Economic impact of the public debt

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Introduction

The economic and financial crisis led to a strong increase in the public debt in the euro area countries, the United Kingdom, the United States and Japan. Moreover, without a change of policy, the public debt will continue to expand in most of those countries.

This article describes the possible consequences and inherent risks of this situation. Those risks have also been illustrated by the problems which certain euro area countries have recently experienced in financing their public debt on the financial markets: those countries had to resort to the conditional financial assistance of the IMF and other European countries. A return to sustainable public finances, not only in those countries but also in most of the other advanced economies, will require a sustained consolidation effort in the coming years.

The first part of this article examines the movement in the public debt in the advanced economies, and the outlook in the absence of a change of policy. The second part concerns the impact of the public debt on economic activity and inflation. The third part focuses on the need for fiscal consolidation to reduce the public debt, and the recommended strategies for achieving that objective. The final part sets out some conclusions.

1. Overview of the public debt

1.1 Current situation

The financial crisis which erupted in 2007 and intensified in 2008, and the ensuing economic recession had a very serious adverse impact on public finances in most of the advanced economies. In particular, many countries saw a sharp rise in their debt ratio.

In the euro area, the debt ratio is set to rise from 66.2% in 2007 to 87.7% in 2011. Nevertheless, there are wide variations between countries. Ireland is seeing the biggest increase, at almost 90 percentage points of GDP. In Greece, which already had the highest debt ratio in the euro area before the crisis, the increase is expected to exceed 50 percentage points of GDP. Similarly, in Spain and Portugal the public debt has expanded considerably, by over 30 percentage points. In other euro area countries, though the rise in the public debt is weaker, it is still substantial with increases ranging between 10 and 20 percentage points. In no less than twelve euro area countries, the public debt exceeds the maximum reference value of 60% of GDP stipulated by the Maastricht Treaty.

The euro area countries are not the only ones to see their debt level increase strongly between 2007 and 2011. Thus, over the same period the debt ratio of the United States will have risen from just over 60% to almost 100% of GDP. In Japan, where the debt ratio was already particularly high in 2007, it is set to rise by a further 50 percentage points to just under 240% of GDP. In the United Kingdom, the debt ratio is likely to rise by 40 percentage points, but since it was still relatively modest in 2007, the
debt is expected to remain lower at 84.2 % of GDP by the end of 2011.

Clearly, the surge in the debt ratio seen in the advanced countries in recent years is closely linked to the support measures for the financial sector at the time of the financial crisis and to the loss of revenue caused by the ensuing economic recession. However, the financial sector rescue operations account for only a small proportion of the total increase in the public debt since the outbreak of the crisis. The growth of the budget deficits is in fact the main factor determining that increase. Despite the economic recovery evident since 2010, the upward trend in the debt ratio of most of the advanced countries has persisted.

Since the start of the financial and economic crisis, the gross borrowing requirements of the public sector have been very substantial. It has been necessary to refinance part of the debt as it reaches maturity. Governments have also had to raise money to finance the injections of capital into the financial sector and their fast-growing budget deficits. However, up to mid-2010, the strong risk aversion generated sustained demand for government securities considered as safe. That sustained demand and the accommodating policy of the central banks enabled most countries to borrow at favourable rates. However, since the final quarter of 2010, concerns about the solvency of certain countries have driven up interest rates. These persistent worries combined with substantial gross refinancing requirements could increase the pressure on rates.

The financial and economic crisis has not affected all regions of the world in the same way. The emerging and developing countries, which – on average – had an initial public debt ratio below that of the advanced countries, have not seen their debt ratio rise, on average. In the emerging and developing countries, the debt ratio has remained relatively stable since the crisis, at around 35 % of GDP. This favourable dynamic reflects stronger growth and smaller deficits than in the advanced countries. The gap between the two groups of countries therefore widened after the financial and economic crisis.
1.2 Projections with no change of policy

In the absence of consolidation measures, the budget situation in the advanced countries is set to become even worse. Population ageing is likely to contribute to that deterioration by putting additional pressure on public expenditure on health care and pensions. Without a change of policy, that situation is likely to generate even bigger deficits and a strong rise in public debt levels.

The ageing-related public expenditure is projected to rise by 2.6 percentage points of GDP by the year 2030 for the euro area countries, and as much as 5.1 percentage points by 2060. However, it should be noted that there are major variations between the euro area countries. The United States, Japan and the United Kingdom will also have to cope with a substantial rise in age-related public spending. In most of the advanced economies, the sustainability of public finances is therefore a serious problem. To avoid a marked deterioration in the budget position of those countries, fundamental adjustments are needed.

To demonstrate that the current budgetary policy is unsustainable, it is possible to simulate what will happen to public debt levels if there is no change of policy. This exercise clearly shows the exponential growth of the public debt in most of the advanced countries.

Debt levels in the euro area would exceed 180% of GDP in 2030. None of the euro area countries would escape this vicious spiral. In some countries such as Greece and Ireland, the debt would even reach levels equivalent to 3 or 4 times their GDP. This exponential growth of the public debt would not be confined to the euro area countries. In fact, without a change of policy, the public debt of the United Kingdom could amount to three times its GDP in 2030, while the public debt of the United States would exceed that figure by then. In Japan, the debt ratio could actually be more than four times GDP in 2030.

Thus, it is clear that all the advanced countries will be forced to act in order to prevent their financial situation from becoming unsustainable. Some countries have already announced measures to restore sound, sustainable public finances. Nonetheless, many countries have yet to put such measures in place.

2. What is the economic impact of the public debt?

The impact of fiscal policy – and hence of the public debt – on economic growth and other economic variables has always been the subject of lively debate among economists. Following the increase in the public debt in
most of the advanced countries, this subject is more topical than ever.

This chapter examines the main current viewpoints on this question. It begins with some theoretical considerations concerning the optimum and maximum government debt ratios. Next, it focuses on the central question of this article: the impact of the public debt on economic activity. The chapter ends by considering the potential implications for inflation of the scale and pattern of the public debt.

2.1 Theoretical considerations concerning the optimum and maximum public debt ratios

The public debt tends to increase the disposable income of the current generation while – ceteris paribus – reducing that of future generations. It therefore seems obvious to assess the debt level in an intergenerational framework. In that context, the public debt and deficits are acceptable if they facilitate the expansion of production capacity and if the return on the public financial intervention thus financed outweighs the costs of the debt. By comparing those costs and the return on public intervention, it is therefore possible to determine the optimum level of the public debt. Government intervention may concern investment expenditure on infrastructure, education, the operation of public institutions, security and a reduction in taxation in order to moderate its adverse impact on economic growth. The criterion of intergenerational neutrality – which means that each generation should make an equivalent net contribution to the government – also requires inclusion in the analysis of the impact of demography on that neutrality: with the prospect of significant population ageing, it seems appropriate to anticipate the increased costs in the form of pensions and health care for the elderly, and to ensure that they are financed partly by the current generation.

In practice, however, it is difficult to determine the optimum level of the public debt. First, the concept of an equivalent net contribution to government from each generation can be defined in absolute or relative terms. Moreover, it is extremely hard to measure the economic return on public intervention. It is therefore difficult to quantify the level at which the return on public intervention financed by the debt is lower than the cost of the public debt. Owing to these methodological problems, the empirical literature on the optimal debt level is fairly limited, and the findings are very divergent.

Nevertheless, it is evident that fiscal policy does not necessarily correspond to what might be considered the macroeconomic optimum. Thus, in past decades, the governments of a good many countries have shown a lack of fiscal discipline and have therefore increased their debt levels. The literature attributes that lack of fiscal discipline to the “deficit bias”. This says that the democratic decision-making process may encourage deviation from the optimum fiscal policy. Fiscal policy may be too improvident if the population focuses essentially on the short-term advantages of lower taxes or higher spending, without always being aware of the potential adverse repercussions on the budget in the long term of an expansionary fiscal policy. Political decision-makers may tend to play on this in order to increase their chances of re-election. There may also be a preference for deliberately favouring current generations and transferring the burden of the debt to future generations. The concept known in game theory as the ‘common pool problem’ offers another explanation for the deficit bias. In regard to fiscal policy, this concept means that each interest group or each party in a coalition government looks after its own interests, so that the budget deficit and the public debt may exceed the optimum levels. The deficit bias and its undesirable effects may be counteracted by independent institutions and rules imposing restrictions on the budget.

Apart from the concept of the optimal debt, the literature also examines the concept of the maximum acceptable public debt, corresponding to a country’s maximum capacity to repay its debts. The current level of public debt is, by definition, equal to the discounted value of future primary balances. The literature refers to the concept of inter-temporal budget constraint. According to this constraint, the higher the public debt ratio, the bigger the future primary balances need to be.

Consequently, the maximum acceptable debt ratio corresponds to the discounted value of the maximum acceptable future primary balances. The primary balances can only increase via an expansion of public revenues or a restriction on public spending. The maximum acceptable debt ratio is therefore determined by the maximum acceptable level of public revenues and the minimum acceptable level of public primary expenditure. Those levels cannot be fixed only on the basis of economic considerations: it is essentially social and political considerations that may set the limits here. If the current level of the public debt exceeds the discounted value of the future primary balances that the population is prepared to generate, then sooner or later there will be a problem of default on the public debt. However, it is extremely difficult to quantify the theoretical concept of the maximum debt ratio. Moreover, the maximum acceptable debt ratio may vary from one country to another.
2.2 Impact of the public debt on GDP

2.2.1 Short- and long-term effects of a reduction in the public debt

The theoretical and empirical literature concerning the impact of fiscal policy on economic activity is extensive, but it does not offer a clear answer to the question of the link between fiscal policy and economic activity. In fact, the impact depends very much on circumstances, which may vary considerably over time and from one country to another. Here it is crucial to distinguish between the short-term economic impact of the public debt and its long-term effects.

Short-term impact

In the short term, the measures taken to consolidate the budget are likely to depress economic growth. In fact, most empirical studies show that the budget multipliers – which indicate the extent to which a given fiscal stimulus influences activity growth – are positive in the short term. However, the scale of a consolidation plan’s short-term negative impact on economic activity varies according to the measures adopted. Measures relating to public consumption and investment have a relatively major impact on economic activity, whereas measures concerning transfers – such as taxes or social benefits – have a weaker effect. The reason is that the latter have only an indirect effect in modifying consumption or investment, via an adjustment to the incomes of households or companies. The degree to which households and firms face liquidity constraints or credit restrictions is also important for ascertaining the impact of tax increases or social benefit cuts on economic growth.

Moreover, it seems that the negative effect of consolidation measures on economic growth in the short term is weaker – or even practically non-existent – if the public finance situation deteriorates and that situation is considered worrying. In fact, the consolidation measures may avoid an interest rate rise, which would curb private investment. Moreover, they may lead to a reduction in the savings ratio, e.g. owing to a reduction in precautionary savings by households thanks to a revival in confidence after a period of budget difficulties. In that case, the negative impact on economic activity in the short term could be very small. In the current situation, these factors seem relevant, so that fiscal consolidation will not necessarily have a very negative effect on business activity.

The scale of the impact of consolidation also depends on the economic and monetary environment in which it is implemented. Where consolidation takes place in a small, open economy, its short-term impact is less than in the case of simultaneous consolidation in a number of countries, which will have a bigger restraining effect on global demand. Next, if the central banks are able to adopt an accommodating policy, consolidation is less damaging to growth. However, if interest rates are close to zero, central banks have less scope for compensating for the potential decline in global demand and inflation caused by increasing revenues and cutting public spending. Finally, the presence of a fixed exchange rate tends to reinforce the negative impact of consolidation on growth, compared to a system of floating exchange rates, which generally plays a significant buffer role.

Long-term impact

In contrast to the short-term effects, the long-term impact of fiscal consolidation ensuring the sustainability of public finances is undeniably positive. The effects include a decline in long-term interest rates, owing to a contraction in the supply of government securities on the market and a reduction in risk premiums. In addition, the reduction in interest charges resulting from consolidation frees up more resources for productive public expenditure or for reductions in the burden of taxation and parafiscal levies.

According to the literature, fiscal consolidation based on spending cuts is more effective and has a more favourable impact on economic growth in the long term than that based on a rise in public revenues. That is particularly the case if the budget restraint applies to spending other than that which is generally considered productive, such as expenditure on investment, education, research and innovation. The scale of the impact of consolidation on economic activity will depend on the use made of the money saved by budget austerity (see section 2.2.3).

2.2.2 Transmission mechanisms

There are several ways in which an increase (reduction) in the public debt may have a negative (positive) influence on economic activity in the long term. There are three main transmission channels.

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(1) According to the Ricardian equivalence theory, an increase in the public debt is offset by an increase in the private savings ratio, because individuals take account of the prospect of a future tax increase and a future public spending cut. However, the Ricardian equivalence theory is based on a number of unrealistic assumptions, e.g. that households face no budget constraints and that households take account of an infinite time horizon and non-distorting, lump-sum taxes. Consequently, though an increase in the public debt may lead to a higher private savings ratio, that will not be enough to compensate entirely for the decline in national net savings.
First, an increase in the public debt generally corresponds to a decline in the positive savings or an increase in the negative savings of the government, leading to a reduction in the volume of net national savings. This tends to push up interest rates. The rise in interest rates causes a fall in investment and in the growth of the capital stock. The slower pace of capital accumulation hampers the innovations that improve productivity. The result is lower labour productivity. It should be noted that the impact on interest rates depends on the size of the region affected by the rise in the public debt. If that rise is confined to a small open economy, the impact on market interest rates will be very modest. Conversely, if the debt expands simultaneously in countries forming a large economic region, the upward pressure on market interest rates will be substantial.

In addition, the increase in the debt leads to higher interest charges. Those charges then take the place of productive expenditure – such as public investment in infrastructure – or are offset by higher taxation and an increase in the associated distortions. Depending on the fiscal measure adopted, there may be a negative impact on consumption (in the case of an increase in VAT and excise duty), on private investment (in the case of capital taxes), and on the labour supply (in the case of taxes on wages).

Finally, if the increase in the debt leads to the emergence of sovereign risk, the debt drives up the risk premiums. The higher premiums generate an increase in financing costs which may threaten the solvency of public finances. In addition, that may lead to an increase in the interest rates applied to individuals and firms.

Where substantial debts are combined with adverse budgetary starting conditions, that amplifies the negative and non-linear effect of a high debt level on interest rates. In this context, attention must be drawn to the importance of the initial budgetary, structural and institutional conditions, and the contagion effects emanating from the financial markets. Thus, factors such as weak or inadequate institutions, low private savings, a weak inflow of foreign capital, weak competitiveness of the national economy, high unemployment, a fragile banking sector or high sensitivity to contagion effects play a key role in determining the scale of the impact of the debt on interest rates. The impact of population ageing on the sustainability of public finances may also be an essential determinant.

The pattern of yield differentials on ten-year government securities in the euro area countries vis-à-vis the German Bund shows the great sensitivity of risk premiums on
government securities since the start of the financial and economic crisis. The movement in those risk premiums, particularly since 2010, shows that the financial markets made a steep upward revision to the default risk of certain countries, and that the financial markets may react suddenly and very vigorously.

The negative impact of the public debt on economic activity may also be felt via other transmission mechanisms, such as higher inflation expectations, greater uncertainty and increased macroeconomic volatility. The impact which expansion of the public debt may have on inflation expectations is discussed in section 2.3.

It should also be noted that while the debt has a negative effect on growth, the opposite causal relation is equally true. In other words, a deterioration in economic growth tends to increase the debt ratio.

2.2.3 Empirical findings

Link between the public debt and economic growth

The data covering the period 1970-2007 indicate that there is a significant negative link between the level of the public debt and per capita GDP growth at constant prices.
During that period, the advanced economies with a debt ratio below 30% of GDP achieved an average increase in per capita GDP at constant prices of 3.2%, whereas growth came to only 1.9% for the advanced economies with a debt ratio in excess of 90% of GDP. The link is less clear for the emerging economies, but here too the average per capita GDP growth at constant prices is strongest in the countries with the lowest public debt. Finally, in the developing countries, per capita GDP growth at constant prices is clearly higher the lower the public debt.

In the case of the emerging and developing countries, a negative link is also evident for the period 1970-2007 between the level of the public debt and gross fixed capital formation. This finding seems to confirm the existence of a significant transmission channel which operates via gross capital formation. Conversely, for the advanced economies, there is no clear link between the level of public debt and gross fixed capital formation.

A number of empirical studies have tried to determine the limit which the debt must not exceed in order to avoid a severe adverse impact on economic growth. Those studies(1) confirm the existence of a negative, non-linear causal relationship between the debt and GDP. In fact, they conclude that a low debt level has no effect on economic growth, whereas beyond a certain level, the debt has a negative impact on growth. According to these studies, the critical debt level is between 90 and 100% of GDP.

However, in some cases, the empirical findings do not bear out this threshold effect for debt levels equivalent to or above 90% of GDP. That is notably the case in Japan, where the debt exceeds 200% of GDP. This critical threshold therefore needs to be analysed and defined country by country, taking account of the domestic economic, budgetary and institutional characteristics. Market perception of solvency risk and macroeconomic stability is another crucial factor.

Long-term effects of a permanent reduction in the public debt

Although fiscal consolidation generally has a detrimental effect in the short term for countries which have no major solvency problems, in the long term a rebalancing of the budget is likely to be beneficial. Thus, on the basis of the IMF simulations(2), cutting the debt by 10% in the euro

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(1) See for example Kumar and Woo (2010), Reinhart and Rogoff (2010a), Chercherita and Rother (2010) and Carne, Grennes and Kähler-Gelb (2010).
(2) For more details, see IMF (2010b).
area, the United States and Japan would boost output not just in those countries but also in the rest of the world. The rebalancing introduced in this simulation exercise comprises permanent cuts in public consumption and transfers. Deficit reduction would lead to a steady decline in real interest rates, thus stimulating private investment.

A 10% cut in the debt ratios would drive interest rates down by 30 basis points. That decline in interest rates would boost private investment, leading to an increase in the physical capital stock and output in the long term. The IMF points out that the improvement in output in the countries analysed also produces benefits for the rest of the world in the form of the expansion of exports to those countries. In the IMF exercise, the capital stock would thus expand by 2.1% in the countries concerned, and by 1.6% in the rest of the world.

In addition, lower interest rates would mean a reduction in debt interest charges. If the savings on interest are used to cut taxes on labour incomes, that will increase the labour supply and, consequently, output. If the savings on interest are used to reduce the taxes on capital incomes, the long-term effects on growth could be even more favourable, via increased investment in the private sector. Conversely, if the savings are used to cut taxes on consumption or to increase public transfers, the increase in output would be more modest.

During the first three years of consolidation, the costs are likely to outweigh the benefits. Subsequently, the benefits should always outweigh the costs of fiscal consolidation. After five years, the gains resulting from consolidation would exactly offset the losses suffered in the first three years. In the long term, GDP would increase by 1.4% in the euro area, the United States and Japan, and 0.8% in the rest of the world.

It should be noted that this IMF simulation takes no account of the positive effect of debt reduction on the perception of sovereign risk, and hence on the risk premium on government securities. This is another factor which would help to cut the cost of financing the debt and the interest charges, reinforcing and accelerating the positive long-term effects on output.

2.3 Impact of the public debt on inflation

An increase in the public debt may, in certain cases, heighten the risk of inflation. If the public debt grows strongly, the government may in fact be tempted to reduce the value of that debt by generating inflation. That happens if the public debt is monetised. In that case, the government issues debts which are bought by the central bank, that purchase usually being mandatory. The money which the government thus receives from the central bank is used to finance the budget deficit. The money supply expands substantially as a result, and there is inflationary pressure which may lead to hyperinflation.

All periods of hyperinflation which have occurred in the past have originated from a budget crisis which may be due to war, extremely negative economic shocks, or bad policies. A budget crisis may prevent the government from raising finance on the capital market, or force it to borrow at very high interest rates, so that it resorts to monetisation of the public debt.

If the public debt increases, and if the economic agents take account of a greater likelihood of monetisation of the debt, inflation expectations – and hence also current inflation – may rise. In that case, apart from the transmission channels already described, there would be an additional negative impact on economic activity.

Whether or not this risk materialises depends in particular on institutional factors. Thus, it will not be possible to monetise the public debt if the law prohibits the monetary financing of public spending or deficits, as is the case in the European Union. The independence of the central bank and a clear mandate geared to the maintenance of
price stability are also important to prevent the risk of a strong rise in the public debt triggering higher inflation.

During the period after the Second World War, a rising debt ratio was accompanied by higher inflation in certain developing or emerging countries. In contrast, during that same period, the increase in the debt ratio in the advanced countries did not cause inflationary pressure. The existence of institutions independent of the government for deciding on monetary policy, and the role of those institutions in monitoring inflation, were certainly crucial here.

Be that as it may, a situation featuring unsustainable public finances makes it considerably more difficult to conduct monetary policy, which must be centred on price stability. If such a situation were to fuel inflation expectations, there would inevitably be a tightening of monetary policy in the form of a rise in short-term interest rates. In addition, tensions could appear between the central bank and the government which, having a substantial public debt, is very sensitive to interest rate increases.

3. Strategies for reducing the public debt

The accumulation of historically high levels of public debt is problematic for several reasons. First, high and rising public debt levels cause problems for the sustainability of public finances and pose solvency risks. The resulting increase in the risk premium makes it more expensive for countries to borrow. The financial markets already doubt the solvency of the State in the case of some countries such as Greece, Ireland and Portugal. In addition, the rise in interest rates caused by the increase in the public debt may have an adverse effect on long-term growth and productivity, e.g. as a result of slower private investment. Moreover, the budgetary impact of population ageing will further aggravate the problem of the sustainability of public finances. Finally, the uncertainty over sustainability may reduce the capacity of monetary policy to control inflation expectations and to exert a favourable influence on the real economy.

Consequently, the consolidation of public finances is unavoidable in almost all the advanced countries. To that end, there is an urgent need for credible consolidation programmes. Nonetheless, the strategy may vary from one country to another. It will be more urgent and more stringent in the countries facing high and rising risk premiums. For those countries, postponing the consolidation would not only be likely to increase the cost of financing the public debt, it would also exacerbate macroeconomic instability. The cost of non-intervention could therefore be even greater. The heavily indebted governments must therefore embark on adjustment programmes without delay. For the countries with lower risk premiums, consolidation is no less urgent, but the adjustment can be made more gradually.

The three-pronged strategy formulated by the Stockholm European Council in March 2001 for addressing the challenge of population ageing is as relevant as ever in the current battle to restore sustainable public finances. That budgetary strategy consists in reducing the public debt, increasing the employment rate and productivity, and reforming the existing pension schemes, health care and care of the elderly.

First, almost all the advanced countries must achieve and maintain sound budgetary positions. In most of the advanced countries, the adjustment measures should consist mainly of sharp reductions in public spending, which has edged upwards in recent years. However, it is necessary to avoid reducing certain public spending regarded as productive, such as public expenditure on investment, research and innovation, or education. Yet in view of the scale of the fiscal consolidation required in most of the advanced countries, it is probably inevitable that consolidation measures will have to be taken on the revenue side as well. The strengthening of the institutions and the fiscal rules is also essential to ensure successful consolidation. In this context, the strengthening of the budgetary framework in the euro area is a positive sign. In this regard, the public debt will receive more attention than in the past. Thus, countries with a gross debt in excess of 60% of GDP must reduce the gap between the two variables by at least 1/20th per annum.

Second, the countries must increase participation in the labour market and boost labour productivity, as effective use of those measures could augment potential GDP, thus also expanding the fiscal scope. Education is regarded as a decisive factor here.

Third, the countries must consider appropriate reforms to their pension schemes, health systems and arrangements for the care of the elderly. In fact, the constraints connected with ageing-related expenditure will be particularly great in the light of the demographic pressures in many countries. It is therefore necessary to develop strategies to manage the increase in that expenditure. For the advanced countries, where the pressure is very great, it is essential to avoid an exponential rise in that expenditure in the medium term. In regard to pension spending, many advanced countries should introduce reforms in order to raise the effective retirement age.
Conclusions

The financial crisis has not only brought a sharp economic slowdown and great uncertainty, it has also caused a deterioration in public finances in most of the advanced countries. That situation, characterised by a strong rise in public debt levels, is problematic. In certain countries, the increase in the level of the public debt actually raises solvency risks. In addition, the costs relating to ageing will aggravate the problem of the sustainability of public finances.

A debt reduction programme is therefore needed in most of the advanced countries. The consolidation will be more urgent for the countries whose solvency is called into question by the financial markets and which face high and rising risk premiums. For the other countries, the adjustment can be implemented more gradually. The consolidation measures should focus mainly on cuts in public spending. Given the scale of the adjustment needed in most of the advanced countries, measures which increase revenues will probably also be necessary. In the short term, the consolidation could have the effect of slowing the pace of economic activity. In the long term, however, budgetary rebalancing must certainly be beneficial.

At present, some countries have already implemented consolidation measures while others – including Belgium – are yet to put most of the measures in place.
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