Quarterly Impact on GDP of the Actual Mix of Latvian Fiscal Consolidation Measures Simulated with QUEST II
(percentage deviation from the baseline)



Source: Commission Services.

Figure 7

Quarterly Account of GDP Growth and Fiscal Consolidation Measures



Source: Commission Services.

The fiscal space resulting from the consolidation is used to reduce lump-sum taxes – the least distortionary tax in the model. While it may be argued that lump-sum tax is an artificial instrument which is not available in practice to policy makers, this assumption allows us to attribute as little as possible positive confidence effects to the short-run impact of the fiscal consolidation in our simulations.

The simulation results suggests that the negative effects of consolidation were expected to kick in progressively as the consolidation plan unfolded, reaching more than 6 per cent of GDP in the first quarter of 2010 and then fading away slowly, as the effects of additional measures in the following quarters played against the recovery from the effects of the first negative shocks. In a way, this series can be interpreted as showing the theoretical short-term pain the Latvian economy could have endured in the absence of non-Keynesian effects.

However, a quarterly look at the time pattern of total consolidation undertaken and GDP growth reveals that GDP growth reversed to positive almost immediately after serious consolidation started in the second half of 2009 following the supplementary budget measures envisaged in July (see Figure 7) and by the end of 2011 real GDP was already 10 per cent higher than 2 years earlier and, remarkably, 56 per cent higher than it was at the beginning of the decade. In order to understand what may have caused such a quick recovery in the presence of significant fiscal consolidation, in the next section we investigate what role non-Keynesian effects may have played in the post-crisis Latvia.

4.2 Non-Keynesian effects

Since the seminal contribution of Giavazzi and Pagano (1990), we know that under certain conditions fiscal consolidation can trigger non-Keynesian effects as strong, or even stronger, than

standard contractionary Keynesian effects on demand (Giavazzi *et al.*, 2000). When this happens, consolidation may turn out to be expansionary and result in a quick rebound of the economy, of the kind observed in Latvia in late 2009. In other words, the sign and magnitude of fiscal multipliers depend on particular conditions under which fiscal policy is implemented. As noted by Alesina and Ardagna (1998), the main channel through which non-Keynesian effects are activated is aggregate demand: a serious fiscal tightening may indeed increase both consumption and investment, as wealth rises when future tax burdens decline and interest rates decline when credibility is restored and inflation or default risks abate. Indeed, the improvement in the fiscal position may immediately affect consumer confidence, business confidence, and in particular it may lead to a reduction in risk premia which influence the economy's borrowing costs and thereby also the cost of capital. For this effect to produce an expansion, though, the tightening must be sizeable, credible, and occur after a period of stress when the budget is quickly deteriorating and public debt is building up (Afonso, 2010; Giudice *et al.*, 2007). The new EU member states, in particular, seem to be prone to such growth-enhancing consolidation (Rzonca and Cizkowicz, 2005).

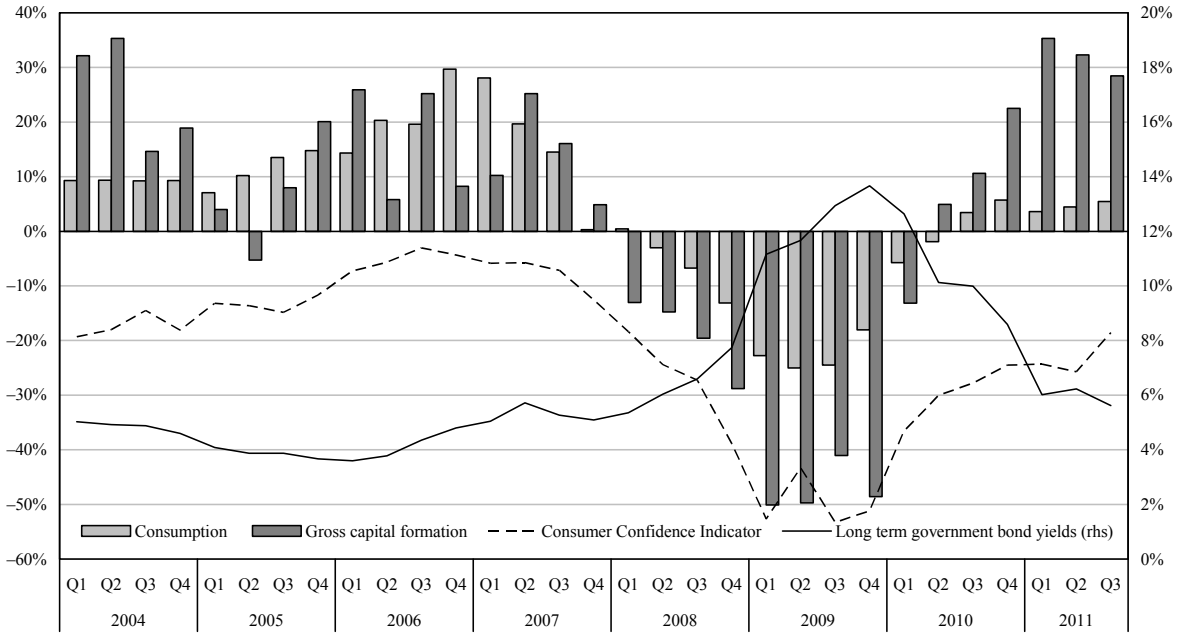
An increase in consumer confidence may raise current consumption through expectation of higher future income and the willingness to consume today part of the expected future gains. Consumers could both expect taxes to be lower in the future, as a consequence of current consolidation or their gross income to be higher due to an improvement in the fundamentals of the economy. A similar argument can be made for entrepreneurs, who may anticipate higher consumer expenditure and start investing in the economy to have enough capacity to match demand as soon as it picks up. Arguably, these effects are consistently accounted for in the QUEST model, leading to the scenario portrayed in Figures 4 and 6, where it is assumed that the fiscal space gained by the consolidation over time is used to reduce non-distortionary taxes. However, two key determinants of economic performance for small open economies such as shocks in external demand and in country risk premia due to developments in the international financial markets cannot be introduced endogenously in the simulation, even if their directly affect investments and capital formation. For this reason we analyse them separately and then link them to the results of the simulation to determine their likely impacts.

In addition, if undertaken through spending cuts rather than tax increases, fiscal consolidation is likely to produce growth-enhancing gains in external competitiveness. Cuts in government consumption, and in particular in public wages and public employment can spill over to the private sector and abate the costs of domestic manufacturing, leading to gains in international market shares. The process may be more or less quick depending on the particular labour market institutions of the country undertaking the cuts, but eventually the increased availability of labour and lower wages in the public sector are bound to map into a more efficient production process. However, it is worth noting that while volumes exported increase the effect on value of exports is partly offset by the decrease in export prices, so that in some simulations the overall effect in terms of value added is not necessarily very strong.

In the case of Latvia, there is some evidence on the activation of all these channels of economic expansion triggered by fiscal consolidation, each following a slightly different timing. This could contribute to explain the pace of recovery from the crisis. The connection between the renewed confidence in the Latvian Government and risk premia, investments and consumption can be seen from Figure 8. After a constant deterioration of confidence in 2008 and most of 2009, reflecting the impact of the financial crisis first and Government financial sustainability then, it can be seen how the Latvian Government's decision to undertake bold actions to consolidate its fiscal position (mid-2009) was resulted in an improvement in consumer confidence, investments and consumption, whereas risk premia first stabilised and then decreased, at a time in which standard Keynesian wisdom would have predicted further recession due to the contraction in public consumption.

Figure 8

Quarterly Series of Consumption, Capital Formation, Consumer Confidence Indicator and Long-term Government Bond Yields



Source: Commission Services.

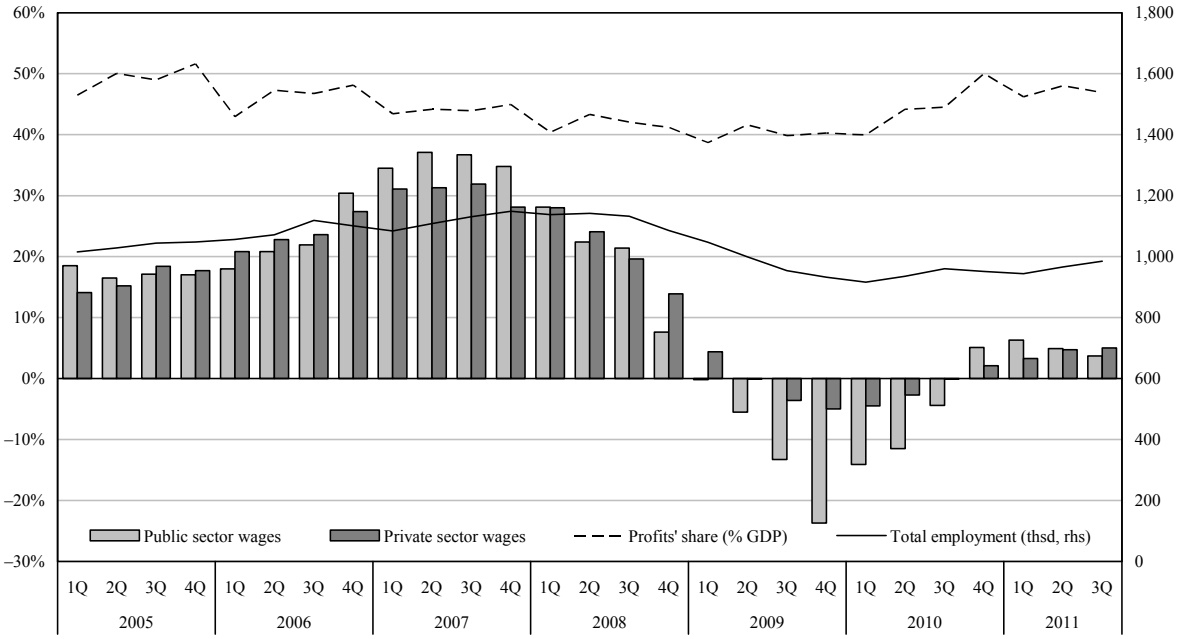
There could be different reasons for the consumption and investments to increase so rapidly between the last quarter of 2009 and the first half of 2010. For example, an increase in consumption and investment could have been driven by higher wages in the private sector or gains in total employment, or also it could have come from a sudden increase value added in export-oriented sectors, due to an increase in Latvian competitiveness or an increase in external demand. We investigate these channels and find no evidence to support them. As a matter of fact, wages and total employment actually decreased as a result of the Government-led internal devaluation strategy, as shown in Figure 9. In addition the profits' shares in the economy remained constant while the economy contracted, meaning that lower wage bill didn't lead immediately to higher profits to reinvest in the economy.

Indeed, the positive impact of lower wages on the growth of value added in manufacturing took some quarters before materialising, as Figure 10 shows. Real wages began decreasing in 2009, but value added in the manufacturing sector started to pick up substantially only during the second half of 2010 and in 2011, which means it cannot be used to explain the recovery in real terms of growth of gross value added in the private sector observed since the second quarter of 2009.

If not from higher total wage bill or profits, the recovery in consumption observed since the second half of 2009 may then have been triggered by an increase in exports, as firms may have consumed more intermediate or capital goods to serve foreign markets. This has been typically an important channel in previous cases of growth in the short run after a substantial fiscal consolidation, but again it again does not seem to apply to the Latvian case. In Figure 11 we show the contribution to nominal GDP growth of different components of GDP and, at first sight, it may appear that the evolution of net exports contributed positively to growth in 2009, reducing GDP contraction by more than 10 per cent of GDP every quarter.

Figure 9

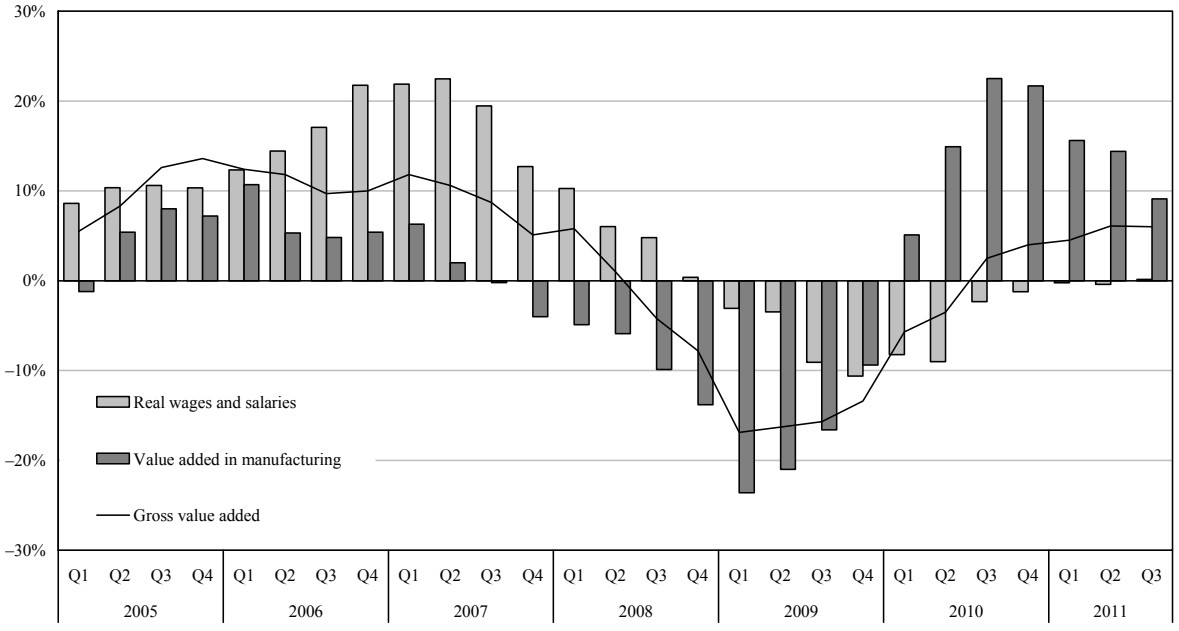
Quarterly Series of Private and Public Sector Wages *(annual changes)*, Profit's Share of GDP and Employment



Source: Commission Services.

Figure 10

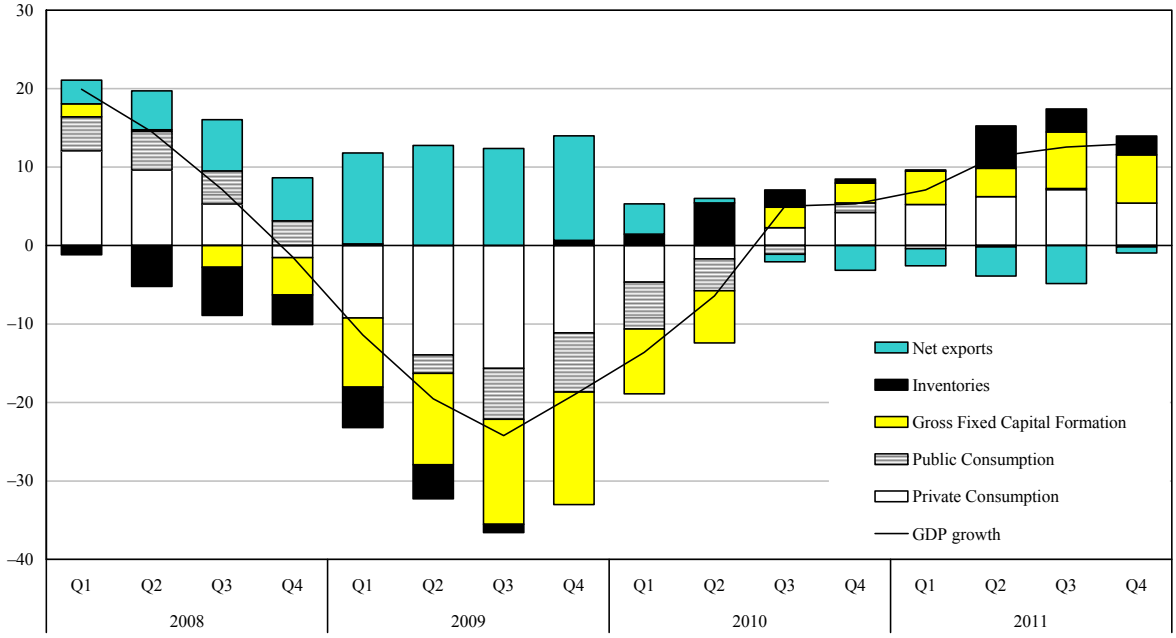
Quarterly Series of Real Wages, Value Added in Manufacturing and Gross Value Added
(annual changes)



Source: Commission Services.

Figure 11

Quarterly Series of Contribution to Annual Nominal GDP Growth of All GDP Components



Source: Commission Services.

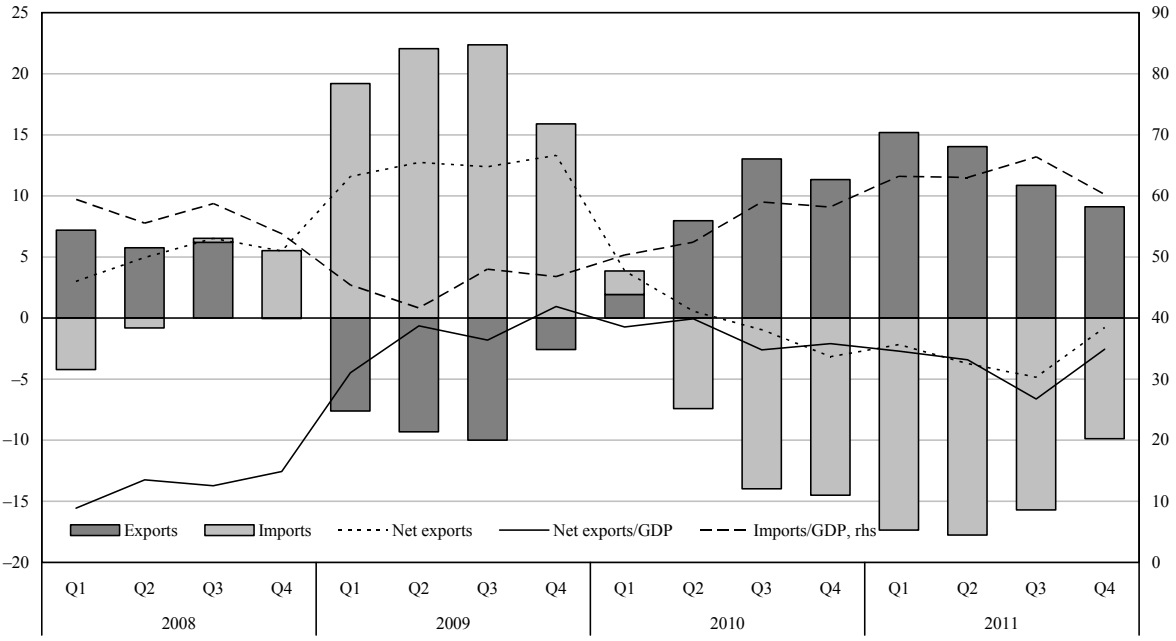
Unfortunately, a deeper observation of the dynamics behind the positive contribution of the external sector in the 2009 figures shows that exports contracted significantly and it was just an even greater contraction of imports that tilted the net trade balance on the positive side. This can be seen clearly from Figure 12, where the contribution to GDP growth of net exports is disaggregated into imports' and exports' contribution. In the second and third quarters of 2009 the contribution of imports' contraction to GDP growth was above 20 per cent of GDP, which accounts for a big share of the contemporaneous contraction in private consumption and gross fixed capital formation shown in Figure 11 (between 25 and 30 per cent of GDP). Indeed the ratio of import over total GDP (measured on the right axis of Figure 12) shrank from 60 to 40 per cent between 2008Q1 and 2009Q2. It is true that in 2009Q4 Latvian trade balance was positive for the first time in more than a decade, but it was only because between 2008Q1 and 2009Q4 total imports dropped by more than 1/3 and total exports by 1/5, so it would be fair to say that Latvian external adjustment happened despite and not thanks to external demand dynamics.

Summing up, all the available evidence point in the direction of suggesting that during the second half of 2009 competitiveness gains and external demand did not play a significant role in kick-starting Latvian economy. However, it should be noted that this outcome was probably driven by the extremely weak external demand due to the global spread of the financial crisis and could thus not be directly compared to previous episodes of export-driven expansionary fiscal consolidation happening during more favourable external conditions.

Still, even in the absence of external support, Latvian economy did start to recover as soon as consolidation kicked in, leaving as the only possible explanation a recovery of confidence. A clear sign of this can be seen in the financial sector, as the financial openness of the country allowed capitals to flow easily in and out of the country in response to policy action and confidence in the stability of the economy. As we can see in Figure 13, net flows of foreign direct investments and

Figure 12

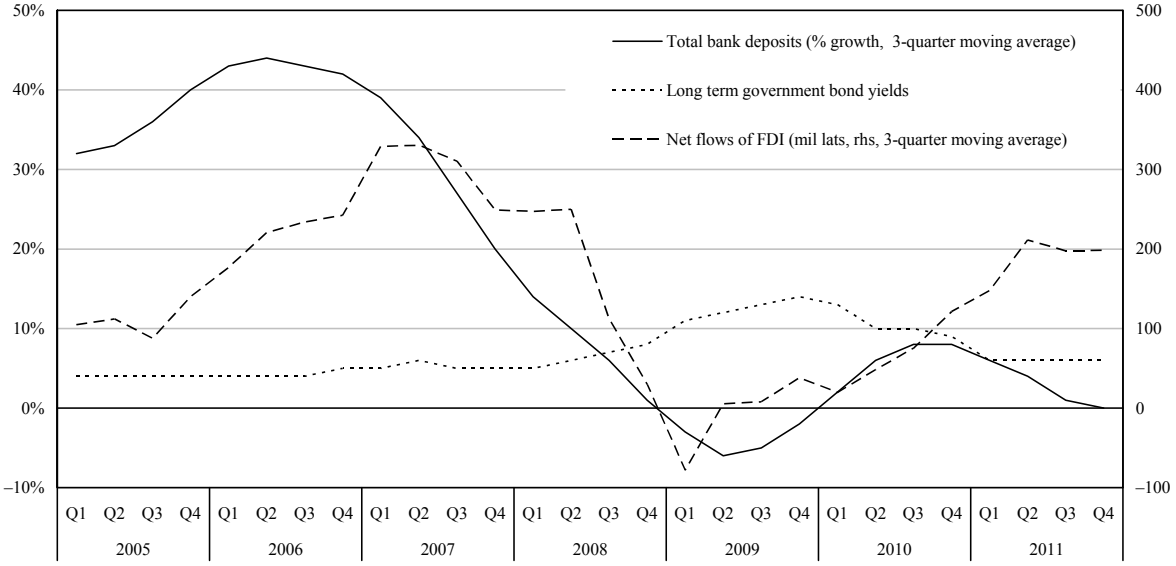
Quarterly Series of Annual Net Export's Contribution to GDP Split into Imports and Exports, and Imports/GDP Ratio in Percentage Points



Source: Commission Services.

Figure 13

Quarterly Evolution of Long-term Government Bond Yields, Total Bank Deposits and Net Flows of FDI



Source: Bank of Latvia.
Note: Total bank deposits are expressed in terms of millions of lats, total bank deposit annual growth is shown percentage points. Both series show 3-quarter moving averages.

residents' total bank deposits fled the country during the crisis quarters, but came back as soon as fiscal consolidation started. The series clearly mirror the investment and consumption series shown in Figure 8. As the consolidation measures kicked in, from the second half of 2009, it can be noticed that Latvian residents stopped withdrawing their savings from the banking system and foreigners started investing again in the country. This clearly shows how related are capital flows and foreign investments to the level of confidence in the country, which is in turn closely linked to the government action.

The general lesson we can draw from the impact of fiscal consolidation on the Latvian economy is that in a flexible and open economy a bold intervention by the government and the international community to restore confidence can trigger important non-Keynesian effects which may even completely offset standard Keynesian multipliers.

In addition, the immediate response of the confidence-related channels of non-Keynesian reaction and the lagged response of external competitiveness can have the additional advantage of resulting in a prolonged stimulus as a result of the two effects kicking in at different times. This feature may provide the government a comfortable period of economic growth after a crisis which can be used to enact the due structural reforms.

4.3 A tentative measure of non-Keynesian effects

As we observed in the previous sections, however, the short term negative effects of fiscal consolidation never fully materialised in the Latvian experience as the economy started recovering just as the bulk of the fiscal consolidation kicked in, from the second half of 2009. In order to give an idea of the unexpected linkages between economic growth and fiscal consolidation, we plot in Figure 14 the previously estimated Keynesian effects of fiscal consolidation on GDP against the evolution of real GDP in the quarters following the consolidation. Normalising GDP using the first quarter of consolidation, 2009Q1, and taking it as a baseline, we consider the percentage difference of each quarter from the baseline. Comparing the gap between the deviation of actual GDP from the baseline and the theoretical deviations that should have arisen from the fiscal multipliers of the measures, we can have a rough estimate of the magnitude of the non-Keynesian effects. It can be noted that real GDP contracted up to the third quarter of 2009, but then bounced back between the end of 2009 and 2010, at a time in which the Keynesian effects associated with the additional consolidation should have dragged it down. Even if we know that many additional factors not included in our simulation may have contributed to determine this gap, the difference between these two series point to the presence of significant non-Keynesian effects rising from 1 per cent of GDP in 2010Q1 to 7 per cent in 2011Q4.

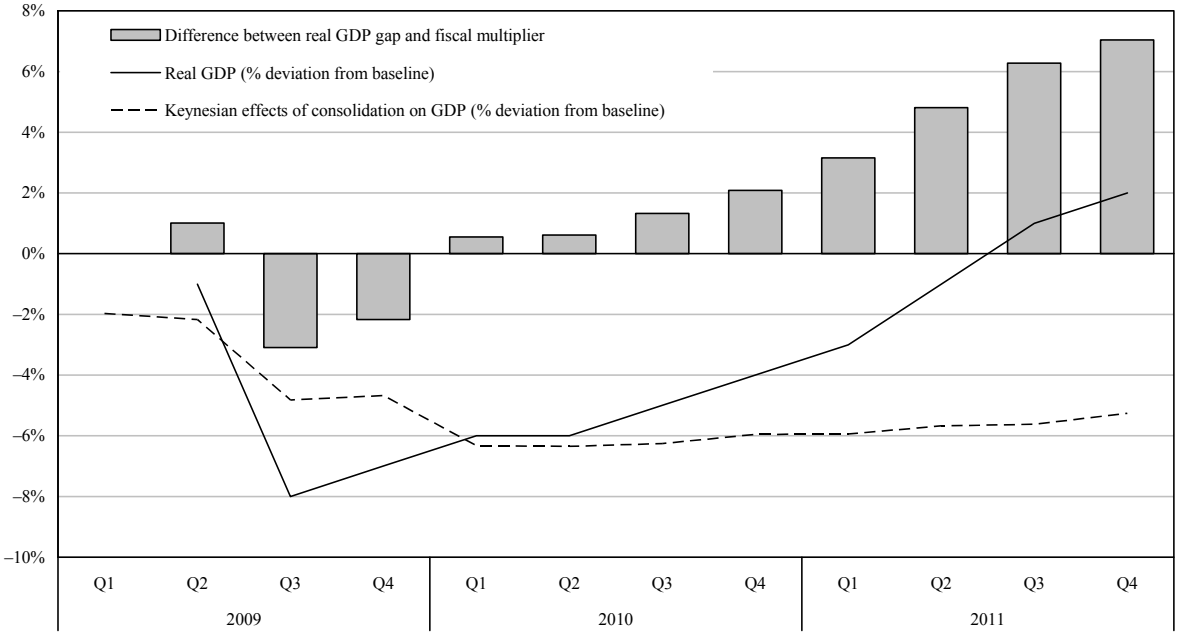
We should keep in mind that this is a rather conservative estimate, since in our QUEST simulation external demand was assumed to be stable, whereas in Figure 12 we have shown that exports dropped by 9-10 per cent of GDP in 2009Q2 and 2009Q3, even if the overall contribution of trade to GDP growth was positive due to a more than proportional contraction in imports.

Interestingly enough, the evolution of the consumer confidence indicator introduced in Section 3 follows closely our indicator of non-Keynesian impact of fiscal consolidation on the economy, as can be seen from Figure 15, this pointing to the relevance of the recovery of consumer confidence as a possible source of non-Keynesian effect.

In addition, we may notice that a similar improvement, starting from the second half of 2009 and consolidating in 2010, can be seen in the evolution of indicators of financial confidence such as the credit default swap (CDS) spreads and the interbank market rates, shown in Figure 16.

Figure 14

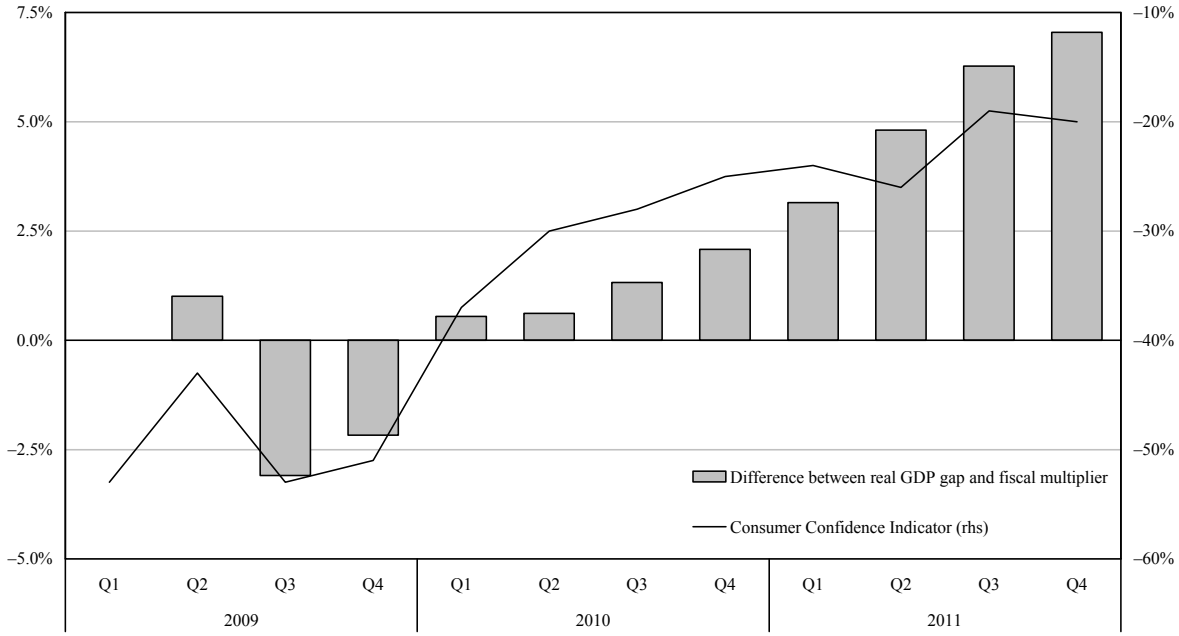
Difference Between Real GDP Gap and GDP Gap Simulated with QUEST II Considering the Actual Composition of Fiscal Consolidation, by Quarters



Source: Commission Services.

Figure 15

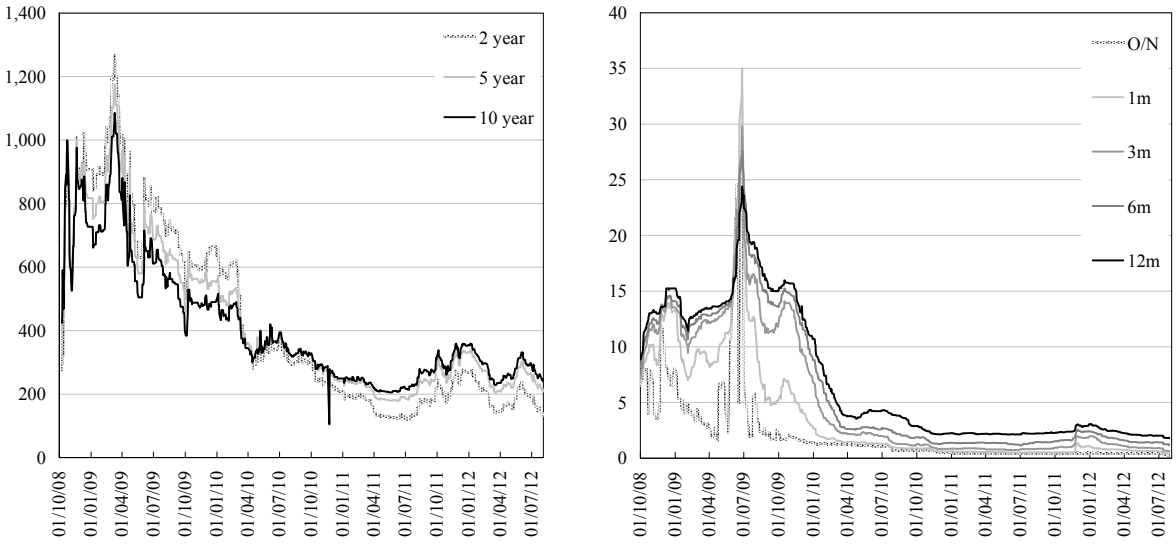
Quarterly Evolution of the Difference Between Real GDP Gap and GDP Gap Simulation, Plotted Against the Evolution of the Consumer Confidence Indicator



Source: Commission Services.

Figure 16

Evolution of Two Financial Confidence Indicators: the CDS Spreads *(left panel)* and the Interbank Market Rates (*right panel)*



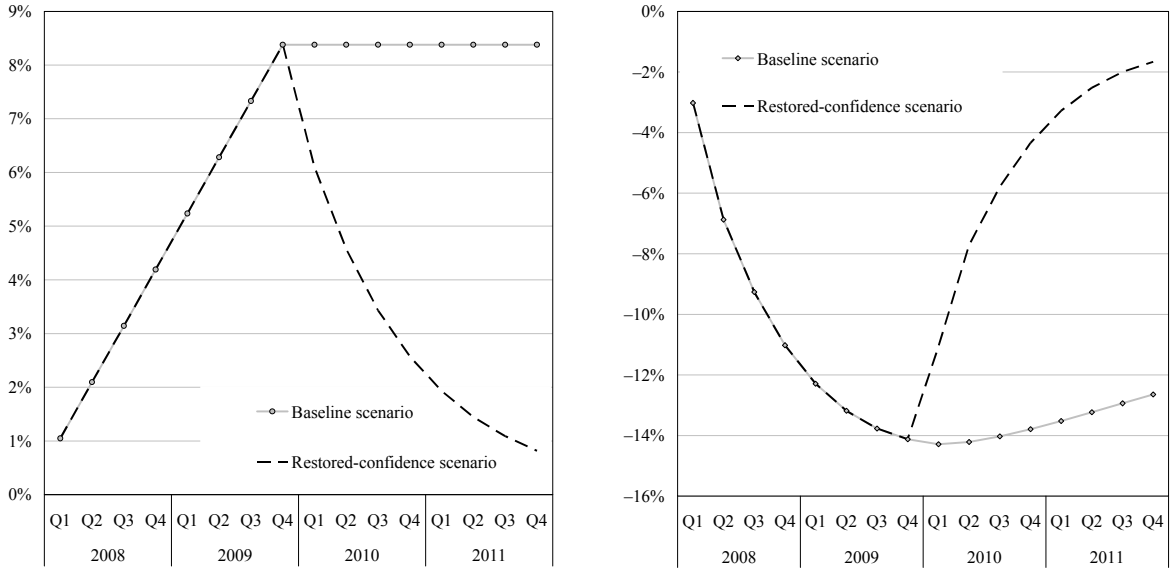
Source: Reuters EcoWin.
Note: CDS spread are expressed in basis points. Interbank market rates are RIGIBOR, fixing, in percentages.

Since also government bond yields and financial risk premia have been identified in the literature as sources of non-Keynesian effects, we further investigate their potential role in the Latvian case, turning again to a QUEST simulation and showing the results in Figure 17. The risk premium in the model drives a wedge between the domestic and the world interest rates and concerns domestic borrowing costs for each the households, the corporate and the public sector. As far as the small open economy is indebted to the rest of the world, this risk premium will also constitute a wealth transfer to external economies. The baseline scenario shows the large negative effect of a persistent annualised 800 basis point increase in the spread starting from 2008Q1. This roughly matches the pattern of government bond yields and CDS spreads for Latvia in 2008 and 2009 with the assumption that, absent the measures taken by the government in 2009, risk premia would have remained persistently high over the following years. The reversal scenario shows the effect of the drop in spreads back from 800 basis points to close to around 100 basis points by 2012. The sudden reversal has a positive effect on economic activity which converges back to its pre-2008 level relatively quickly following the reversal.

The reversal in the Latvian yields may arguably be linked to the firm fiscal consolidation measures undertaken by the government. As such, the above scenario underlines the likely pre-eminence of the financial channel in triggering the observed non-Keynesian effects. In other words, the consolidation measures helped bring back confidence in the financial markets and allowed Latvia to dispel the negative effects associated with the very high risk premia it was experiencing before the government took action. It is worth noting that the simulated size of the shock is rather significant, reaching 14 per cent of GDP at its peak. The link between the reduction in bond yields and recovery can be seen in Figure 18, where we plot the evolution of Latvia's real GDP (black dashed line) against the GDP trend simulated by the QUEST model (red solid line) and the bond yields shock. It seems reasonable to attribute part of the merits of the quick recovery to the normalisation of the risk premia, which allowed firms and consumers to gain a better access to the financial markets.

Figure 17

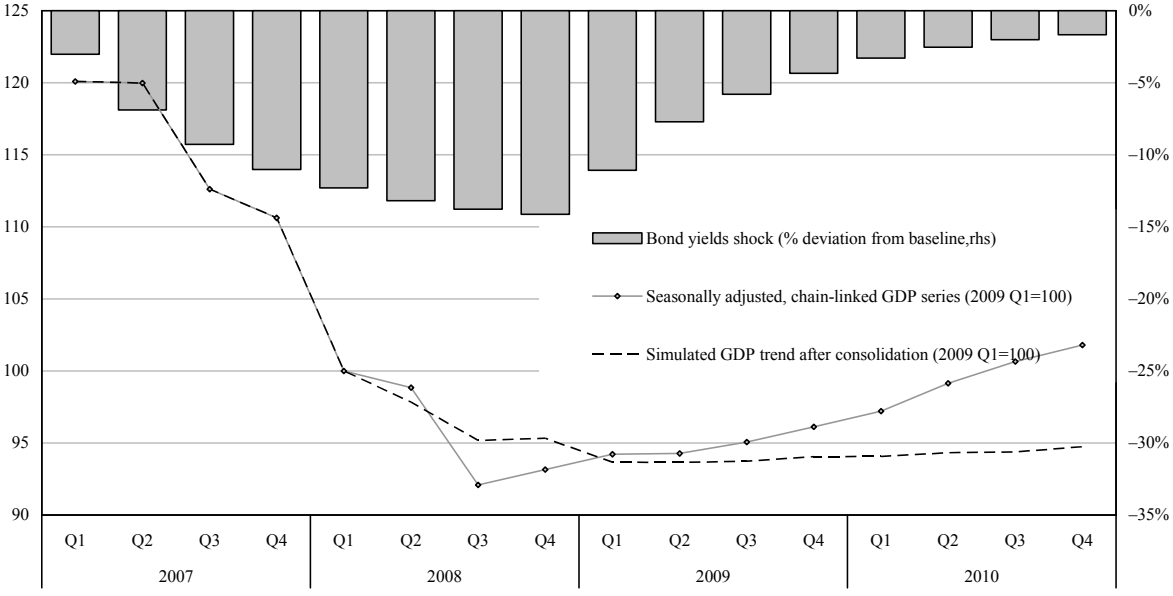
Impact on GDP *(right panel)* of a Financial Confidence Shock of the Magnitude Experienced by Latvia During the Balance-of-payment Crisis, as Captured by the Long-term Government Bond Yields Spread *(left panel)*



Source: Commission Services.
Note: Real data until 2009Q4, long-term government bond yields spread being the deviation from the Latvian average in the previous 10 years, then QUEST simulation.

Figure 18

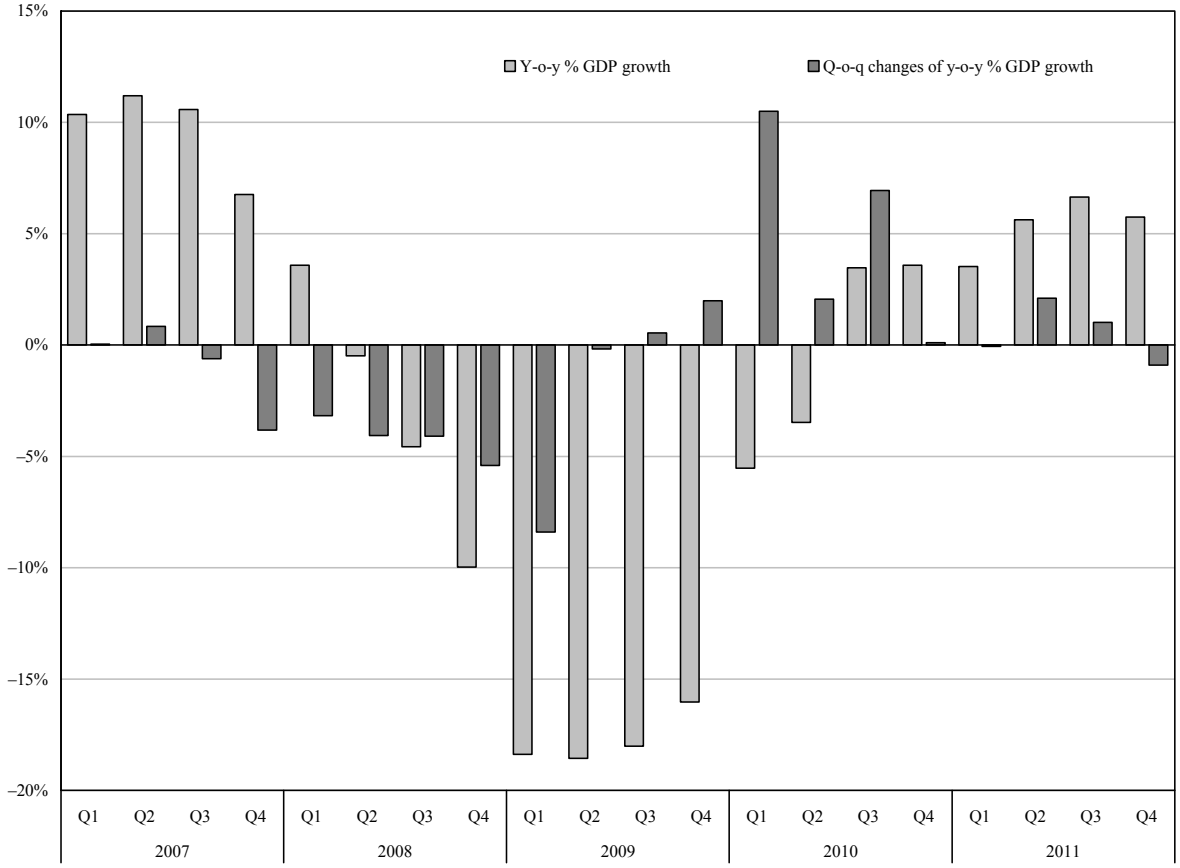
Simulated Impact on GDP of the Financial Confidence Shock and of the Impact of Fiscal Consolidation, Plotted Against the Actual Series of Real GDP



Source: Commission services. Note: QUEST simulation for the simulation for the GDP trend after consolidation starts after 2009Q1 and takes into account the impact of fiscal consolidation but not the impact of the financial confidence shock, thus plotted separately.

Figure 19

Annual GDP Growth, by Quarter, and Quarterly Changes in Annual GDP Growth



Source: Commission Services.

Since consumer and business confidence has often been identified as the main driver of non-Keynesian effects in the literature, this observation seems to reinforce our intuition that the particular characteristics of Latvian fiscal consolidation managed to offset the short-term negative impact of fiscal consolidation.

As a final remark, it is worth seeing how Latvian economic growth was affected by the consolidation measures not compared to our simulations, but in its own sake. As a complement to the GDP figures in level provided in Figure 7, Figure 19 shows the year-on-year GDP changes and their quarterly changes. It can be noticed that while the situation keeps on deteriorating for the entire 2007 and 2008, increasingly bad growth performances, the economy reacts to the austerity measures by first stabilising, in middle of 2009 and then rebounding strongly by the beginning of 2010, even if positive year-on-year changes could be observed only by the second half of 2010.

Summing up, our analysis suggest strongly that credible, bold, front-loaded and well-designed measures managed to convince Latvians and foreign investors, between 2009 and 2010, that the worst was over and the country was back again on a sustainable path. This renewed confidence in the country immediately alleviated the economic pain caused by prohibitive risk premia for government bonds and has triggered the equivalent of a cost-free economic stimulus to the economy when it was most needed.

5 What lessons from Latvia?

Latvia's experience represents a remarkable example of how fiscal consolidation should be undertaken to maximise long-term benefits and at the same time provide relief to the economy in the short term. The foundations of its success lied on the following essential elements:

- **Timing:** a rapid response is crucial when the economy and the budget are getting out of hands, but time is needed for surgical and meaningful action. It is therefore essential to have a large enough financial package and a long enough horizon to avoid across-the-board cuts;
- **Size:** when trends are wrong, everybody, including markets, must be impressed by the size of action. Going big can change mind sets and attitudes. Much of what has been done has been large from the beginning: wage adjustment, employment, reforms in key areas such as education, health and the organisation of the public administration;
- **Trust:** at the end, what drives the economy is the behaviour of agents. This is strongly affected by credibility of policies, but even more by the trust in the counterparts;
- **Country-specific analysis:** the adjustment of Latvia defied much of conventional economics. There must be courage to challenging some of its assertions, when new ground is being broken. Every economy is different at any given time. While there are similarities, one should not overlook key differences;
- **Prudence:** in devising an adjustment, one should not bank on uncertain benefits. Markets and observers have asymmetric reactions. Better results lead at best to a progressive increasing credibility. But any credibility can be quickly lost because of a small negative underperformance. A certain distance must thus always be kept from the edge;
- **Effective Communication:** effective communication is needed to spell out misinterpretation and to persuade actors that the policy objectives are achievable. Telling the "hard-truth", explaining what needs and can be done, reminding about the final objective, have been key elements of the Balance-of-Payments assistance programme that supported Latvia's fiscal consolidation.

6 Conclusions

The unprecedented fiscal consolidation efforts undertaken by Latvia in 2009 represent an ideal case study to have a fresh look at the short-term relation between fiscal policy and GDP growth. Especially on the expenditure side, the Latvian consolidation strategy was characterised by a careful design of measures, based on strategic plans rather than across-the-board cuts in several important areas. The bold, decisive, targeted and front-loaded nature of Latvian consolidation appear to have contributed to trigger non-Keynesian effects so relevant as to offset the standard negative Keynesian reaction to spending cut and tax hike (which were in themselves minimised by the growth-friendly composition of the consolidation). Government intervention and international lenders' guidance certainly halted a downward spiral and was accompanied by a sudden recovery in confidence which is likely to have prompted a quick rebound of consumption and investments in the private sector. With negative effects limited and positive ones kicking in in a sequential manner, this consolidation rapidly drove the Latvian economy on a sustained growth path.

There could be several conditions that allowed the consolidation to work so well. First of all, the fiscal sector in Latvia over-expanded so rapidly in boom years preceding the crisis that it could not pose much resistance to its downsizing. Second, even though it grew rapidly before the crisis, the size of the public sector in Latvia and in the Baltics in general has historically been smaller than in the rest of the European Union. This implies that the impact of fiscal multipliers is more limited than in other European countries, as more scope is left for the private sector's behaviour to

determine the ultimate effects on growth. Finally, the economic contraction and loss of confidence were so serious at the onset of the crisis years that they could have amplified the effects of the following rebound.

It is also worth mentioning that the availability of EU funds may have offset part of the cuts in public expenditure. A study commissioned by the Latvian Ministry of Finance (SSE, 2011) estimated that the impact EU funds on the Latvian economy amounted to 4 per cent of real GDP in 2009 and 5.2 per cent in 2010. Even if that is not a significant increase with respect to 2008, when the estimated impact on the economy was 3.9 per cent of GDP, it may be argued that the crowding out effects of EU funds should be lower in a phase of economic contraction. Credit should however be given to the Latvian authorities and to the Commission for having secured the co-funding of such expenditure during the consolidation, which was achieved by higher cuts to other current expenditures.

All in all, important lessons that can be drawn from the Latvian experience. Good judgements on country-specific issues, right timing and sufficient size of intervention were key elements for Latvian success, but for their potential benefits to be fully tapped, they had to be accompanied by mutual trust across decision makers, prudence and effective communication. It was this particular combination of features that allowed the consolidation measures to restore confidence and significantly offset the possible negative impacts of consolidation on the economy. Latvia showed that the trade-off between short-term pain and long-term gain can be avoided if intervention is sufficiently well designed.

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