

Is government spending the key to successful consolidation ?

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Introduction

The financial crisis that erupted during 2007 and intensified in 2008, and the ensuing economic recession, caused a marked deterioration in the public finances of most of the advanced economies. That resulted in a sharp increase in the financing requirement and public debt in those countries, including Belgium. Since then, almost all countries have made a considerable effort to achieve fiscal consolidation in order to end the unsustainable developments. However, restoring sustainable public finances will entail additional efforts in most countries in the years ahead.

This article examines the budgetary instruments that can be used to continue consolidating public finances. In the process, it examines in depth the role of public spending. The situation in Belgium will be the focus of special attention, including via a comparison with the other euro area countries.

The first chapter of this article reviews developments concerning public finances and explains why the consolidation efforts must continue. The second chapter describes the impact of the various budgetary instruments on economic activity in both the short and long term. The third chapter focuses on the fiscal situation and the potential consolidation instruments in Belgium. The article ends with some conclusions.

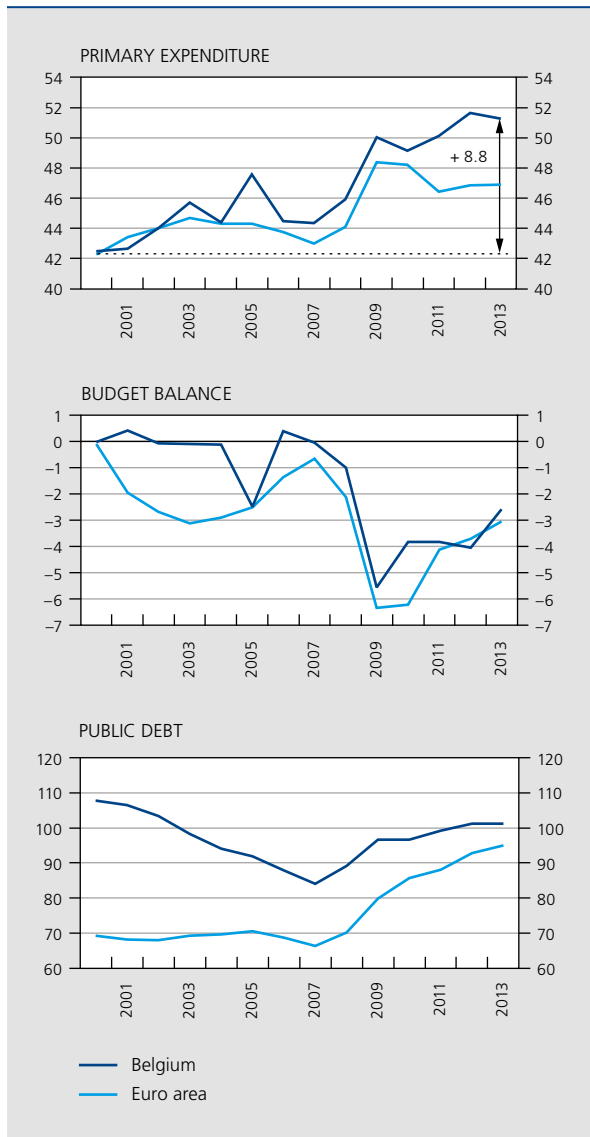
1. Recent developments and the current state of public finances

Since the start of the financial and economic crisis, most euro area countries have seen a substantial deterioration in their budget balance. The severe economic recession that began in late 2008 eroded government revenues while public spending ratios soared. At the same time, governments had to contend with a large increase in the amount of their debt, as they were forced to raise the money necessary to finance both the capital injections for the financial sector and the ballooning budget deficits.

Belgium likewise suffered a marked deterioration in its public finances as a result of the financial and economic crisis. The fiscal balance, which had been more or less in equilibrium since the start of the millennium, turned into a substantial deficit that reached 5.6 % of GDP in 2009. At the same time, the decline in the debt ratio which had begun in the mid-1990s came to an abrupt end.

The deterioration in public finances in the euro area countries led to the outbreak of the sovereign debt crisis in 2010. Some euro area countries then found it impossible to raise finance on the markets. To help the countries under stress and to safeguard the stability of the euro area, the other countries together with the IMF set up financial assistance programmes. This assistance was subject to the implementation of draconian fiscal austerity plans. Since then, not only the countries in

CHART 1 KEY AGGREGATES OF PUBLIC FINANCES
(in % of GDP)



Sources: EC, NAI, NBB.

question but the other euro area countries, too, have embarked on consolidation measures to restore sound public finances.

Measured by the movement in the structural primary balance – which excludes interest charges, one-off factors and cyclical effects – the fiscal consolidation for the euro area as a whole between 2010 and 2013 amounted to 3.3 percentage points of GDP, compared to 0.9 percentage point of GDP for Belgium. That suggests that, up to now, Belgium has pursued a relatively modest consolidation policy compared to the fiscal measures adopted elsewhere in Europe. It is also striking that revenue has

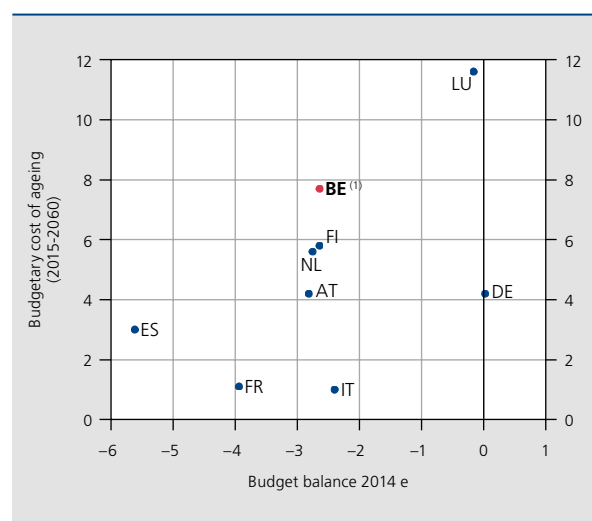
risen considerably in Belgium, and that expenditure as a ratio of GDP has recorded a significant increase, making a negative contribution to fiscal consolidation. That contrasts with the situation in the euro area as a whole, where the revenue and expenditure levers were activated simultaneously to achieve substantial consolidation of public finances.

However, most euro area countries including Belgium still need to maintain their efforts to achieve a balanced budget and reverse the trend in their public debt. Moreover, the rise in ageing-related expenditure is a major challenge for the viability of public finances in the long term.

The budgetary cost of ageing is relatively high in Belgium compared to most other European countries. It is therefore essential to continue the consolidation of Belgian public finances and free up sufficient scope in the budget to cope with the impact of an ageing population.

The implementation of a programme geared to the consolidation of public finances entails choosing not only the instruments to be used but also the pace of the measures to be adopted. The next chapter therefore examines the impact on economic activity of fiscal consolidation based on measures adopted on both the

CHART 2 GOVERNMENT BUDGET BALANCE AND BUDGETARY COSTS OF AGEING
(in % of GDP)

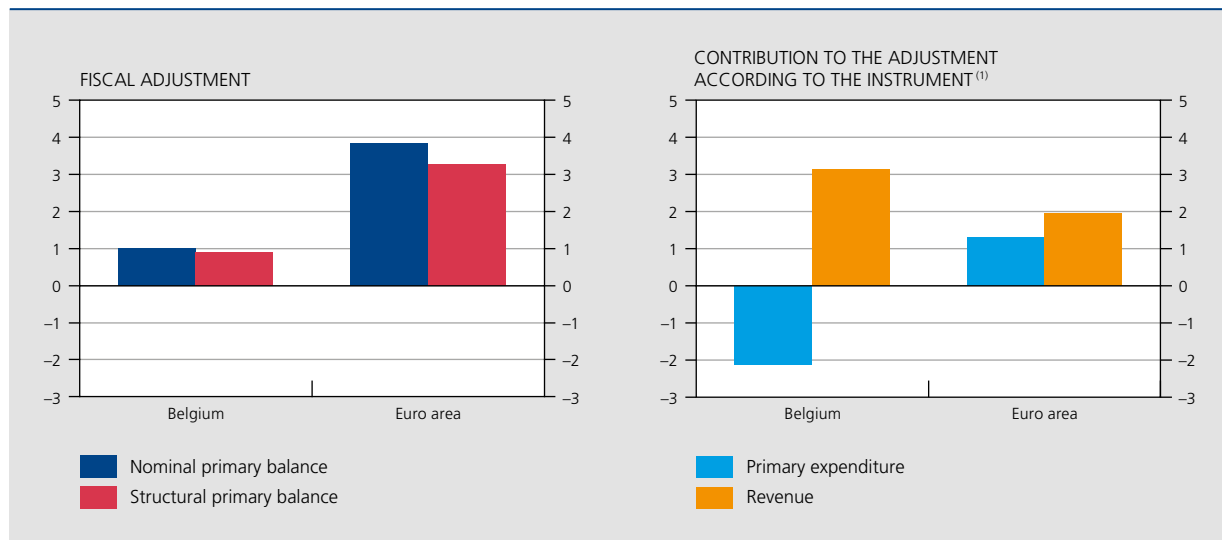


Sources: EC, NBB.

(1) The data used in this chart come from the EC's Fiscal Sustainability Report 2012. The SCA makes also an estimate of the budgetary cost of ageing for Belgium; this estimate is lower. The spread between those estimations is due to differences relative to the macroeconomic and demographic assumptions and the choice of expenditure categories.

CHART 3 SCALE AND COMPOSITION OF FISCAL CONSOLIDATION

(change between 2010 and 2013, in percentage points of GDP)



Sources: EC, NBB.

(1) Nominal data.

revenue and the expenditure side, in both the short and the long term.

2. Impact of fiscal consolidation on economic activity

The economic literature on the effects of fiscal consolidation is very extensive. However, it does not offer a clear answer to the question of the link between fiscal policy and economic activity. The impact in fact depends very much on circumstances, which may vary considerably over time and from one country to another.

It is crucial to distinguish here between the short-term impact and the long-term impact. Fiscal consolidation is generally detrimental to economic growth in the short term, while producing long-term benefits. Consequently, the pace at which the consolidation measures are implemented, namely the measures needed to guarantee the sustainability of public finances in the long term, is sometimes the subject of animated debate between economists and politicians.

2.1 Short-term impact

Most econometric models and empirical studies show that the fiscal multipliers – which indicate the extent to which a particular fiscal stimulus influences the growth of

activity – have a positive sign in the short term. Generally, an expansionary fiscal policy can stimulate economic activity in the short term, while consolidation measures tend to apply the brakes.

However, the short-term multiplier effects vary according to the different instruments and circumstances. In order to illustrate the main factors that determine the scale of the fiscal multipliers, the results of the simulations made with the aid of the ECB's general dynamic equilibrium model are given below.

First, the impact of fiscal consolidation depends on the economic and monetary conditions in which it takes place. When consolidation is implemented in a small, open economy, the short-term impact is less than in the case of simultaneous consolidation in multiple countries; in the latter case, it has a bigger effect in restraining total demand. In particular, the simultaneity and scale of the consolidation programmes undertaken in a period of economic slowdown would cause a sharp decline in economic activity. A fixed exchange rate reinforces the negative effect of consolidation on growth, in contrast to a floating exchange rate system which tends to absorb shocks. The fiscal multiplier is also defined by the monetary policy stance. If central banks are able to adopt an accommodative policy, the consolidation is less detrimental to growth. Conversely, if interest rates are close to zero, central banks have little room for manoeuvre, and consolidation is generally more harmful to growth.

The initial budget position also determines the value of the fiscal multipliers. Thus, the negative impact of the consolidation measures on short-term economic growth is weaker – or even practically non-existent – the worse the position of public finances and the more worrying the situation is thought to be. In such circumstances, those measures may reduce the sovereign risk premium and the level of interest rates. That drives down the financing costs of not only the general government sector but also the private sector, and therefore stimulates investment. Moreover, the measures may trigger a fall in the savings ratio, e.g. because households reduce their precautionary savings, as the consolidation restores their confidence following a period of budgetary difficulties.

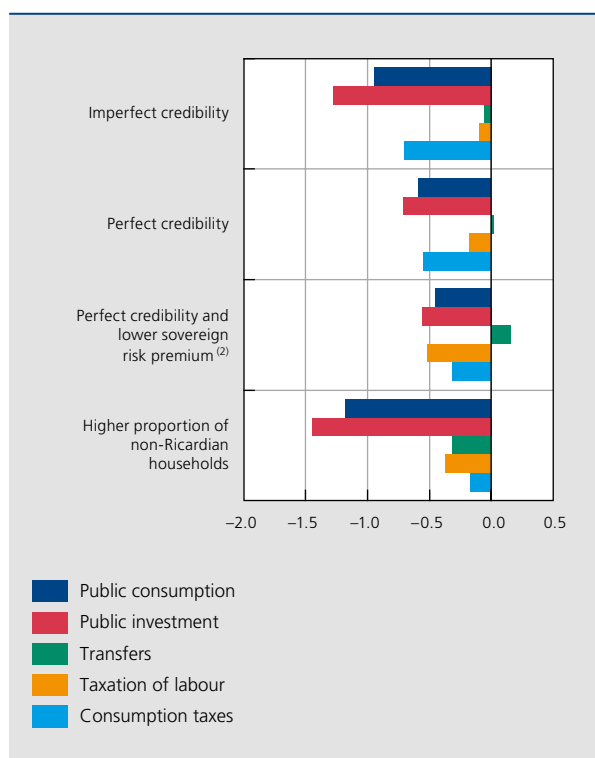
The credibility and permanence of fiscal consolidation are also essential to limit its negative short-term effect on economic activity. If the markets do not believe in the government's commitment to implement the stated measures successfully, the consolidation has a greater negative effect on economic activity in the short term than in a

situation of perfect credibility. That perfect credibility exists if the markets are convinced that the consolidation measures announced will be fully implemented and permanent. In fact, perfect credibility causes households and businesses to anticipate future tax cuts enabled by the budgetary scope opened up by the consolidation efforts. That has a favourable impact on economic activity, attenuating the short-term contraction effects of the consolidation.

The scale of the short-term multipliers is also influenced by the degree to which households and businesses face liquidity or credit constraints. A larger proportion of non-Ricardian households – i.e. households which cannot smooth out their consumption over time in response to a decline in their disposable income resulting from certain consolidation measures – is reflected in higher negative fiscal multipliers. A reduction in transfers, such as social benefits, has a much more negative effect in this scenario, compared to other scenarios in which the effect of cutting transfers is virtually zero. Special attention must be paid to this aspect when consolidation is implemented during a crisis, when the proportion of such households tends to increase.

Finally, the short-term multiplier effects depend on the composition of the consolidation measures. Tax increases and transfer reductions are associated in the short term with much smaller multipliers than cuts in public consumption or public investment. In the short term, public consumption and public investment have a direct influence on GDP, whereas other public expenditure and taxation have an indirect effect via their impact on disposable income. In addition, savings can act as a buffer and soften the impact on consumption or investment of a decline in disposable income.

CHART 4 SHORT-TERM FISCAL MULTIPLIERS⁽¹⁾
(simulations for the euro area as a whole according to the ECB's New Area-Wide Model)



Source: ECB.

(1) This concerns the change in GDP caused by a permanent adjustment to the fiscal instrument in question amounting to 1% of GDP. In the short term, the budgetary scope made available by consolidation is used exclusively to moderate the public debt ratio. In the long term, that scope is used to cut taxes on earned incomes.

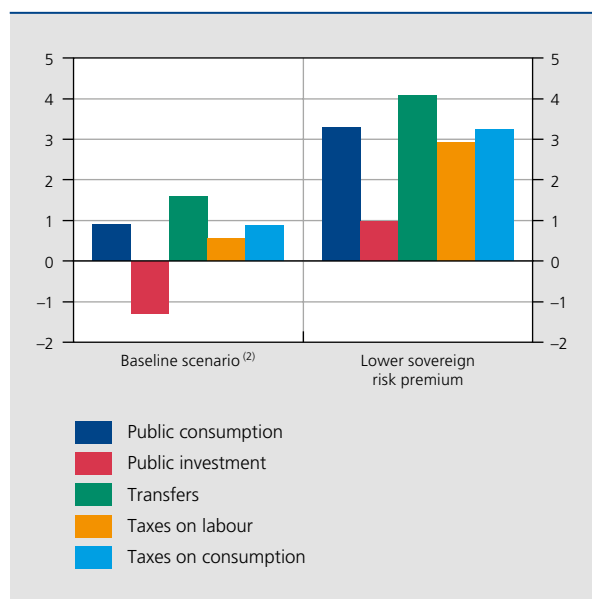
(2) This scenario presupposes a 30-basis-point reduction in the risk premium.

2.2 Long-term impact

Unlike the short-term effects, the long-term effects of fiscal consolidation ensuring the sustainability of public finances are undeniably positive. Thus, the reduction in interest charges resulting from a decrease in the public debt frees up more resources for productive public spending or for a reduction in the fiscal and parafiscal burden. These effects are heightened if the fiscal consolidation is accompanied by a decline in long-term interest rates, owing to a contraction in the supply of government securities placed on the market and a reduction in the risk premiums included in interest rates.

In a simulation based on the ECB's general dynamic equilibrium model, in which risk premiums remain constant

CHART 5 FISCAL MULTIPLIERS IN THE LONG TERM⁽¹⁾
(simulations for the euro area as a whole according to the ECB's New Area-Wide Model)



Source: ECB.

(1) This concerns the change in GDP resulting from a permanent change in the fiscal instrument in question of around 1% of GDP. In the short term, the budgetary scope created by consolidation is used exclusively to reduce the public debt ratio. In the long term, that scope is used to cut taxes on labour incomes.

(2) Imperfect credibility and fixed nominal short-term interest rate.

and the budgetary scope created by the consolidation programme is used to reduce the tax burden on labour, fiscal consolidation has a positive effect on GDP in the long term for almost all the fiscal instruments, except for a reduction in public investment. Cuts in public consumption and transfers, including social benefits, have a more positive impact on economic activity than tax increases.

If it is also assumed that the fiscal consolidation efforts lead to a reduction in sovereign risk premiums, the long-term benefits of the consolidation are much greater still. The reduction in public financing costs resulting from the decline in the long-term interest rate improves the public sector's fiscal position, expanding the scope for cutting the rate of tax on labour. The fall in interest rates also means a reduction in the financing costs of the private sector, leading to an increase in the capital stock.

Box 1 – Impact of a reduction in public expenditure on total factor productivity

Everaert *et al.* (2014) conduct an empirical analysis of the effects of fiscal policy on long-term output for a group of 15 OECD countries. The influence measured operates exclusively via the total factor productivity channel.

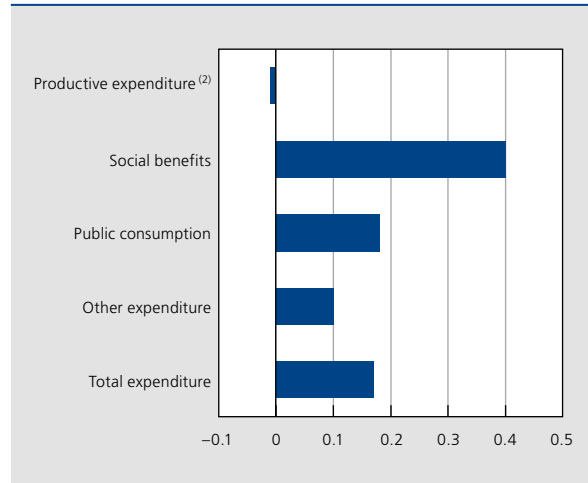
The chart below shows the effect of a reduction in public expenditure on long-term output in Belgium, where the budgetary scope created is used to reduce the general government deficit.

If no distinction is made between the various expenditure categories, cutting total public expenditure by one percentage point of GDP increases output in the long term by 0.2% on average, all other things being equal. In fact, a reduction in the public deficit is associated in the long term with a more stable environment and less macroeconomic uncertainty. That encourages technological investment and efficiency, leading to a rise in general productivity.

However, cutting productive expenditure, such as spending on education, research and investment, would have a slightly negative effect on output in the long term. The positive impact on total factor productivity of a reduction in the public deficit is neutralised in this case by the specific influence inherent in the nature of such expenditure. Thus, cutting public expenditure on research, either directly or indirectly, depresses total factor productivity owing to a reduction in the corresponding private expenditure. Restricting expenditure on education hampers the acquisition of knowledge, and that also harms general productivity. Finally, a reduction in infrastructure investment also tends to hold back total factor productivity. Moreover, any change in public investment has a direct impact on

IMPACT ON LONG-TERM OUTPUT IN BELGIUM OF CUTTING PUBLIC EXPENDITURE BY ONE PERCENTAGE POINT OF GDP⁽¹⁾

(in %)



Source : Everaert *et al.* (2014).

(1) The above calculation is based on a panel estimate of 15 OECD countries for the period 1970-2012 and on data taken from the budgetary variables for Belgium in 2012.

(2) Expenditure on education, research and investment.

the capital stock, and hence on long-term output. However, that effect is disregarded here because the authors are only examining the impact via the total factor productivity channel. The total impact of a cut in public investment is therefore more negative than it appears here.

In the other expenditure categories, a reduction has a positive effect on long-term output. The biggest effect results from cutting social benefits. If that category is reduced by one percentage point of GDP, long-term output rises by an average of 0.4% via an increase in total factor productivity. In the case of public consumption and other expenditure, the increases come to 0.2% and 0.1% respectively.

3. Public expenditure in Belgium

The third chapter of this article examines the public expenditure situation in Belgium. It begins by analysing that expenditure over time before comparing it with data from other euro area countries. Next, it examines various specific expenditure categories, and comments on a medium-term simulation envisaging various scenarios for the movement in primary expenditure in Belgium. Finally, a study which forms the basis for some recommendations on the preferred instruments for further fiscal consolidation is presented.

3.1 Trend in primary expenditure in Belgium

Since the beginning of the millennium, public expenditure excluding interest charges – in other words, primary expenditure – has risen considerably in Belgium, increasing from 42.5% of GDP to no less than 51.3% in 2013. In all government sub-sectors, the growth of this expenditure in fact far exceeded trend GDP growth. As revenue increased on average at a pace more or less matching trend GDP growth during that period, the primary balance deteriorated. These dynamics are unsustainable: they imply either an increase in levies on the economy, or an expansion of the budget deficit and hence an increase in the debt.

TABLE 1 ADJUSTED PRIMARY EXPENDITURE PER GOVERNMENT SUBSECTOR ⁽¹⁾⁽²⁾
(deflated by the GDP deflator, percentage changes compared to the previous year)

	2008	2009	2010	2011	2012	2013	Average 2000-2013
Entity I	4.8	3.9	3.2	3.1	1.6	0.4	2.7
Federal government	5.5	3.6	4.5	2.6	-1.3	-1.7	2.4
Social security	4.5	4.1	2.7	3.2	2.8	1.3	2.8
Entity II	2.5	3.2	2.0	3.2	1.5	-0.5	2.4
Communities and Regions	3.1	3.4	1.8	3.0	0.8	-0.3	2.6
Local authorities	1.5	3.0	2.4	3.5	2.9	-0.9	2.0
Total	3.9	3.7	2.8	3.1	1.6	0.1	2.6
<i>p.m. GDP in volume</i>	<i>1.0</i>	<i>-2.8</i>	<i>2.3</i>	<i>1.8</i>	<i>-0.1</i>	<i>0.2</i>	<i>1.2</i>

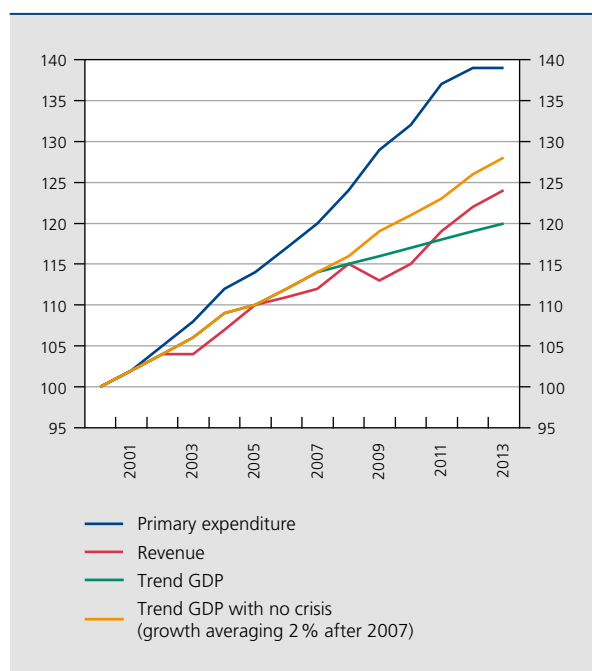
Sources: NAI, NBB.

(1) The expenditure of the government sub-sectors does not include mutual transfers.

(2) Primary expenditure deflated by the GDP deflator and adjusted for cyclical, one-off or budget-neutral factors, and for the effect of indexation. This last effect results from the difference between actual indexation of civil service pay and social benefits and the movement in the GDP deflator.

In 2012, however, Belgium modified the path of its fiscal policy. In that year, expenditure growth was much more moderate than in the preceding ten years. In 2013, the

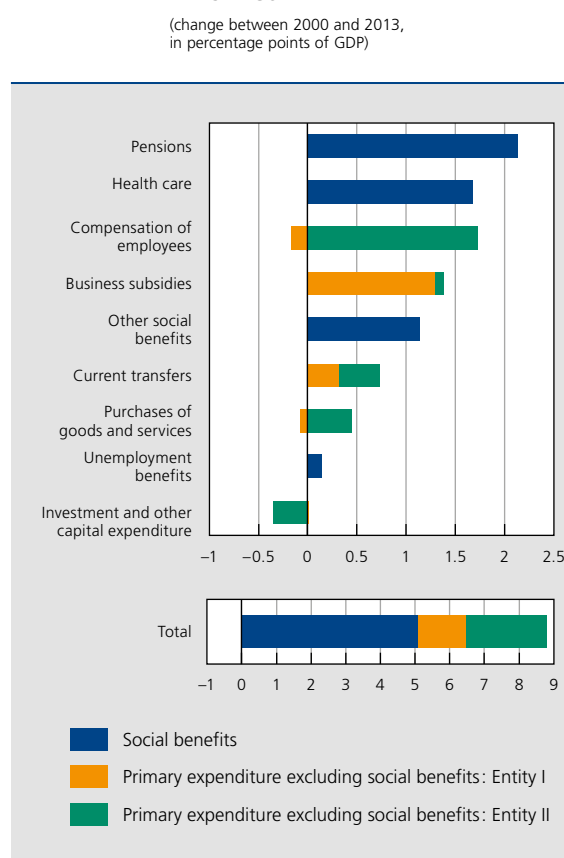
CHART 6 REVENUE AND PRIMARY EXPENDITURE ⁽¹⁾ OF GENERAL GOVERNMENT AND TREND GDP
(deflated by the GDP deflator, indices 2000 = 100)



Sources: NAI, NBB.

(1) Adjusted for cyclical factors (according to the ESCB method) and one-off or budget-neutral factors, and for indexation effects.

CHART 7 PRIMARY EXPENDITURE PER CATEGORY AND PER ENTITY
(change between 2000 and 2013, in percentage points of GDP)



Sources: NAI, NBB.

(1) Entity I comprises the federal government and social security.

(2) Entity II comprises the Communities and Regions and the local authorities.

real growth of primary expenditure was virtually zero. This should be seen as the outcome of the recent consolidation efforts on the part of the federal government, the Communities and Regions, and the local authorities.

The expenditure categories recording the largest increases in recent years are social benefits, compensation of employees of the general government sector and subsidies. In fact, of the increase in primary expenditure between 2000 and 2013, an amount equalling 5.1 percentage points of GDP is due to social benefits, which have risen considerably faster than GDP. Expenditure on pensions and health care increased by 2.1 and 1.7 percentage points respectively. During this period, compensation of employees of the general government sector went up by 1.6 percentage points of GDP, an increase attributable entirely to the Communities and Regions and the local authorities. During the same period, business subsidies increased by 1.4 percentage points of GDP. That increase originated from the federal government and social security. In contrast, investment – the public expenditure regarded as the most productive – declined in relation to GDP, falling from 2% in 2000 to 1.6% in 2013. Only part of that fall – around half – can be explained by the influence of the electoral cycle on local authority investment.

3.2 Belgian public expenditure in a European perspective

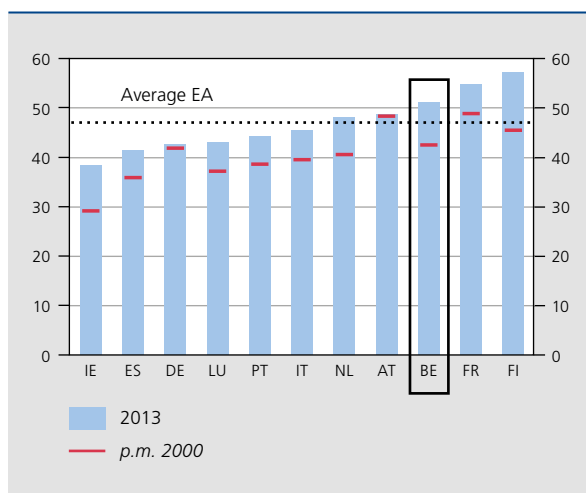
Belgium is among the European countries with the highest public expenditure. As already stated, in 2013 Belgian primary expenditure amounted to 51.3% of GDP, 4.4 percentage points above the euro area average.

Comparison of primary expenditure per category reveals the budget headings on which Belgium spends more than the euro area average. As a percentage of GDP, Belgian government expenditure on general government sector wage bill, subsidies and social benefits exceeds that in the euro area. Conversely, intermediate consumption and public investment are slightly lower in Belgium.

3.3 Analysis of specific expenditure categories

This section presents a detailed analysis of expenditure on compensation of employees of the general government sector, subsidies and social benefits, these being the expenditure categories which have expanded strongly in recent years and for which Belgium spends more, on average, than the other euro area countries.

CHART 8 PRIMARY EXPENDITURE OF GENERAL GOVERNMENT
(in % of GDP)

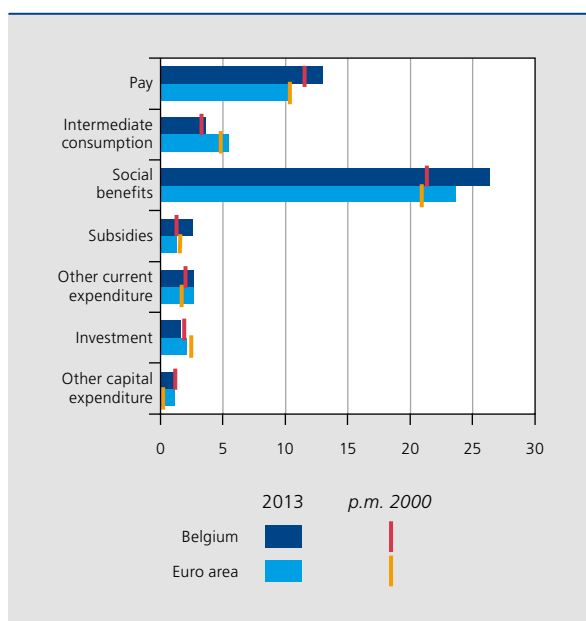


Sources: EC, NBB.

COMPENSATION OF EMPLOYEES OF THE GENERAL GOVERNMENT

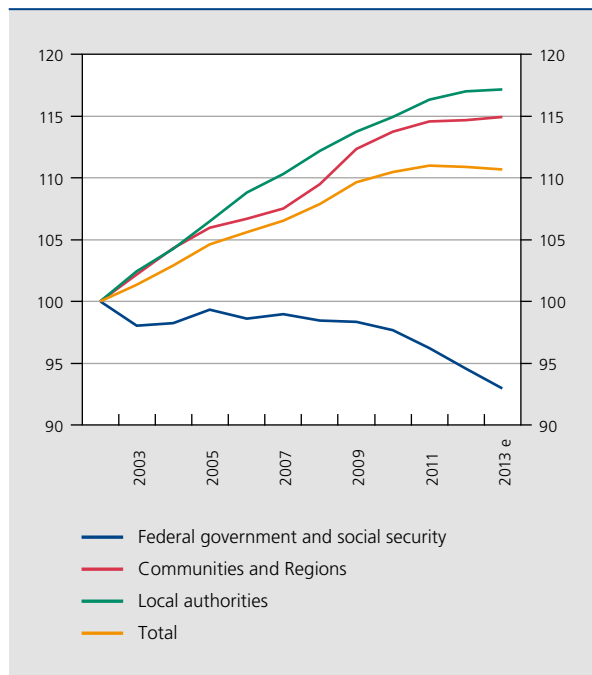
The general government sector wage bill represents about a quarter of government expenditure in Belgium. The size

CHART 9 PRIMARY EXPENDITURE PER CATEGORY
(in % of GDP)



Sources: EC, NBB.

CHART 10 PUBLIC SECTOR EMPLOYMENT
(annual averages, indices 2002 = 100)



Sources: NAI, NBB.

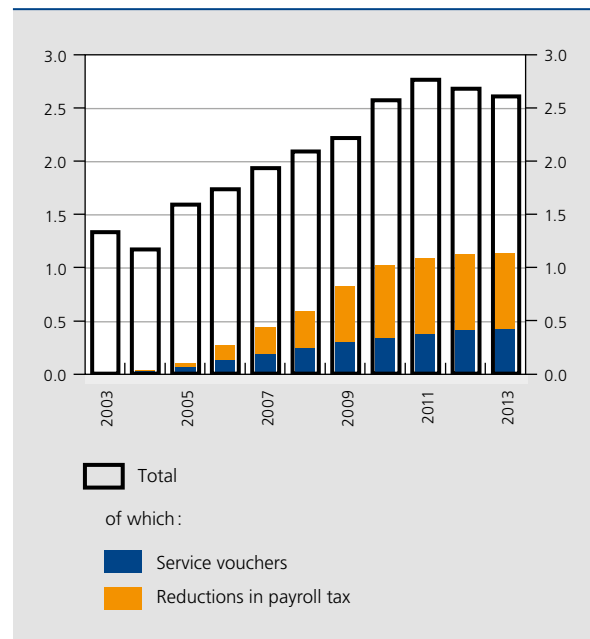
of the wage bill depends both on the level of employment and the wages paid in the general government sector. The level of general government sector wages in Belgium differs only slightly from the private sector average, and is very similar to that paid in the public sector in many European countries⁽¹⁾. Conversely, the number of civil servants per head of population seems to have risen here more significantly in recent years, and is higher than elsewhere in Europe. Therefore, any reduction in the wage bill in the context of fiscal consolidation must be achieved primarily by restricting public sector employment.

Public employment has not grown in all government sub-sectors. The Communities and Regions, like the local authorities, recorded stronger expansion of their staff during the past decade. In contrast, employment at federal level was down over the same period, essentially as a result of staff cuts in defence. Since 2011, the stabilisation of employment in the Communities and Regions and the local authorities has brought a slight fall in total public sector employment. That has limited the growth of the wage bill, though its level remains relatively high.

SUBSIDIES

Subsidies paid by government to businesses have risen considerably in recent years. That expenditure includes,

CHART 11 BUSINESS SUBSIDIES
(in % of GDP)



Sources: NAI, NBB.

for instance, investment grants to the SNCB, and expenditure relating to service vouchers and other activation measures targeting workers in certain risk groups. The reductions in payroll tax granted to businesses by the federal government, both the general reduction and that relating to shift work and night work, are also business subsidies in the sense of the national accounts. Although they have risen strongly in the past decade, these concessions have remained stable since 2010. The service voucher budget has risen steadily since the scheme was launched ten years ago.

SOCIAL BENEFITS

Social benefits account for around half of public expenditure in Belgium. Pensions and expenditure related to health care services and care for the elderly are the main items. In the past decade, the volume of those social benefits and benefits paid to people in case of work incapacity due to sickness or invalidity has expanded very strongly, significantly outpacing GDP growth. Health care spending has risen more moderately in recent years, in contrast to pensions and sickness/invalidity benefits, which have continued to increase very rapidly.

(1) Eugène B. (2011).

CHART 12 SOCIAL BENEFITSS
(deflated by the GDP deflator, percentage changes compared to the previous year)



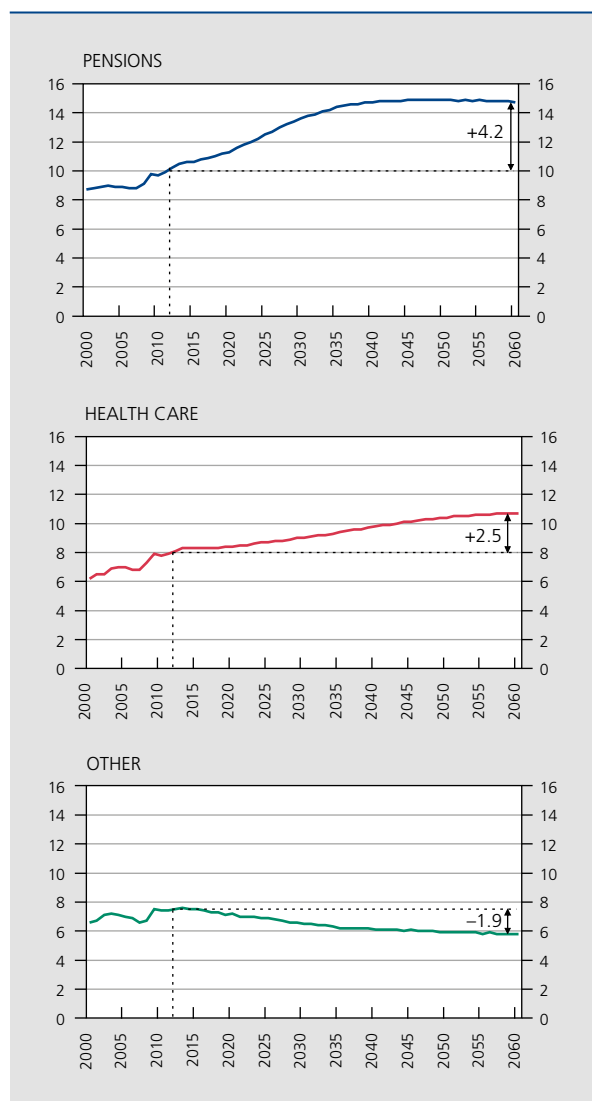
Sources: NAI, NBB.

If policy remains unchanged, the growth of social expenditure cannot be expected to slow down. In fact, the distortion of the age pyramid, due to population ageing, will push up the cost of social benefits considerably in the decades ahead. According to estimates by the Study Committee on Ageing which are naturally subject to a high degree of uncertainty, if the government does not take action then social expenditure will increase from 26.4% to 31.2% of GDP between 2013 and 2060, corresponding to a budgetary cost of 4.8% of GDP. That growth is due entirely to the expected increase in expenditure on pensions, health care and care for the elderly, while the other social expenditure categories should decline overall.

These projections already allow for the expected effects of the recent pension reform, extending working life and delaying the actual age of retirement.

The minimum conditions concerning age and length of career will thus be gradually increased: from 2016, it will be necessary to be 62 years old and to have worked for 40 years in order to qualify for early retirement. Although these measures help to soften the impact of ageing on public pension expenditure, the Study Committee on Ageing still expects a substantial rise in pension expenditure in the medium and long term. That shows the need to continue reforming the pension system. In that regard, the average length of working life will need to be further extended in view of life expectancy, specific career factors and the growth of the labour force. Those efforts will have to be supplemented by reforms of the health care system and the system of care for the elderly in order to keep that expenditure under control. The next few years will therefore provide an unmissable opportunity for resolutely addressing the ageing problem.

CHART 13 PROJECTION OF THE TREND IN SOCIAL EXPENDITURE WITH NO CHANGE OF POLICY
(in % of GDP)



Source: SCA.

3.4 Simulations relating to medium-term expenditure growth

The moderation of public expenditure will need to be maintained for quite a time to enable Belgium to respect its European commitments on the consolidation of public finances. That is clear from an exercise which, by way of pure illustration, develops three technical scenarios concerning the movement in primary expenditure. The first scenario is based on expenditure being frozen at its current nominal amount for 2013, implying a contraction in volume. The second assumes that expenditure is frozen in real terms. Finally, the third presents the likely picture without a change of fiscal policy. In all three cases, GDP

and inflation are also estimated with no change of policy. This exercise is conducted in the current fiscal and para-fiscal framework.

In that context, each scenario leads to a budget balance which is then compared with the targets advocated for Belgium by the "Public Sector Borrowing Requirements" section of the High Council of Finance in March 2014, namely a structurally balanced budget in 2016 and a structural surplus of 0.75 % of GDP in 2017, in accordance with the medium-term objective laid down in connection with European governance. That last objective would correspond to a nominal surplus of 0.6 % of GDP in 2017. These targets were also included purely as a guide in the April 2014 stability programme, with a reminder that it would be up to future governments to decide on the budget path and its allocation among the various levels of power.

With revenues unchanged, the scenario in which nominal expenditure is held steady would lead to a budget surplus well above the target recommended for 2017. However, that would entail measures with a very high immediate return. The scenario in which expenditure is frozen in real terms would produce a balanced budget in 2017, which implies the need for additional revenue amounting to 0.6 % of GDP in this scenario. If primary expenditure were less strictly controlled, fiscal consolidation would need to be based to a greater extent on new revenues in order to achieve the medium-term objective for Belgium in 2017.

3.5 Recommended consolidation instruments

The study by Cournède et al. (2013) published by the OECD is an excellent general survey of the macroeconomic effects of various consolidation instruments. The analysis in that study enables the authors to make policy recommendations for various countries including Belgium, concerning the best instruments to use in order to achieve fiscal consolidation.

First, the authors analyse both the short-term and the long-term effects of various consolidation instruments on economic activity and income equality. They specifically examine whether the literature contains a consensus on the impact of a particular instrument. On the basis of that meta-analysis the authors divide the consolidation instruments into various categories ranging from largely positive to largely negative instruments in terms of their effect on both economic growth and income equality. If there is no consensus in the literature on a particular instrument, that instrument is not classified.

TABLE 2 SCENARIOS FOR THE GROWTH OF PRIMARY EXPENDITURE ⁽¹⁾

(average percentage changes compared to the previous year for the period 2013-2017, unless otherwise stated)

	Primary expenditure		Budget balance	Gap in relation to the target in 2017 ⁽²⁾
	Real growth	Nominal growth	(in % of GDP)	
Freezing of nominal expenditure	-1.5	0.0	2.9	2.3
Freezing of real expenditure	0.0	1.5	0.0	-0.6
Projection of expenditure with no change of policy ⁽¹⁾	1.2	2.8	-2.8	-3.4

Sources: Budget documents, NBB.

(1) On the basis of the macroeconomic projections of the Federal Planning Bureau dated March 2014, which were used in the March 2014 opinion of the High Council of Finance.

(2) Objectives included in the April 2014 stability programme, based on the March 2014 opinion of the High Council of Finance.

TABLE 3 CONSOLIDATION INSTRUMENTS RECOMMENDED FOR BELGIUM

	Impact on economic activity		Impact on income equality		Classification	
	Short term	Long term	Short term	Long term	Short and medium term	Long term
Reduction in expenditure						
Pensions		++			1	2
Subsidies	-	++	+	+	2	1
Unemployment benefits	-	+	-		4	3-6
Sickness and invalidity benefits	-	+	--	-	8	7-9
Public sector labour costs and operating costs	--	+	-		11	3-6
Family allowances etc.	-	-	--	--	14	15-16
Public investment	--	--			15	13-14
Health care	--	-	-	--	16	13-14
Education	--	--	-	--	17	17
Increase in revenue						
Registration fees, inheritance taxes etc.	-		++	+	3	3-6
Eco-taxes	-	+	-		5	3-6
Current tax on property	-				6	7-9
Sale of goods and services	-	+	-	-	7	7-9
Personal income tax	-	--	+	+	9-10	10-12
Corporation tax	-	--	+	+	9-10	10-12
Tax on consumption (except environmental taxes)	-	-	-		12	10-12
Social security contributions	-	--	-	-	13	15-16

Source: Cournède *et al.* (2013).

On the expenditure side, in regard to a reduction in pensions, there is no consensus except concerning the long-term effect on economic activity. That effect is decidedly positive, the main reason being the increase in the labour supply which follows from the reduction in pension expenditure. The short-term impact of a cut in pension expenditure on economic growth and income equality depends on the specific way in which it is implemented. It is also important to note the significant difference between the short-term and long-term effects on economic growth of a reduction in public sector labour and operating costs. In the short term, the impact is very negative, whereas in the long term it becomes positive. The reason is that the decline in public consumption resulting from that reduction has a direct impact on GDP, but the negative Keynesian demand effects apply only in the short term. In the long term they disappear, so that cutting that expenditure ultimately has a positive effect on economic activity. Finally, the authors draw attention to the very negative short-term and long-term effects on economic activity and income equality of a reduction in expenditure on education. Cutting public investment also has a very negative impact on economic growth.

On the revenue side, the short-term and long-term effects of an increase in both personal income tax and corporation tax are similar. In the long term, the impact on economic growth is very negative. The impact on income equality is moderately positive in both the short and the long term. In theory, the effect on economic activity of an increase in personal income tax is ambiguous. Such an increase leads to a reduction in the proceeds of their labour for workers. Depending on whether the workers choose to do more work in order to preserve their net income (income effect) or to do less work since their free time becomes relatively less expensive (substitution effect), the impact on economic growth will be either positive or negative respectively. However, on the basis of empirical studies, there is a consensus whereby the substitution effect dominates, so that the effect on economic activity is negative. The impact on economic activity of an increase in social security contributions is comparable to the effect of an increase in personal income tax and corporation tax, but the effect on income equality is different. Increasing social security contributions generally has a negative effect on income equality since these contributions are often concentrated on labour incomes and, in many countries, are only payable on labour incomes up to a certain level. Moreover, an increase in both eco-taxes and income from the sale of goods and services – this essentially concerns the consumption costs of public goods and services – exerts a positive effect on economic growth in the long term. An increase in these consumption costs in fact leads to a reduction in inefficient use of the goods

and services which, in the long term, may be beneficial for growth. An increase in eco-taxes in turn promotes sustainable production, and that has a positive impact on long-term output.

On the basis of this summing-up exercise, the authors then establish two rankings of consolidation instruments: one geared to both the short and the medium term, and the other focusing solely on the long term. The higher an instrument's position in the ranking, the better, or less damaging, it is for economic growth and income equality. A short- and medium-term cluster analysis is conducted to attribute weightings to the economic growth and income equality objectives. Belgium is placed in a group of countries where there is a little more emphasis on economic growth than on income equality, as these countries already have relatively high income equality compared to the other OECD countries. It is therefore considered that, for Belgium, the challenges mainly concern stimulating economic activity. In consequence, the impact of the various instruments on economic growth has a relatively greater influence on the ranking. In the long term, the two objectives have the same weighting for the ranking.

In the short- and medium-term ranking, cutting pension expenditure is in first place, followed respectively by cutting subsidies, increasing registration fees and inheritance taxes, and reducing unemployment expenditure. Right at the bottom of the ranking come public investment cuts, restrictions on health care spending and a reduction in expenditure on education. These are consolidation instruments that should preferably be avoided. In the long-term ranking, cuts in pension expenditure and reductions in subsidies swap places. The reason is that, for the long-term analysis, economic growth and income equality criteria are given the same weighting. These instruments are followed by cuts in unemployment expenditure, reductions in public sector labour and operating costs, increases in registration fees and inheritance taxes, and higher eco-tax revenues. Conversely, in the long term, the effect of cutting expenditure on education and public investment is detrimental to economic growth, and in the case of education it also harms income equality.

Finally, the consolidation need is estimated for each country and the authors examine which are the best instruments for achieving consolidation. In that regard, it is assumed that pension expenditure remains constant as a ratio of GDP, and that in itself already entails substantial reforms. Ideally, a country should only use instruments which are high up in the ranking, as they have the best effect on economic activity and income equality. Nonetheless, any given instrument must offer sufficient scope enabling it to be used to achieve the consolidation

objective. Here, the authors apply the following pragmatic rule: on the revenue side, a particular instrument offers some scope if at least a third of the OECD countries studied generate more revenue in relation to GDP with that instrument; on the expenditure side, there is scope for using an instrument if at least a third of these countries spend less as a percentage of GDP.

Taking account of the rankings and the scope of individual consolidation instruments, various instruments are recommended for Belgium. They are outlined in green in table 3. The recommended instruments with a green background are those about which there is little doubt. The other instruments outlined are subject to a little more uncertainty.

The conclusions for the policy to be implemented for Belgium are obviously interesting, but are still only a guide. Thus, according to this study, the recommended instruments about which there is hardly any doubt and for which there is some scope for implementing measures are as follows: cutting pension expenditure, subsidies, and unemployment benefits. In the long term, it is also recommended to reduce the public sector labour and operating costs. According to the approach followed in this study, moderating public expenditure would therefore be the key to successful consolidation of public finances in Belgium. The recommended instruments subject to a little more uncertainty in the short and medium term are as follows: sickness and invalidity benefits, eco-taxes, current taxes on property, and income from the sale of goods and services. In the long term, this concerns eco-taxes and sickness and invalidity benefits.

Conclusion

Owing to the deterioration in public finances resulting from the economic and financial crisis, and the rising costs associated with population ageing, fiscal consolidation is indispensable, both in Belgium and in most other euro area countries.

Although fiscal consolidation is generally detrimental to economic growth in the short term, in the long term it benefits economic activity. Fiscal consolidation efforts based on expenditure cuts have a more favourable impact on economic activity in the long term than consolidation

based on an increase in public revenues, so long as the cuts do not concern the most productive expenditure such as investment. However, if the consolidation measures put an end to the uncertainty surrounding the sustainability of public finances, thus boosting confidence, then the short-term impact on economic activity may be limited.

The consolidation of public finances in Belgium must be based first on inhibiting the growth of primary expenditure. Since the start of the millennium, that expenditure has in fact risen sharply as a ratio of GDP. It is also higher than in most other euro area countries, particularly in regard to social benefits, general government sector wage bill, and subsidies. The moderation of the expenditure growth seen recently – resulting from the efforts made by the federal government, the Communities and Regions, and the local authorities – must therefore be reinforced to enable Belgium to meet its European commitments regarding the consolidation of its public finances. In view of the scale of the effort, the need to improve tax collection is probably unavoidable. Some scope for reducing the particularly high levies on labour incomes needs to be found.

Controlling public expenditure by improving the quality and efficiency of public intervention at all levels of power is therefore an important task. In addition, the contribution that the various types of expenditure make towards an increase in growth potential, sustainable development of the economy and the attenuation of social inequalities may also affect the choices made. From that point of view, expenditure intended to encourage participation in the labour market is very effective. Not only does work support the economy, it is also the best guarantee against poverty and social exclusion. Expenditure on investment and research and development, where Belgium does not perform well by international standards, must be protected or even stimulated as far as possible, in view of its beneficial impact on growth potential.

Finally, these efforts need to be supplemented by pension system reforms, further extending the average length of working life. In view of the time that it takes for these reforms to have an effect, it is important to define and adopt them as soon as possible. Moreover, measures must also be taken to maintain control over health care expenditure. That is the only way to ensure that the social protection system remains adequate and affordable.

Bibliography

Alesina A., C. Favero and F. Giavazzi (2012), *The output effect of fiscal consolidations*, NBER Working Paper 18336.

Alesina A. and S. Ardagna (2012), *The design of fiscal adjustments*, NBER Working Paper 18423.

Barrell R., D. Holland and I. Hurst (2012), *Fiscal consolidation: Part 2. Fiscal multipliers and fiscal consolidations*, OECD Economics Department Working Paper 933, ECO/WKP(2012)10, February.

Cournède B., A. Goujard and Á. Pina (2013), *How to achieve growth- and equity-friendly fiscal consolidation? A proposed methodology for Instrument choice with an illustrative application to OECD countries*, OECD Economics Department Working Paper 1088, October.

de Callataÿ E. and F. Thys-Clément (eds) (2012), *The return of the deficit: Public Finance in Belgium over 2000-2010*, Leuven University Press.

EC (2012), *Fiscal Sustainability Report 2012*, Directorate-General for Economic and Financial Affairs, European Economy 8, December.

EC (2013), *Commission staff working document accompanying the 2014 Annual Growth Survey: Overview of progress in implementing country-specific recommendations by Member State*, SWD(2013)800 final, 13 November.

EC (2013), *Communication from the Commission*, Annual Growth Survey 2014, COM(2013)800 final.

ECB (2012), "The role of fiscal multipliers in the current consolidation debat", *Monthly Bulletin*, 82-86, December.

ECB (2013), "Growth effects of high government debt", *Monthly Bulletin*, 85-87, March.

Eugène B. (2011), "Public sector wages", NBB, *Economic Review*, 23-37, December.

Everaert G., F. Heylen and R. Schoonackers (2014), *Fiscal policy and TFP: Measuring direct and indirect effects*, submitted to *Empirical Economics*.

Hagemann R. P. (2012), *Fiscal consolidation: Part 6. What are the best policy instruments for fiscal consolidation?*, OECD Economics Department Working Paper 937, ECO/WKP(2012)14, 10 January.

High Council of Finance, "Public sector borrowing requirements" section, (2014), *Opinion: Budget path in preparation for the stability programme 2014-2017*, March.

IMF (2014a), *Fiscal Monitor, Public Expenditure Reform: Making difficult Choices*, World economic and financial surveys, April.

IMF (2014b), *Belgium Staff Report for the 2014 Article IV Consultation*, IMF Country Report 14/76.

Laubach T. (2009), "New evidence on the interest rate effects of budget deficits and debt", *Journal of the European Economic Association*, Vol. 7(4), 858-885.

Molnar M. (2012), *Fiscal consolidation: Part 5. What factors determine the success of consolidation efforts?*, OECD Economics Department Working Paper 936, ECO/WKP(2012)13, 10 January.

Nautet M. and L. Van Meensel (2011), "Economic impact of the public debt", NBB, *Economic Review*, 7-20, September.

Study Committee on Ageing (2013), *Annual Report*, July.

Sutherland D., P. Hoeller and R. Merola (2012a), *Fiscal consolidation: How much, how fast and by what means?*, OECD Economic Policy Paper 01, 12 April.

Sutherland D., P. Hoeller and R. Merola (2012b), *Fiscal consolidation: Part 1. How much is needed and how to reduce debt to a prudent level?*, OECD Economics Department Working Paper 932, ECO/WKP(2012)9, 10 January.