Smart Fiscal Consolidation

A Strategy for Achieving Sustainable Public Finances and Growth

Galina Kolev and Jürgen Matthes

CES
CENTRE FOR EUROPEAN STUDIES

Institut der deutschen
Wirtschaft Köln

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Executive Summary

The global financial crisis and, in part, fiscal profligacy have contributed significantly to a sharp rise in government debt levels in Europe. Therefore, tackling excessive public deficits and debts has once again become a priority. However, the course of fiscal consolidation is being hotly debated. On one hand, there was the hope that decisive and front-loaded consolidation programmes would have expansionary effects, as they often had in the past. This expectation has been largely disappointed; fiscal multipliers have been larger than expected for several reasons, including the impossibility of currency devaluations for eurozone countries and the existence of slack in world trade. On the other hand, several economists point to the deep recessions in southern European countries and argue that austerity could be self-defeating. Some even commend fiscal stimulus programmes. The high debt and deficit burden in some countries—attributable, for example, to endangered debt sustainability and depressing growth effects—leaves no choice but to continue the course of fiscal consolidation. This difficult situation calls for smart means of fiscal consolidation in terms of the structure, timing and choice of individual measures. The aim is to set up effective consolidation programmes that foster long-term growth, minimise the potentially negative short-term effect on economic activity and ideally contribute to social fairness and equality. Regaining credibility by means of decisive and wide-ranging reform programmes is key.

Regarding the structure of smart consolidation programmes, raising taxes has been proven to be more detrimental to economic growth and the success of consolidation programmes than have expenditure cuts, which have often been the major part of expansionary fiscal adjustments. Moreover, the timing of fiscal adjustments has influence on potential negative short-term effects of consolidation. Thus, several recommendations can be formulated:

- The focus of consolidation should be on spending cuts.

- Comprehensive expenditure reviews should be used to identify efficiency potentials, that is, to single out spending items that can be reduced without significantly endangering the effectiveness of government spending (see below).

- Concerning the timing of smart consolidation, countries with sufficient fiscal space should aim at a gradual fiscal adjustment, while countries with high or increasing government debts which are under pressure from financial markets have no choice but to front-load their programmes to some degree in order to avoid having the debt burden become unsustainable.

- The more these latter countries manage to regain credibility, the less front-loading is required. Credibility can be fostered through clearly defined medium-term consolidation courses, accompanying structural reforms and clear ownership of the fiscal rules of the eurozone's institutional framework (mainly of the Stability and Growth Pact (SGP) and the Fiscal Compact).

- As explicitly allowed for by these rules, the fiscal adjustment path should not focus on headline nominal fiscal deficits, but on cyclically adjusted structural matters. The EU Commission is, therefore, justified in extending deadlines to achieve nominal fiscal-adjustment targets, but only in cases where the economic situation has worsened significantly and when countries reduce their structural deficits sufficiently.

This study identifies several smart fiscal consolidation measures that aim at being effective in terms of consolidation, long-term growth, short-term growth and social fairness (see the Appendix for a detailed and evaluated list). The recommendations are broadly ranked by their degree of smartness as defined by these four objectives:

- *Pension and health system reforms* (focused on long-term sustainability) have limited positive effects on current consolidation and large positive effects on future consolidation. They can support long-term growth by fostering employment through lower social security contributions (which are a tax on labour) and possibly by leading to lower interest rates that result from better fiscal sustainability. Such reforms also tend to have positive short-term-growth impacts, partly because of the focus on long-term sustainability, which can lead to lower interest rates. Moreover, intergenerational equity is fostered in the probable case that the current pension system disadvantages future generations.

- *Privatisation* contributes directly to fiscal consolidation (also in the longer run if loss-incurring state-owned enterprises (SOEs) are privatised), moderately raises long-term growth as a result of higher efficiency (of allocation and private firms), does not impede short-term growth and contributes to social fairness if the prices of former publicly supplied goods fall (which are supposedly used more by low-income groups) and if former overpayment and overstaffing prevailed in SOEs.

- The government should support long-term growth prospects by *keeping up and, ideally, moderately increasing public investment and education expenditures.* A moderate positive contribution to consolidation can be reached despite this spending increase if as many efficiency potentials as possible are used (in existing spending patterns) to stop ineffective investment projects and raise the effectiveness of education. Particularly with public investment, a moderate increase would generate positive effects, short-term demand and, thus, growth. Education reforms focused on disadvantaged groups could contribute significantly to social fairness and equality.

• In particular, both *reducing the public wage bill* (by wage cuts and number of staff reductions, the latter in case of overstaffing) and *broad-based public sector reforms* lead directly to lower fiscal deficits. They can, to some extent, foster long-term growth (the result of increased efficiency in the public sector, including less bureaucracy and better regulation of private businesses). They have only limited negative macroeconomic effects on short-term growth and can contribute to social fairness, particularly if tax evasion is reduced and if overpayment of public employees was previously the norm.

• *Better targeting and reducing the disincentives of social and unemployment assistance and moderately increasing active labour market policies* (ALMPs) can be important elements in the implementation of 'flexicurity', a concept which originates in Nordic countries. These reforms foster long-term growth by increasing employment, contribute to consolidation by reducing transfers, contribute to higher future revenue growth (despite a moderate spending increase for ALMPs) and should contribute to social fairness and equality through enhanced employment opportunities for the long-term unemployed as well as through reduced abuse of the social system (even though people actively but vainly searching for work have to cope with lower transfers). As the effect of such a reform on short-term growth can be negative in deep recessions, it should ideally be taken during upswings when labour demand increases.

- *Cutting public subsidies* has the (limited) potential to reduce government expenditures and to increase long-term growth potential if it is focused on decreasing financial support for old industries. The short-term-growth impact can be slightly negative, but cutting subsidies can enhance social fairness as particular vested interests are no longer fostered at the cost of taxpayers.

- *Shifting the tax burden from labour to consumption, with a limited increase in the effective burden,* fosters short- and long-term growth by supporting employment and net exports (via an increase in price competitiveness) even though this positive effect is slightly dampened by the limited increase of the effective tax burden. The contribution to consolidation is positive but limited. The effect on social equality should be moderately negative, as better employment opportunities for the long-term unemployed are outweighed by the effect of consumption taxes, which are a heavier burden for poorer households than for richer ones.

- *Increases in various taxes (on property, the environment, or financial transactions)* are effective in terms of consolidation needs and can partly contribute to social fairness. However, they have negative effects on economic growth in the short run (and to some extent, in the long run as well).

Apart from these fiscal consolidation measures, a broad approach to reform is advisable, including thorough structural reforms of labour and product markets, because such reforms display a high degree of smartness. They strongly support long-term productivity and thus economic growth and their short-term effects can also be positive (for example, lowering entry barriers to professional services), although certain reforms (such as lower job protection) can stifle short-term growth during recessions.

Their effect on consolidation depends on the measures taken, but generally, structural reforms improve social fairness and equality because they often enhance the opportunities of outsiders.

Keywords EU – Fiscal policy – Fiscal consolidation – Euro debt crisis – Structural reforms – Stability and Growth Pact (SGP) – Fiscal compact

Introduction

Controversial debate on fiscal consolidation

Restoring public finances has become an issue which has dominated political discussion worldwide in recent years. The development and implementation of credible consolidation plans is one of the main challenges facing industrialised countries. Government debts and underlying deficits have reached historically high levels since the onset of the current economic crisis.

However, a controversial discussion is under way about the appropriate speed and timing of adjustment. Keynesian-oriented critics warn that austerity could be self-defeating because of a possible large negative effect on short-term growth. The relatively large decline in economic growth in the last quarter of 2012 in many eurozone countries has reinforced this criticism. What is more, the Italian elections—as well as large-scale protests, for instance in Greece and Portugal—have shown that fiscal consolidation appears to be highly unpopular. The question of political sustainability of fiscal austerity has been raised.[1]

The following part of Section 1 takes up these concerns and addresses the current austerity debate while the broad-based analysis of Chapter 2 points out a variety of smart fiscal consolidation measures. Reform proposals and best practices in particular are looked for which limit the negative short-run effects of consolidation on economic growth and increase the long-run growth potential. While tailoring the most appropriate

[1] M. Buit and N. Carnot, *The Debate on Fiscal Policy in Europe: Beyond the Austerity Myth*, Economic Brief no. 20, European Commission (Brussels, 2013), accessed at http://ec.europa.eu/economy_finance/publications/economic_briefs/2013/pdf/eb20_en.pdf on 18 March 2013.

consolidation framework for individual countries goes beyond the scope of the present analysis, the aim of the paper is to provide an overview of the possible consolidation instruments that are most commonly discussed in the related literature. Chapter 3 briefly highlights the relevance of structural reform to support smart fiscal consolidation and Chapter 4 concludes and provides several policy recommendations.

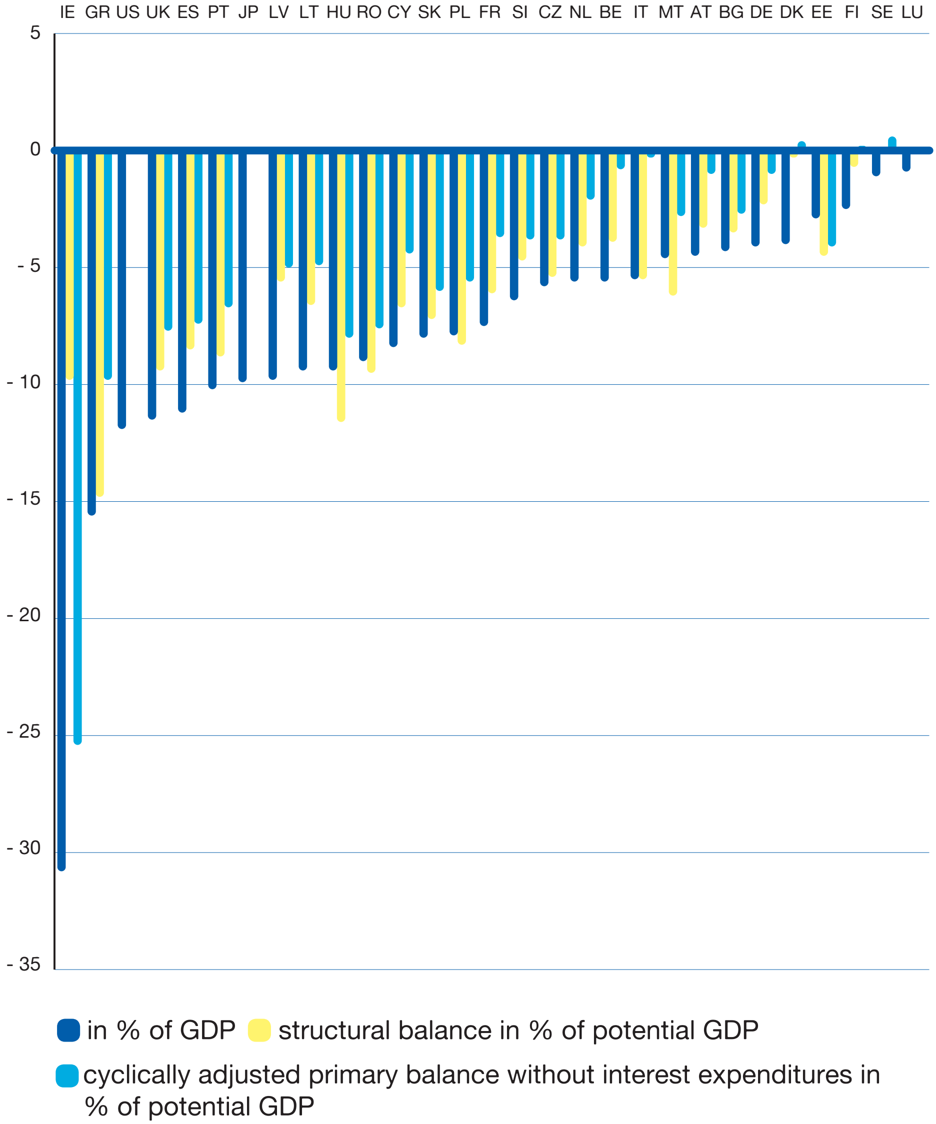
The current state of government deficits and consolidation progress

According to recent data, the gross government debt of EU27 countries is still increasing and amounted to more than 87% of GDP in 2012. This ratio far exceeds the 100% level in Greece (162%), Italy (127%), Portugal (121%) and Ireland (117%). Current fiscal deficits also remain high in some EU countries, but significant progress in reducing deficit levels has been achieved.[2]

The following figures provide a brief account of the huge challenge created by the high levels of government deficit in many EU countries and the consolidation progress up to 2012. Figure 3—calculated as the difference between Figures 1 and 2—shows that some countries suffering most from the euro debt crisis have managed to reduce their structural government budget deficits considerably.

[2] OECD, *Restoring Public Finances* (Paris: OECD Publishing, 2012); IMF, *Taking Stock—A Progress Report on Fiscal Adjustment*, Fiscal Monitor, October 2012 (Washington, DC), accessed at http://www.imf.org/external/pubs/ft/fm/2012/02/pdf/fm1202.pdf on 18 March 2013.

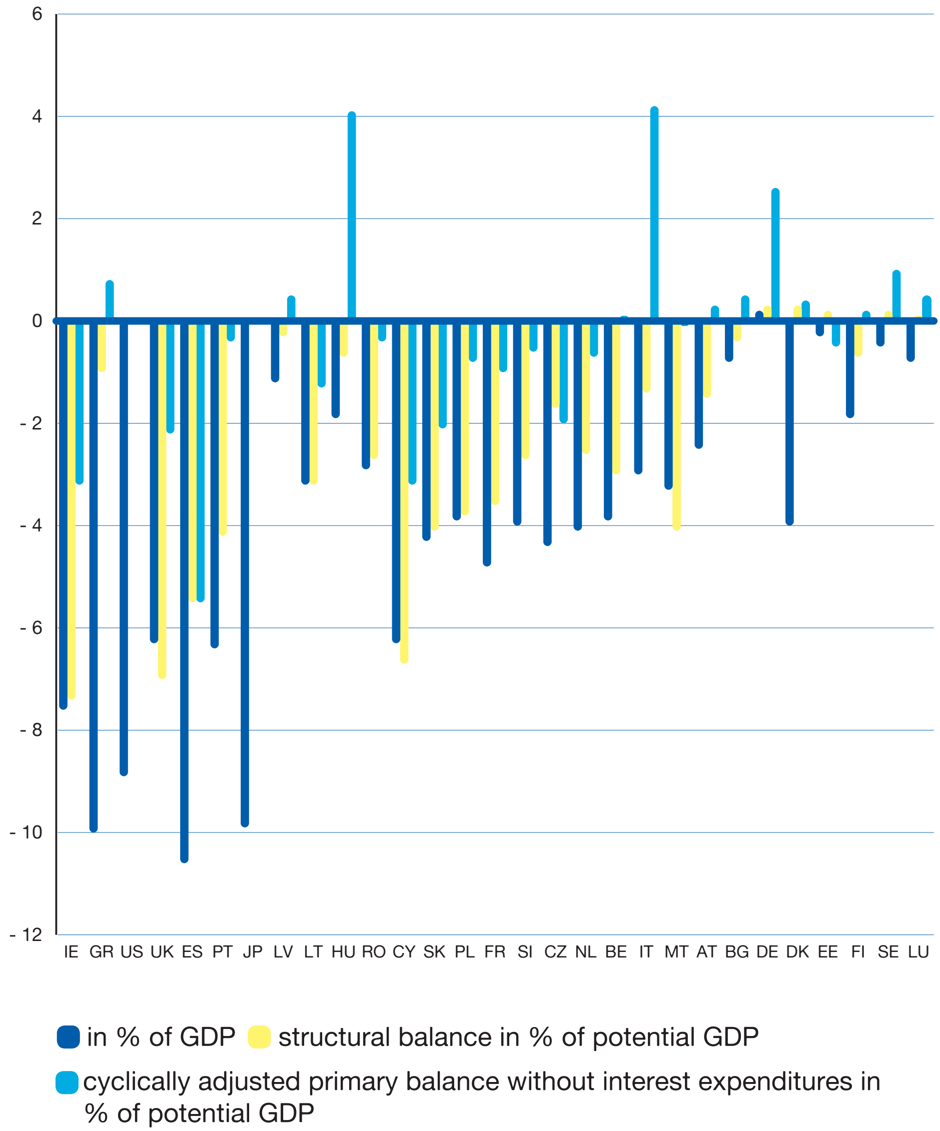
Figure 1 Public budget balance in the EU27 (maximum 2005–12)



Source: AMECO database.

Note: Structural balance equals the fiscal balance adjusted for the business cycle and for one-off measures.

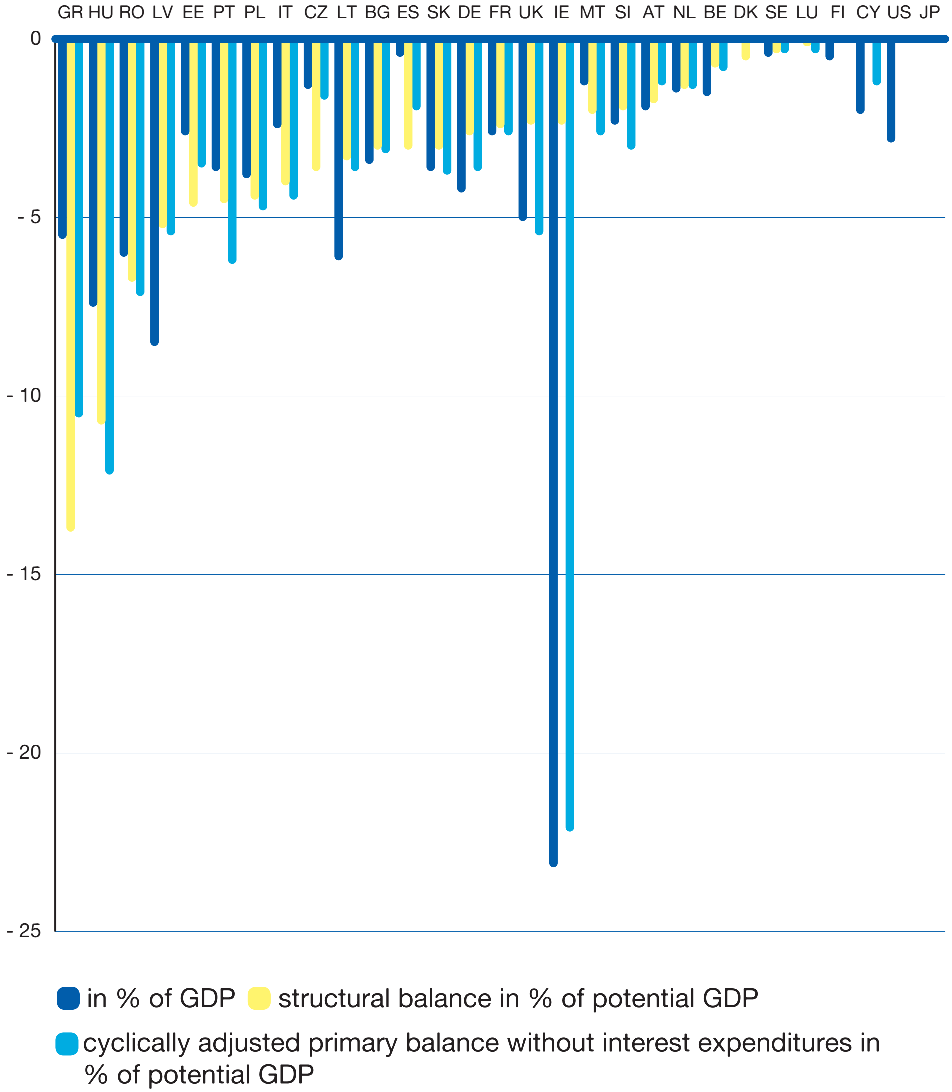
Figure 2 Public budget balance in the EU27 (2012)



Source: AMECO database.

Note: Structural balance equals the fiscal balance adjusted for the business cycle and for one-off measures.

Figure 3 Change of public budget balance (between maximum 2005–12 and 2012)



Source: Authors' calculations on the basis of the AMECO database.

Note: Structural balance equals the fiscal balance adjusted for the business cycle and for one-off measures. The figures are arranged according to change in structural balance.

The concept of expansionary fiscal consolidation

The consolidation plans that led to this progress were set up in the hope that substantial fiscal consolidation would have expansionary effects. In a Keynesian view, however, fiscal consolidation initially leads to a negative effect on domestic demand and thus on economic growth, either directly via less government expenditure or indirectly via higher taxes, which are viewed as reducing private demand. Multiplier effects aggravate the initial demand drag on the economy. However, a more optimistic view relies on the concept of expansionary fiscal consolidation where non-Keynesian effects can compensate these negative demand effects on economic growth.

A recent study[3] identifies several possible channels for expansionary consolidation effects:

- Falling real interest rates can lead to crowding-in effects on private investment and wealth effects on consumption, which can outweigh negative Keynesian demand effects.
- Real interest rates can fall as a result of consolidation efforts, because lower government deficits tend to
    - improve expectations of debt sustainability, and
    - enhance government credibility with regard to its ability and willingness to reduce fiscal deficits and debts.
- Consolidation can improve the general confidence of economic actors and increase their propensity to spend or invest.

[3] F. Heylen, A. Hoebeeck and T. Buyse, *Fiscal Consolidation, Institutions and Institutional Reforms: A Multivariate Analysis of Public Debt Dynamics*, Working Paper no. 2011/763, Universiteit Gent (Ghent, 2011), accessed at http://www.feb.ugent.be/nl/Ondz/wp/Papers/wp_11_763.pdf on 18 March 2013.

- Additional expectation effects are based on the idea of Ricardian equivalence: fiscal consolidation is associated with a permanent reduction of future taxes and therefore with an increase in permanent disposable income. Reduction of government deficits (future taxes) is thus expected to enhance private spending.

Episodes of expansionary fiscal adjustments have been documented as early as the 1980s, for example the experience of Denmark and Ireland in 1980.[4] Further evidence of expansionary fiscal episodes is found by another study.[5] The authors report that in some cases GDP growth tends to be higher after (spending-based) fiscal adjustments than in the two previous years. A recent study[6] uses the IMF definition for large fiscal adjustments and shows further that the following result of fiscal consolidation programmes is robust. Spending cuts have often been followed by very small or no recessions while tax increases have brought about large recessions in many cases.[7]

In general it is found[8] that expansionary episodes are more likely to occur if fiscal consolidation is accompanied by growth-oriented supply-side policy measures including labour and product market liberalisation. Some studies[9] stress that several

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[4] F. Giavazzi and M. Pagano, 'Can Severe Fiscal Contractions Be Expansionary? Tales of Two Small European Countries', in O. Blanchard and S. Fischer (eds.), *NBER Macroeconomics Annual 1990* (Cambridge, MA: MIT Press, 1990), 75–122.

[5] A. Alesina and S. Ardagna, *The Design of Fiscal Adjustments*, Working Papers no. 18423, National Bureau of Economic Research (Cambridge, MA, 2012), accessed at http://www.nber.org/papers/w18423.pdf on 14 March 2013.

[6] A. Alesina, C. Favero and F. Giavazzi, *The Output Effect of Fiscal Consolidations*, Working Papers no. 18336, National Bureau of Economic Research (Cambridge, MA, 2012), accessed at http://www.nber.org/papers/w18336 on 14 March 2013.

[7] Further empirical evidence for the expansionary effects of spending cuts can be found in several Chapters in A. Alesina and F. Giavazzi (eds.), *Fiscal Policy after the Financial Crisis* (University of Chicago Press, forthcoming).

[8] A. Alesina and S. Ardagna, *The Design of Fiscal Adjustments.*

[9] A. F. Alesina and S. Ardagna, 'Tales of Fiscal Adjustment', Economic Policy 27 (1998), 489–545; R. Perotti, *The Austerity Myth: Gain Without Pain?*, Working Paper no. 17571, National Bureau for Economic Research (Cambridge, MA, 2011), accessed at http://www.nber.org/papers/w17571 on 18 March 2013.

additional accompanying policies can be of particular importance in order to achieve the desired long-term incomes, such as loose monetary policy, exchange rate devaluations and income policies.

Is austerity currently self-defeating?

In recent years the above-mentioned (mostly impressive) consolidation measures in southern European countries, which were accompanied by a certain degree of structural reform, do not appear to have had expansionary effects. Instead, continuing and partly deepening recessions have led some to claim that austerity would be self-defeating, leading to deep recessions and even higher debt-to-GDP ratios. It is sometimes claimed that fiscal consolidation efforts should decrease.

Among others, the IMF concluded that short-term fiscal multipliers, which (broadly) measure the immediate effect of fiscal policy on economic growth, increased in recent years and were underestimated considerably by the IMF and other professional forecasters.[10] More specifically, the authors find a correlation between the degree of planned fiscal tightening in 28 economies in recent years after the global financial crisis and the negative forecast error. While this particular study can be criticised for several reasons, for instance for the limited number of observations,[11] there can be no doubt that fiscal consolidation

[10] IMF, *World Economic Outlook—Coping with High Debt and Sluggish Growth* (Washington, DC, 2012), accessed at http://www.imf.org/external/pubs/ft/weo/2012/02/pdf/text/pdf on 14 March 2013; O. Blanchard and D. Leigh, *Growth Forecast Errors and Fiscal Multipliers*, Working Paper no. 13/1, International Monetary Fund (Washington, DC, 2013), accessed at http://www.imf.org/external/pubs/ft/wp/2013/wp1301.pdf on 14 March 2013.

[11] Germany, Federal Ministry of Finance, Monthly Report (21 February 2013), accessed at http://www.bundesfinanzministerium.de/Content/DE/Monatsberichte/2013/02/Inhalte/Kapitel-3-Analysen/3-5-finanzpolitik-im-euroraum.html on 14 March 2013; S. Gechert and H. Will, *Fiscal Multipliers: A Meta Regression Analysis,* Working Papers no. 97, Macroeconomic Policy Institute (Düsseldorf, 2012), accessed at http://www.boeckler.de/pdf/p_imk:wp_97_2012.pdf on 14 March 2013.

went along with prolonged—and in Greece, deepening—recessions. Whether this disappointing tendency results from fiscal consolidation or has other causes remains open, but it is clear that there have been no substantial expansionary effects of consolidation.

Why did this positive experience, which had been proven in former times, not prevail recently in southern European countries and why have fiscal multipliers been considerably higher than expected? In fact several economic reasons can be found:

- Within the EMU there is no option to devaluate the currency to stimulate net exports.[12]
- The growth of world trade slowed considerably during 2011 and 2012, which also implied a drag on the growth of net exports. Expansionary fiscal consolidations, however, have often gone along with favourable global economic conditions and currency depreciations.
- World demand was also subdued as many countries simultaneously consolidated their public finances.
- Interest rates for the private economy and particularly for smaller firms declined very little in southern European countries, mainly because of a fatal financial fragmentation in the eurozone[13] and a largely broken transmission of

[12] However, during the height of the euro debt crisis, the exchange rate of the euro vis-à-vis the US dollar declined to around $1.20 for some time. Bearing in mind the loss of competitiveness of the southern European countries, this depreciation was most likely insufficient to generate a strong impulse from rising net exports which could compensate for weak domestic demand. Moreover, the euro has appreciated again recently to around $1.30.

[13] J. Matthes and S. Rother, 'The Effects of the Crisis on Financial Integration in the Eurozone', *IW-Trends* 39/4 (2012), 57–74.

the ECB's expansionary monetary policy.[14] Initially fiscal consolidation efforts seemed to produce no significant decrease in interest rates on government bonds, largely because of credibility problems in southern European countries, where sustainability not only of government but also of external debts was in doubt. Moreover, it was thought that some countries might exit the eurozone and, as a result, risk premiums due to potential currency devaluations were seemingly priced into government bond interest rates. However, the ECB's announcement that it would buy a potentially unlimited amount of government bonds has calmed the market again, aided by the substantial consolidation efforts of southern European countries. Moreover, the interest rates on Irish and Portuguese government bonds started to decrease long before the ECB's intervention in reaction to impressive reform programmes. This shows that the credibility effect can still be reaped, but currently, and unfortunately, does not extend to private sector financing conditions.

- Not only the channel (relevant in expansionary fiscal consolidations) between credibility and lower interest rates for the private economy was hampered but also the reaction of domestic demand to a (potential) interest rate decrease, possibly as a result of the following factors:

[14] Several studies argue that fiscal multipliers are higher when central bank interest rates are very low and close to zero bound, because in such situations fiscal consolidation cannot be accompanied by significantly lower short-term interest rates (see for example A. J. Auerbach and Y. Gorodnichenko, *Fiscal Multipliers in Recession and Expansion*, Working Paper no. 17447, National Bureau of Economic Research (Cambridge, MA, 2011), accessed at http://nber.org/papers/w17447.pdf on 14 March 2013.). However, despite very low ECB interest rates, this does not appear relevant in southern European countries as there is significant room for declining private interest rates in the medium- and longer-term due to the broken transmission channel.

- The private sector in most southern European countries is highly indebted and needs to deleverage.
- Ricardian effects of fiscal consolidation (which were mentioned in Chapter 1.3) might have been hampered by the credit constraints of households and firms, which would otherwise have increased current demand in reaction to a rise in permanent income by taking out loans.
- In recessions fiscal multipliers tend to be considerably higher than in normal times.[15] One reason could lie in the fact that the general confidence of economic actors is lower in recessions, which limits a positive demand reaction. Moreover, vicious circles are possible in which fears of unemployment and declining incomes dampen domestic demand which then further deepens the recession and the fears of unemployment.[16]

All in all, these reasons largely explain why short-term fiscal multipliers were higher than normal, particularly in southern European countries. As an unwanted implication of this, the government debt-to-GDP ratio could increase in the short term despite cuts in expenditures and higher taxes resulting from the decline in GDP (the denominator of the debt ratio).

[15] A. Baum, M. Poplawski-Ribeiro and A. Weber, *Fiscal Multipliers and the State of the Economy*, Working Paper no. 12/286, International Monetary Fund (Washington, DC, 2012), accessed at http://www.imf.org/external/pubs/ft/wp/2012/wp12286.pdf on 14 March 2013.

[16] G. Corsetti, 'Has Austerity Gone Too Far?', *voxeu.org*, 2 April 2012, accessed at http://www.voxeu.org/article/has-austerity-gone-too-far-new-vox-debate on 14 March 2013.

However, the conclusion that austerity will be self-defeating in the long run appears to be exaggerated. This is suggested by economic models[17] as well as by plausible theoretical arguments.[18] More specifically, the negative short-term growth impact of fiscal consolidation will likely run out over time as GDP growth eventually resumes. When fiscal consolidation has permanently reduced the fiscal deficit (and therefore also debts) in absolute terms (due to lower expenditures and higher revenues) the debt-to-GDP ratio will be lower in the longer term despite the initial increase in the short term.[19]

However, prolonged vicious circles should be prevented by, for instance, repeated rounds of fiscal tightening (in order to meet official nominal headline targets for fiscal deficits) despite a severely weakened economy. Furthermore, potential lock-in effects which could lower the growth potential should be avoided. This could result from a loss of human capital due to rapidly increasing long-term unemployment or, if a recession gets too deep, from insolvencies of basically viable companies.[20]

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[17] European Central Bank, *Monthly Bulletin*, December (Frankfurt am Main, 2012) accessed at http://www.ecb.int/pub/pdf/mobu/mb201212en.pdf on 14 March 2012; J. Boussard, F. de Castro and M. Salto, *Fiscal Multipliers and Public Debt Dynamics in Consolidations*, Economic Paper no. 460, European Commission (Brussels, 2012), accessed at http://ec.europa.eu/economy_finance/publications/economic_paper/2012/pdf/ecp460_en.pdf on 14 March 2013.

[18] D. Gros, 'Can Austerity Be Self-defeating?', *voxeu.org*, 29 November 2011, accessed at http://www.voxeu.org/article/can-austerity-be-self-defeating on 14 March 2013; G. B. Wolff, 'Do We Need More or Less Fiscal Austerity in the Eurozone?', *bruegel.org*, 8 February 2012, accessed at http://www.bruegel.org/nc/blog/detail/article/320-do-we-need-more-or-less-fiscal-austerity-in-the-eurozone/#.UUGjIVE4mZE on 14 March 2013.

[19] L. Eyraud and A. Weber, *The Challenge of Debt Reduction during Fiscal Consolidation*, Working Paper no. 13/67, International Monetary Fund (Washington, DC, 2013), accessed at http://www.imf.org/external/pubs/ft/wp/2013/wp1367.pdf on 14 March 2013.

[20] G. Corsetti, 'Has Austerity Gone Too Far?'.

Fiscal consolidation inevitable

For countries with high or rapidly rising government debt levels, there is no viable alternative to decisive and credible fiscal consolidation for several reasons:

- Government debts could become unsustainable, particularly in the current environment of low growth, low inflation and interest rates higher than before the financial crisis. This macroeconomic environment necessitates relatively strong consolidation efforts to achieve sufficient primary surpluses in the public budget to stabilise and gradually reduce government debt levels.
- Due to the difficulty of achieving this aim, there is a danger of self-reinforcing vicious circles and self-fulfilling prophecies with regard to interest rates on government bonds. With low or moderate interest rates in a good equilibrium, the government debt levels in almost all countries (apart from Greece) appear sustainable. But if interest rates rise significantly, for instance due to financial market nervousness or contagion effects, a bad equilibrium could be the result, where government debt levels would no longer be sustainable. The ECB's preparedness to intervene in secondary government bond markets can only maintain the good equilibrium and buy time if governments make sufficient progress in fiscal consolidation and economic reforms.
- As high government debts tend to subdue economic growth[21] there is another compelling reason for gradual public deleveraging. However, the threshold, the point from

[21] R. Brügelmann, 'Wachstum und Öffentliche Haushalte' in Institut der Deutschen Wirtschaft Köln (ed.), *Wirtschaftswachstum?!: Warum wir wachsen sollten und warum wir wachsen können* (Meckenheim, 2012), 111–30.

which public debts clearly stifle economic growth, is less clear-cut than is often depicted. The regularly quoted public debt level of around 90% of GDP for advanced economies, found by a famous long-run study,[22] is questionable for several reasons. These authors have obviously made significant basic errors in their calculations. In addition, they generally identify only a correlation, while a clear causality remains elusive.[23] Moreover, other studies find different thresholds ranging from 15% to 100% of GDP. Most studies, however, find a non-linear relationship between government debt levels and economic growth. Low debt levels are found to have a neutral or even positive growth effect while debt levels that exceed a certain threshold stifle growth. Thus, a plausible argument can be made in the cases of advanced countries with debt levels approaching or even exceeding 100% of GDP that future economic growth prospects are likely to be hampered.

- Further challenges arise from the fact that the current high levels of public debt come with a wave of retiring baby boomers in the near future.[24] As a result of population ageing, the foreseeable increase in pension and health care expenditures will worsen the public finance framework in the near future, thus raising once again questions of debt sustainability and posing a burden on future economic growth (see Figure 4).

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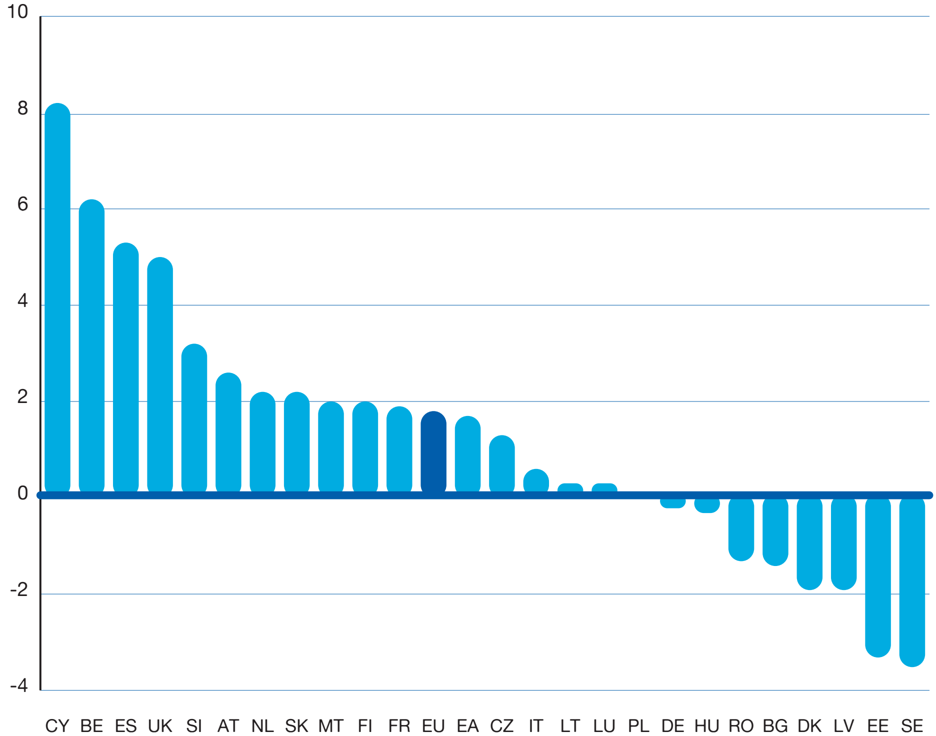
[22] K. S. Rogoff and C.M. Reinhart, 'Growth in a Time of Debt', *American Economic Review* 100/2 (2010), 573–78.

[23] U. Panizza and A. F. Presbitero, *Public Debt and Economic Growth: Is There a Causal Effect?*, Working Paper no. 68, Money and Finance Research Group (Ancona, 2012), accessed at http://docs.dises.univpm.it/web/quaderni/pdfmofir/Mofir065.pdf on 14 March 2013.

[24] See, for example, R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?*, Economics Department Working Paper no. 937, Organisation for Economic Co-operation and Development (Paris, 2012), accessed at http://www.oecd-ilibrary.org/docserver/download/5k9h28kd17xn.pdf?expires=1363596491&id=id&accname=guest&checksum=9AC055909AADCD8BFEA6D9E4F89C6E29 on 18 March 2013.

Figure 4 Required medium-term consolidation efforts, taking into account expected ageing-related expenditure increases (percentage of GDP)[25]



Source: European Commission, *Fiscal Sustainability Report*, Brussels, 2012.

Note: Data not available for all EU27 countries.

These reasons make it obvious that in many countries the need for fiscal consolidation is so large that it cannot be delayed or significantly diluted. However, the above-mentioned danger,

[25] Required cumulative reduction of the structural primary balance to be achieved by 2020 and sustained thereafter in order to bring down the government debt to 60% of GDP in 2030.

that austerity could become self-defeating, has to be addressed. Therefore, a search for smart fiscal consolidation measures which strike an appropriate balance between the need and danger of austerity is required.

Smart fiscal consolidation recommendations

In proposing smart fiscal consolidation measures, first government spending is focused on. Government spending can broadly be classified into the following three categories: public consumption spending, public investment spending, and social welfare or redistributive spending. These will be separate items of focus in what follows, leading to a discussion of the reform options for the tax system, privatisation, public administration management and independent fiscal councils. But before going into detail, some general remarks are appropriate.

The general concept of smart fiscal consolidation

Growth enhancing consolidation

The above considerations and particularly the slow economic recovery have raised the question of balancing fiscal consolidation efforts with the urgent need to stimulate growth and employment. This is all the more important since economic growth can also help to reduce debt adjustment needs, mainly for two reasons. First, progress in fiscal consolidation is directly affected by growth dynamics since government debt and budget deficits are mostly reported as a percentage of GDP. Second, economic growth can contribute to consolidation via increasing government revenues. In fact, a recent study[26] stresses the crucial role of real growth in past consolidation, since they identify only 3 out of 40 consolidation episodes between 1980 and 2008 where consolidation efforts led to a decreasing government-debt-to-GDP ratio in times of weak growth.

Therefore, the main challenge for policymakers consists of identifying consolidation measures which are growth-promoting or at least less growth-retarding. Indeed, well-targeted permanent reductions in budget deficits can positively influence both growth and the level of output over the long run.[27] The design of a smart fiscal consolidation framework is therefore of crucial importance.

Strengthen credibility of consolidation programmes

In order to make fiscal consolidation expansionary or to limit the possible negative short-term-growth impact, it is of the utmost importance for national governments to regain or improve credibility. Lower interest rates which foster private demand (and which can compensate for the Keynesian negative demand effect of lower expenditures or higher taxes) can be realised if policymakers convey to financial markets the impression of a strong commitment to reform. Therefore, the concept of smart fiscal consolidation suggests several general requirements for fiscal reform programmes:

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[26] F. Heylen, A. Hoebeeck and T. Buyse, *Fiscal Consolidation, Institutions and Institutional Reforms: A Multivariate Analysis of Public Debt Dynamics*, Working Paper no. 2011/763, Universiteit Gent (Ghent, 2011), accessed at http://www.feb.ugent.be/nl/Ondz/wp/Papers/wp_11_763.pdf on 18 March 2013.

[27] See, for example, K. Clinton et al., *Budget Consolidation: Short-Term Pain and Long-Term Gain*, Working Paper no. 10/163, International Monetary Fund (Washington, DC, 2010), accessed at http://www.imf.org/external/pubs/ft/wp/2010/wp10163.pdf on 14 March 2013.

- Reform concepts have to be broad and should also include structural reforms to improve the competitiveness and the growth potential of the economy (see Chapter 4).
- Reform programmes should be spelled out over the medium term in detail. As far as possible, the envisaged consolidation steps should be backed by binding legislation.
- In case economic conditions deteriorate, potential additional consolidation measures should be available.
- Reform programmes should be actively and clearly communicated to the market.

Successful reform efforts which were honoured by financial markets in terms of lower interest rates took place in, for example, Ireland, Portugal (even before the ECB's OMT programme), and, to a large extent, Italy under the auspices of Mario Monti.

Increasing the efficiency of government expenditure and the tax system

Generally the most appropriate consolidation measures are those which cut expenditures without affecting the basic objectives of government actions. Indeed there appears to be ample scope for such efficiency increases. A non-parametric analysis[28] shows that European countries spend on average 30% more than the most efficient OECD country would have used to attain the same overall public sector performance.

A theoretical benchmark to evaluate the appropriateness of fiscal expenditures is provided by the fundamental normative discussion about the role of the state in a social market economy:

[28] A. Afonso, L. Schuknecht and V. Tanzi, 'Public Sector Efficiency: An International Comparison', *Public Choice* 123/3 (2005), 321–47.

- Generally, economic growth is created by private economic actors.
- The government has the task of setting a regulatory framework which allows private activities to thrive while at the same time ensuring adequate protection for consumers, workers and the environment. The business environment set by the state should foster private investment in capital and labour (human capital) as these are important growth drivers. Therefore, taxes and regulations, for example, should not be overly burdensome.
- The government should directly foster growth prospects by investing in infrastructure, education, and basic research and development.
- In addition, the government has to correct the income distribution generated by the market, mainly by means of progressive income taxes. Moreover, the state should provide a well-targeted social safety net and efficient social insurance against sickness, unemployment and poverty in old age.
- However, in achieving the latter aims, it is important to minimise supply-side disincentives to work and to invest.

Structure and timing of fiscal consolidation programmes

On the basis of these general considerations, the appropriate pace and mix of smart fiscal consolidation measures has to be determined in order to be successful and to support economic growth.

Structure: the balance between expenditure cuts and tax increases

The effective mix between tax increases and spending cuts is one of the decisive questions regarding the design of smart fiscal adjustments. Empirical evidence shows that, by and large, primary spending cuts tend to be less growth-retarding than revenue increases and that they are sometimes associated with no recession at all.[29] According to a recent analysis,[30] divergences in monetary policy cannot explain the systematic differences between tax-based and expenditure-based consolidation programmes.

Furthermore, spending-based consolidation is more likely to lead to a permanent stabilisation of public finances.[31] A recent study[32] confirms this result. It studies 40 fiscal consolidation episodes in 21 OECD countries and shows that a stronger reduction of public debt can be achieved via a consolidation on the spending side.

Another study[33] lists several explanations for its observation that successful consolidation programmes rely mainly on cuts in government wage bills and transfers as opposed to public investment cuts and tax increases:

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[29] A. Alesina and S. Ardagna, *The Design of Fiscal Adjustments*, Working Papers no. 18423, National Bureau of Economic Research (Cambridge, MA, 2012), accessed at http://www.nber.org/papers/w18423.pdf on 14 March 2013.

[30] Ibid.

[31] A. Alesina and S. Ardagna, *The Design of Fiscal Adjustments*; A. Alesina and R. Perotti, 'Fiscal Expansions and Adjustments in OECD Countries', *Economic Policy*, 21 (1995), 207–47; International Monetary Fund, *World Economic Outlook*, 56–74 (Washington, DC, 1996); J. von Hagen and R. Strauch, 'Fiscal Consolidations: Quality, Economic Conditions, and Success', *Public Choice* 109/3–4 (2001), 327–46.

[32] F. Heylen, A. Hoebeeck and T. Buyse, *Fiscal Consolidation, Institutions and Institutional Reforms: A Multivariate Analysis of Public Debt Dynamics*, Working Paper no. 2011/763, Universiteit Gent (Ghent, 2011), accessed at http://www.feb.ugent.be/nl/Ondz/wp/Papers/wp_11_763.pdf on 18 March 2013.

[33] A. Alesina and R. Perotti, 'Fiscal Expansions and Adjustments in OECD Countries', *Economic Policy*, 21(1995), 207-47.

- Tax increases can stifle economic growth by raising disincentives to work or to invest (see Chapter 2.6).

- Current spending cuts may elicit tax cuts in the future and create positive supply-side effects. In fact, a relevant study[34] shows that the effect of public spending cuts on private investment is, by and large, positive while tax increases—in particular labour tax increases—tend to hamper private activity and investment.

- Tackling politically delicate expenditures, the governments signal that their consolidation efforts are serious and create positive credibility effects.

- Lower public wages could lead to lower private sector wages, which would improve employment and competitiveness.[35]

- In a recent study,[36] it is argued that one of the reasons tax-based consolidations are less successful is that they mostly induce higher wage claims and increase labour costs. Thus it comes as no surprise that evidence of a positive effect from spending cuts on exports' competitiveness as opposed to a negative effect from tax increases can be found.[37]

Figure 5 shows that in countries with the largest progress in fiscal consolidation, the share of spending decreases is relatively large. This is particularly true for Ireland and Portugal and, to a more limited extent, for Greece. Important exceptions are France, Italy, Spain and Belgium. Here a much greater focus on reducing expenditures is required.

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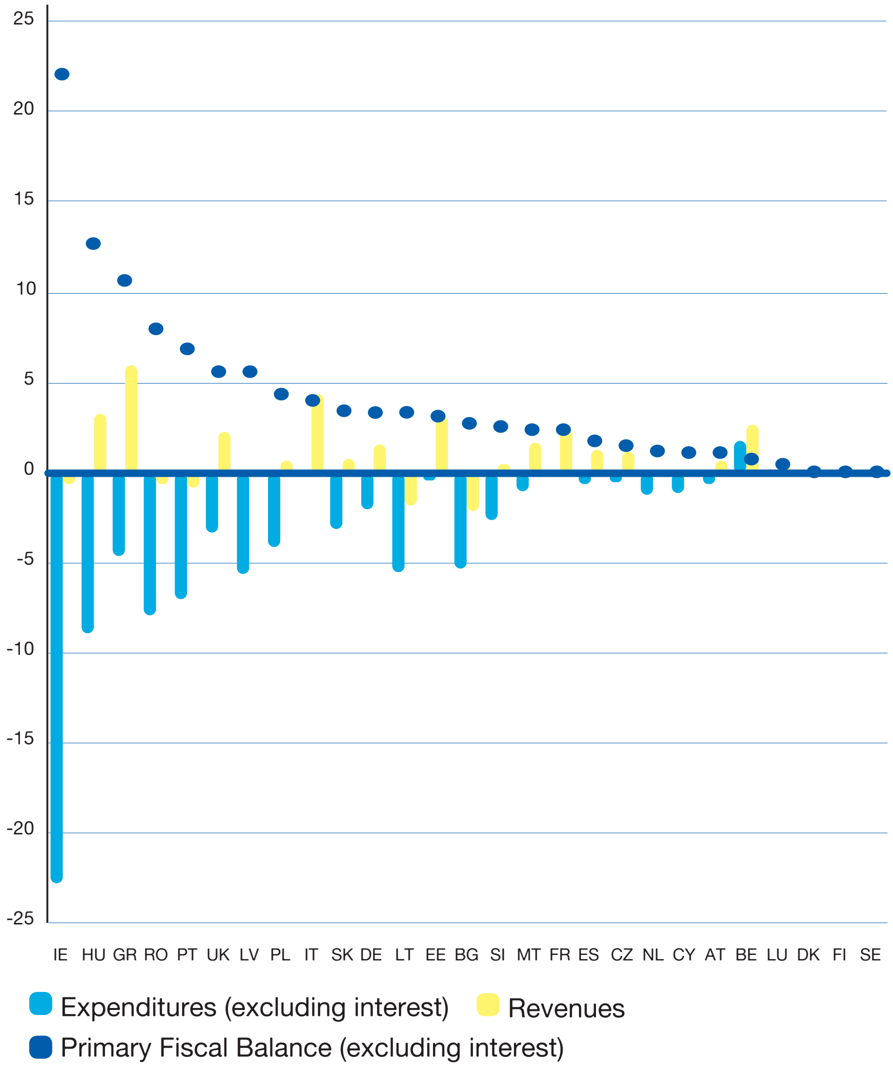
[34] A. Alesina et al., 'Fiscal Policy Profits and Investment', *American Economic Review* 92/3 (2002), 571–89.

[35] S. Ardagna, 'Fiscal Stabilizations: When Do They Work and Why?', *European Economic Review* 48 (2004), 1047–74.

[36] F. Heylen, A. Hoebeeck and T. Buyse, *Fiscal Consolidation, Institutions and Institutional Reforms: A Multivariate Analysis of Public Debt Dynamics.*

[37] A. Alesina and R. Perotti, 'Fiscal Expansions and Adjustments in OECD Countries'.

Figure 5 Structure of fiscal consolidation until 2012 based on cyclically adjusted measures



Source: Authors' calculation based on AMECO database.

Note: The figure gives the difference between the year of maximum fiscal deficit and 2012 in percentage points of potential GDP. The difference between the increase in total revenue and the decrease in total expenditure is equal to the change of the fiscal balance.

Timing: how much front-loading is needed?

When designing smart fiscal consolidation programmes a particular focus has to be given to the timing and structure of public deleveraging. How much front-loading is needed and how far can adjustment be stretched over time to limit a possible negative impact on short-run economic growth?

In economic literature, a case for front-loading can be found under certain circumstances. Principally, fiscal consolidation can be expansionary in the short term if immediate credibility gains can be achieved.[38] These are more likely with large front-loaded (and persistent) fiscal consolidations.[39] A further study[40] also finds evidence that successful consolidation efforts are large but of short duration. Box 1 shows that the eurozone's institutional framework within the SGP and the Fiscal Compact (which, contrary to widespread belief, does not inevitably require front-loading) can help crisis countries gain credibility and reduce the need for up-front consolidation.

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[38] See, for example, A. F. Alesina and S. Ardagna, *Large Changes in Fiscal Policy: Taxes versus Spending*, Working Paper no. 15438, National Bureau of Economic Research (Cambridge, MA, 2009), accessed at http://www.nber.org/papers/w15438.pdf?new_window= on 14 March 2013; A. Alesina and S. Ardagna, *The Design of Fiscal Adjustments.*

[39] A. Drazen, 'Comment on Giavazzi and Pagano', in O. Blanchard and S. Fischer (eds.), *NBER Macroeconomics Annual 1990*, National Bureau of Economic Research (Cambridge, MA: MIT Press, 1990), 117–22; F. Giavazzi and M. Pagano, 'Can Severe Fiscal Contractions Be Expansionary? Tales of Two Small European Countries', in O. Blanchard and S. Fischer (eds.), *NBER Macroeconomics Annual 1990*, National Bureau of Economic Research (Cambridge, MA: MIT Press, 1990), 75–122; J. McDermott and R. Wescott, *An Empirical Analysis of Fiscal Adjustments*, Working Paper no. 96/59, International Monetary Fund (Washington, DC, 1996), accessed at https://papers.ssrn.com/sol3/Data_Integrity_Notice.cfm?abid=882959 on 18 March 2013. Moreover, from a political economy perspective, credibility should be more easily achieved in times of high or rapidly increasing debt ratio, because the severity of the situation means the opportunity for persistent political implementation should be better. However, the evidence is mixed on the influence of the debt level on the success of consolidation, with confirming evidence from A. F. Alesina and S. Ardagna, 'Tales of Fiscal Adjustment', R. Perotti, 'Fiscal Policy in Good Times and Bad', *Quarterly Journal of Economics* 114/4 (1999), 1399–436, and S. Ardagna, 'Fiscal Stabilizations: When Do They Work and Why?' and contrary results by F. Heylen and G. Everaert, 'Success and Failure of Fiscal Consolidation in the OECD: A Multivariate Analysis', Public Choice 105/1 (2000), 103–24 and L. Pozzi, F. Heylen and M. Dossche, 'Government Debt and Excess Sensitivity of Private Consumption: Estimates from OECD Countries', *Economic Inquiry* 42/4 (2004), 618–33.

[40] F. Heylen, A. Hoebeeck and T. Buyse, *Fiscal Consolidation, Institutions and Institutional Reforms: A Multivariate Analysis of Public Debt Dynamics.*

In the current situation, the strategy to front-load fiscal adjustments in crisis countries appears to have been discredited by the disappointing experience of Greece and the above-mentioned evidence on (currently) relatively high fiscal multipliers. In this respect, if a country's output gap is negative, the IMF suggests a more gradual fiscal adjustment in which the impact on output in the short term is normally smaller than with an up-front reduction.[41] With this approach, part of the consolidation would be postponed to a time when the output gap is less negative and the (currently) impeded credit channels in some countries work better.[42] However, the superiority of this approach for countries with high debt levels in a phase after a financial crisis which led to a debt increase that was piled upon existing high debt levels is questioned in a recent study.[43]

Box 1 The eurozone's institutional framework and the focus on structural fiscal deficits

With regard to the timing of fiscal consolidation it is sometimes argued that the EU's institutional fiscal framework, in particular the SGP and the Fiscal Compact,[44] forces overly strict consolidation pressures on deficit countries and thus poses the risk of unnecessarily stifling short-run economic growth.

When arguing in this direction, the critical focus is often laid on the widely known headline nominal fiscal deficit threshold of 3% of GDP. As many countries currently have considerably higher fiscal deficits, the SGP prescribes country-

[41] A. Baum, M. Poplawski-Ribeiro and A. Weber, *Fiscal Multipliers and the State of the Economy.*

[42] C. Cottarelli, 'The Austerity Debate: Festina Lente!', *voxeu.org*, 20 April 2012, accessed at http://www.voxeu.com/article/austerity-debate-make-haste-slowly on 14 March 2012.

[43] M. Buti and L. R. Pench, 'Fiscal Austerity and Policy Credibility', *voxeu.org*, 20 April 2012, accessed at http://www.voxeu.org/article/fiscal-austerity-and-policy-credibility on 14 March 2012.

[44] Formally, the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union; also referred to as TSCG.

specific deadlines to reach the 3% target. If a country enters a recession, it could become necessary to introduce further consolidation measures in order to meet the target. This could indeed aggravate the recession as counter-cyclical automatic stabilisers would largely be prevented from working.

However, the SGP and the Fiscal Compact also explicitly allow for consolidation targets in terms of cyclically adjusted (*structural*) fiscal deficits. Thus, it would be possible in recessionary times to let automatic stabilisers work to a large extent. Consolidation efforts need not be substantially accelerated, but the pace of the planned adjustment has to be kept in structural terms. Researchers of the International Monetary Fund[45] consider an annual structural adjustment of about 1% of GDP adequate if interest rates remain at sustainable levels. The SGP foresees a regular annual structural adjustment of 0.5% of GDP.[46] For countries with high fiscal deficits, a larger structural decline is suggested. For example, for Spain the EU recommends a structural adjustment of 2.5% of GDP in 2013 and 1.9% in 2014. Moreover, in case nominal deficit targets are missed due to this flexibility, the respective country would have to accelerate product and labour market reforms in order not to lose market confidence.

In fact, precisely because of the focus on structural deficit targets, the EU Commission has in recent times—rightly—accepted the extension of the deadlines for reaching the 3% threshold for several countries, such as Spain, Italy, Portugal and Greece after these countries entered severe recessions which had not been envisaged when the deadlines were set. Thus, the above-mentioned criticism appears misplaced—and sometimes misinformed.

Moreover, the criticism of the Fiscal Compact also seems to be exaggerated. As mentioned, the credibility of fiscal consolidation programmes is of the utmost importance in order to minimise the possible negative short-term-growth effects of fiscal consolidation. The EU's new institutional framework promises to convey this credibility. Particularly, the Fiscal Compact, which prescribes the introduction of reliable national rules governing balanced budgets, is important in this respect. Thus, contrary to the widespread public perception, the Fiscal Compact should not be seen as leading to self-defeating austerity but ideally to expansionary fiscal consolidation.

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45 IMF, *Fiscal Monitor Update* (Washington, DC, July 2012), accessed at http://www.imf.org/external/pubs/ft/fm/2012/update/02/pdf/0712.pdf on 18 March 2013.

46 M. Buit and N. Carnot, *The Debate on Fiscal Policy in Europe: Beyond the Austerity Myth*, 3.

Moreover, the Fiscal Compact offers the opportunity for the smaller negative short-term growth associated with fiscal consolidations, particularly for countries with high or rapidly increasing debts which face financial scepticism. The credibility conveyed by a strong commitment to the Fiscal Compact could limit the necessity to front-load fiscal consolidation, which is often seen as a seemingly indispensable means to regain credibility. This hope should be reinforced by a clear commitment to a broad reform programme.

In the near future, when the new institutional fiscal framework will be fully in force, there are several possible prescriptions for EU countries on the pace of fiscal adjustments under the SGP and the Fiscal Compact. According to the EU, the strictest rule should apply.[47] While such a prescription provides clear guidance, there is a danger that this approach could impede the focus on fiscal adjustment to be measured mainly in structural terms. If the economic situation in some eurozone countries with ongoing high fiscal deficits remained recessionary, the consolidation targets set by the EU Commission could be too strict in the future to be attainable. This could pose the grave danger that the EU's recently reformed institutional fiscal framework could lose acceptance in Member States. Moreover, the credibility of the new framework would likely be shattered if, in the end, the new rules had to be bent (again). Thus, it could be reasonable to introduce longer transition periods sooner rather than later.

In fact, the recommendations of international organisations (and the Troika in programme countries) acknowledge that there is mostly no alternative to front-loaded consolidation for countries in which financial market scepticism and high or rapidly increasing debt burdens have put the government under pressure. This applies not only to the country-specific recommendations of the EU in the framework of the European Semester, but also to the IMF's Fiscal Monitor.[48] In this respect, the OECD advocates a consolidation strategy of policies with relatively low multipliers, at least initially, and reforms that underpin credibility with little

[47] S. Barnes, D. Davidsson and Ł. Rawdanowicz, *Europe's New Fiscal Rules*, Economics Department Working Paper no. 972, Organisation for Economic Co-operation and Development (Paris, 2012), accessed at http://search.oecd.org/officialdocuments/displaydocumentpdf/?cote=ECO/WKP%282012%2949&docLanguage=En on 14 March 2013.

[48] IMF, *Fiscal Monitor Update.*

negative effect on demand in the short run, such as pension reforms.[49]

Recommendations on the structure and timing of consolidation programmes

Summing up, several recommendations can be given on the timing and the structure of consolidation programmes:

- Countries that have room to manoeuvre (due to moderate debt levels, fiscal deficits and interest rates) should carry on with their structural consolidation as planned, but be prepared to let automatic stabilisers operate if economic conditions deteriorate substantially. Due to relatively high debt levels in most EU countries, there is no room for expansive fiscal stimulus.

- Countries with very high or increasing government debts which are faced by financial market scepticism have no choice but to front-load fiscal adjustment to a considerable degree in order to stabilise the debt ratio and to regain lost credibility.

- The degree of front-loading can principally be reduced by clear and broad reform commitments, particularly by clearly defined, detailed medium-term consolidation programmes.

- The eurozone's institutional framework (including the conditionality of the ESM) can support such a strategy by providing a political anchor and the possibility of locking in reform commitments, thus also reducing the need for up-front consolidation.

[49] D. Sutherland, P. Hoeller and R. Merola, *Fiscal Consolidation: How Much, How Fast and by What Means?*, Economic Policy Paper no. 01, Organisation for Economic Co-operation and Development (Paris, 2012), accessed at http://www.oecd-ilibrary.org/docserver/download/5k9bj10bz60t.pdf?expires=1363601004&id=&accname=guest&checksum=A0219EB3E88C81A0C573D609CF73AD04 on 18 March 2013.

- However, the reaction of the financial market to a strategy of less front-loading would have to be tested. If the reaction is benign, there could be some room to let automatic stabilisers work and also to introduce limited targeted programmes—for instance against youth unemployment—potentially supported by EU funds. But there would be no scope for broad fiscal stimulus packages for crisis countries.

- If economic conditions deteriorate substantially and nominal deficit targets get out of reach, implementing substantial additional fiscal efforts should be avoided in order to stop countries from getting into a vicious circle, such as the one in Greece. Instead, the SGP and the Fiscal Compact allow for focusing on the cyclically adjusted (structural) fiscal deficit and thus allow for automatic stabilisers to work. The fiscal adjustment in structural terms, however, has to stick to the set targets.

- If the nominal fiscal deficit targets are missed, the respective countries should be obliged to spell out the medium-term fiscal consolidation strategy in more detail if needed. Parliamentary approvals of medium-term measures would be highly useful in this respect. Moreover, the countries in question should be obliged to implement more structural reforms in order to improve their credibility in the financial markets.

- In order to minimise negative short-term effects of (possibly front-loaded) fiscal consolidations, the focus should be on measures with low initial fiscal multipliers.[50]

- Spending cuts which need not be very large promise to be more effective at stabilising debt-to-GDP ratios than larger tax-based adjustments.[51]

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[50] D. Sutherland, P. Hoeller and R. Merola, *Fiscal Consolidation: How Much, How Fast and by What Means?.*

[51] A. Alesina and F. Giavazzi (eds.), *Fiscal Policy after the Financial Crisis.*

In the following analysis, concrete and effective fiscal consolidation measures are looked for which also foster long-term growth, have only a limited negative impact on short-term growth and, ideally, increase social fairness and equality.

Public consumption expenditure

On the spending side, there is a range of core items which are essential for the economy to function and to grow.[52] If provided in a cost-effective way, government spending can contribute to macroeconomic stability and promote economic growth. However, seemingly productive expenditures may become unproductive if they exceed a certain amount, which can differ from country to country and depends on individual stages of development.[53] The main objective should be, therefore, to improve the efficiency of government interventions in such a way as to achieve the same policy outcome with fewer resources, the main suggestion being the adoption of best practices.[54]

As efficiency potentials differ from country to country, a comprehensive review of all public expenditures should be taken, as is the case, for instance, in Portugal and Italy. While this study cannot go into detail, several areas of public consumption where particularly useful lessons can be drawn from literature and from countries' experience are focused on in the following.

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[52] See A. Afonso et al., *Quality of Public Finances and Growth*, Working Paper no. 438, European Central Bank (Frankfurt am Main, 2005), accessed at http://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp438.pdf on 14 March 2013.

[53] See, for example, S. Devarajan, V. Swaroop and H.-F. Zou, 'The Composition of Public Expenditure and Economic Growth', *Journal of Monetary Economics* 37/2 (1996), 313–44.

[54] R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?*.

Public sector wage bill

Consolidation objectives can be targeted via the reduction of the wage bills paid by the public sector. Public sector wage bills account for a significant proportion of government spending: around 10% of GDP in the EU27 and up to more than 13% in France, Sweden, and Finland (see Figure 6). So in cases where the public administration is lacking efficiency, in-depth analysis of the appropriate level of staffing and of wages should be part of the consolidation agenda.[55]

In fact, overstaffing in the public sector is an issue in several EU countries. While the general government share of employment in the labour force was at 15% on average in the OECD countries in 2008, this ratio is much higher in Denmark (29%), Sweden (26%), Finland (23%) and France (22%) according to the OECD.[56] Overstaffing can be targeted by several approaches, for example job cuts, redundancy programmes, early retirement schemes, voluntary departure schemes and an end to new hiring. In fact, there are important reform examples in the United Kingdom, Canada and Latvia, where public sector employment was cut by as much as 7%.[57]

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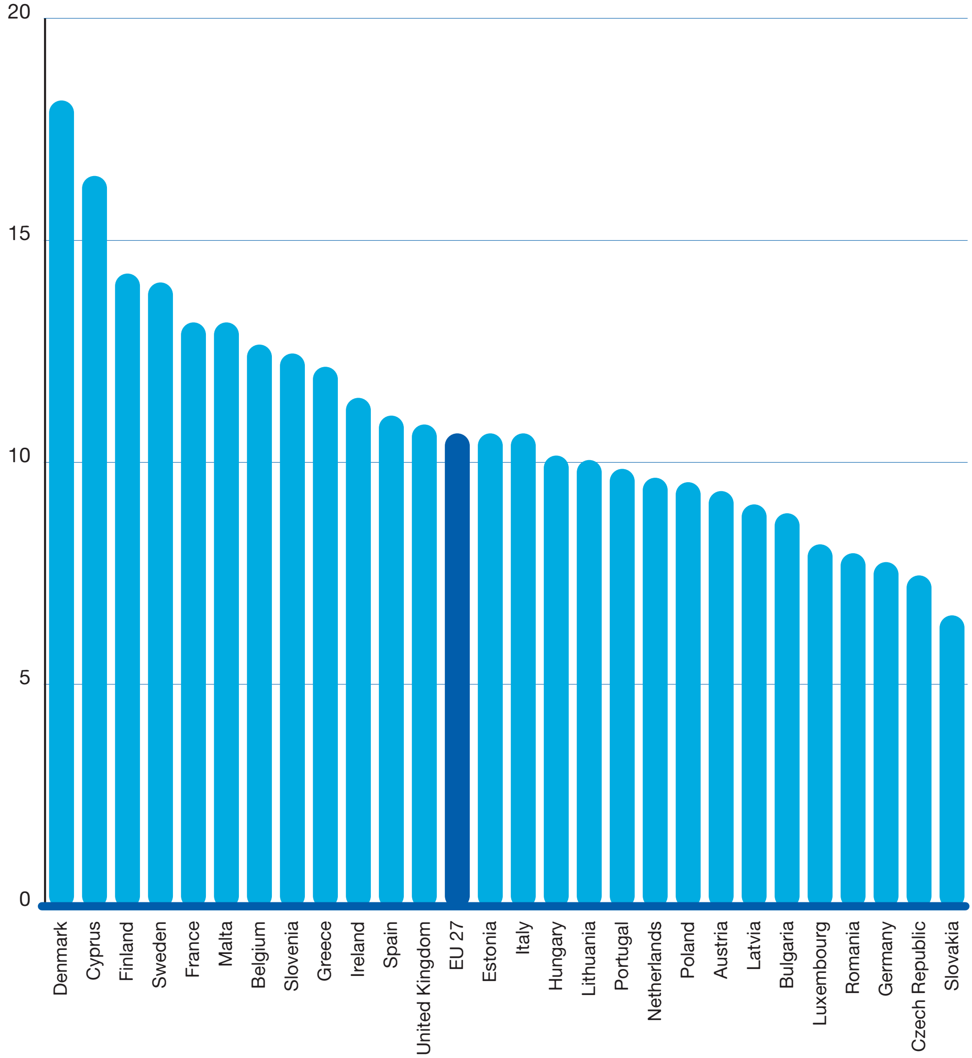
[55] F. Heylen, A. Hoebeeck and T. Buyse, *Fiscal Consolidation, Institutions and Institutional Reforms: A Multivariate Analysis of Public Debt Dynamics.*

[56] OECD, *Government at a Glance* (Paris: OECD Publishing, 2012).

[57] OECD, *Restoring Public Finances*, 25.

Figure 6 Public employee compensation in the EU27 countries (2012), in percentage of GDP



Source: AMECO database.

Note: General government (central and other levels of government); Commission estimate for 2012.

The adjustment of the public sector wage bill—as an element of smart fiscal consolidation—appears particularly justified if public wages are substantially higher than private wages and when private wage dynamics have been relatively weaker, for instance, due to a recent downturn. In such situations, a reduction of public sector wages has several important advantages (see Appendix[58]):[59]

- a very significant contribution to fiscal consolidation as mentioned above;
- an efficiency improvement in the allocation of labour, taking into account the competition between the public and private sectors for skilled labour;
- improved labour allocation (and also the enhanced productivity of the public sector) fosters long-term growth;
- income declines for (former) public employees act as a minor drag on short-term growth; and
- an improvement of social fairness and equality, which
- might also foster the acceptance of policy reforms within the broad public.

Restoring the public-to-private-sector wage ratio (which has risen over the past decade in many countries) to the wage ratio in the early 2000s could reduce public spending and could thus contribute substantially to fiscal consolidation. The estimated effect ranges between 0.2% of GDP in Germany and 2.2% of GDP in Poland.[60] The negative effect on short-term growth should

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[58] The Appendix can only provide a broad evaluation tendency and thus only a rather rough and necessarily incompletely objective reform guide.

[59] R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?*

[60] R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?*, 9–10.

be limited because public employees represent only a fraction of all employees and should be able (due to relative high former incomes) to draw on savings so that they would probably reduce their consumption expenditures by a limited extent. Moreover, public sector employees are mostly skilled employees who should be able to find new employment relatively quickly.

Subsidies

Expenditure-based general government subsidies to private actors account for a more limited share of total public expenditure in EU countries (1.2% of GDP on average in 2012).[61] This share ranges from 3.5% in Austria to only 0.1% in Greece according to data provided by the EU Commission.[62] Therefore, the impact of subsidy cuts on fiscal consolidation differs but will not be very significant overall.

However, thorough subsidy reform can improve economic efficiency and thus long-term economic growth. Subsidy payments can be questioned if they are focused on traditional and declining sectors and thus hamper structural change. Agriculture, mining and shipbuilding are typical examples where government support conserves existing economic structures and tends to hinder the reallocation of resources to more productive uses. The negative impact on short-term growth should be limited because the macroeconomic relevance of subsidy recipients whose government support is abolished or reduced tends to be small. Social fairness can be improved by subsidy reform if unjustified advantages for particular vested interest groups are reduced to the benefit of overall economic welfare.

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[61] Subsidies can also be provided by alternative means, mainly via tax exemptions which are focused on in Chapter 2.6.

[62] See also P.-A. Buigues and K. Sekkat, 'Public Subsidies to Business: An International Comparison', *Journal of Industry, Competition and Trade* 11/1 (2011), 1–24.

Several reform recommendations can be given: While public subsidies for old sectors are clearly questionable, there is also no strong case for financial support of new and prospering sectors unless there are clear signs of market failure. This economic rationale notwithstanding, there appears to be a new momentum within the EU and also in Brussels to foster manufacturing and competitiveness in the framework of the Europe 2020 strategy. However, apart from subsidies for basic research efforts or general tax incentives for business research and development (R&D) (see Chapter 2.4), there are strong doubts that governments are better suited than markets to picking winners or that subsidies to single sectors or even individual companies are justified.[63]

Abolishing existing subsidies often proves difficult due to strong resistance from entrenched and well-organised vested interest groups. In these cases, and also to facilitate the adjustment of economic actors, subsidies can be phased out gradually.[64]

Spending on education

The role of the state in securing formal school education has been confirmed to positively influence economic growth.[65] OECD data show that OECD countries spent on average over 13% of total government spending on all levels of public education in 2007.[66]

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[63] A. Boss et al., *Haushaltskonsolidierung und Subventionsabbau: Wie der Staat seine Handlungsfähigkeit zurückgewinnen kann*, Kieler Beiträge zur Wirtschaftspolitik, no. 3, Institut für Weltwirtschaft Kiel (Kiel, 2011), accessed at http://www.ifw-kiel.de/pub/wipo/volumes/wipo_03.pdf on 11 April 2013.

[64] OECD, 'Subsidy Reform and Sustainable Development: Political Economy Aspects', *OECD Sustainable Development Studies* (Paris, 2007).

[65] See, for example, J. de Gregorio, *Inflation, Growth and Central Banks: Theory and Evidence*, Policy Research Working Paper no. 1575, World Bank (Washington, DC, 1996), accessed at http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1996/02/01/000009265_3961019185641/Rendered/PDF/multi0page.pdf on 18 March 2013; A. de la Fuente and R. Doménech, *Human Capital in Growth Regressions: How Much Difference Does Data Quality Make?*, Economics Department Working Paper no. 262, Organisation for Economic Co-operation and Development (Paris, 2000), accessed at http://www.oecd.org/innovation/research/1825500.pdf on 18 March 2013.

[66] See, for example, R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?*, 14.

Empirical analyses indicate that substantial efficiency gains can be achieved for most of the OECD countries by improving the efficiency of education inputs, particularly at the primary and secondary school level.[67 68] The potential budgetary savings could amount to roughly 1% of GDP on average among the OECD countries.[69]

In one analysis[70] a range of institutional determinants of efficiency of primary and secondary education and for budgetary savings is identified. These can be attained, for instance,

- if the input of financial resources is adjusted to better match local educational needs (for instance via increased decentralisation of responsibilities in order to be able to account for geographical differences), or
- if policies are more outcome-oriented (setting clear objectives for public institutions involved in education, for instance in terms of PISA scores, introducing evaluation, and reward and/or sanction systems).

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[67] R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?*; D. Sutherland et al., *Performance and Indicators for Public Spending Efficiency in Primary and Secondary Education*, Economics Department Working paper no. 546, Organisation for Economic Co-operation and Development (Paris, 2007), accessed at http://www.oecd-ilibrary.org/docserver/download/514s874ltfs5.pdf?expires=1363601302&id=id&accname=guest&checksum=FB9799538ECB6EEE85B4FB7EDD8B3CC1 on 18 March 2013.

[68] While primary and secondary education benefit society as a whole, it is widely recognised that returns from tertiary education are mainly private (R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?*). Nevertheless, tertiary education is highly subsidised or directly provided by public universities in most EU countries. Introducing or raising fees will thus have multiple benefits: contributing to fiscal consolidation, enhancing competition among universities, improving incentives for students to complete their tertiary schooling, contributing to more societal equity because the public subsidies for private tertiary education returns are reduced.

[69] R. Hagemann, *Fiscal Consolidation*: *Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?*, 15; D. Sutherland et al., *Performance and Indicators for Public Spending Efficiency in Primary and Secondary Education.*

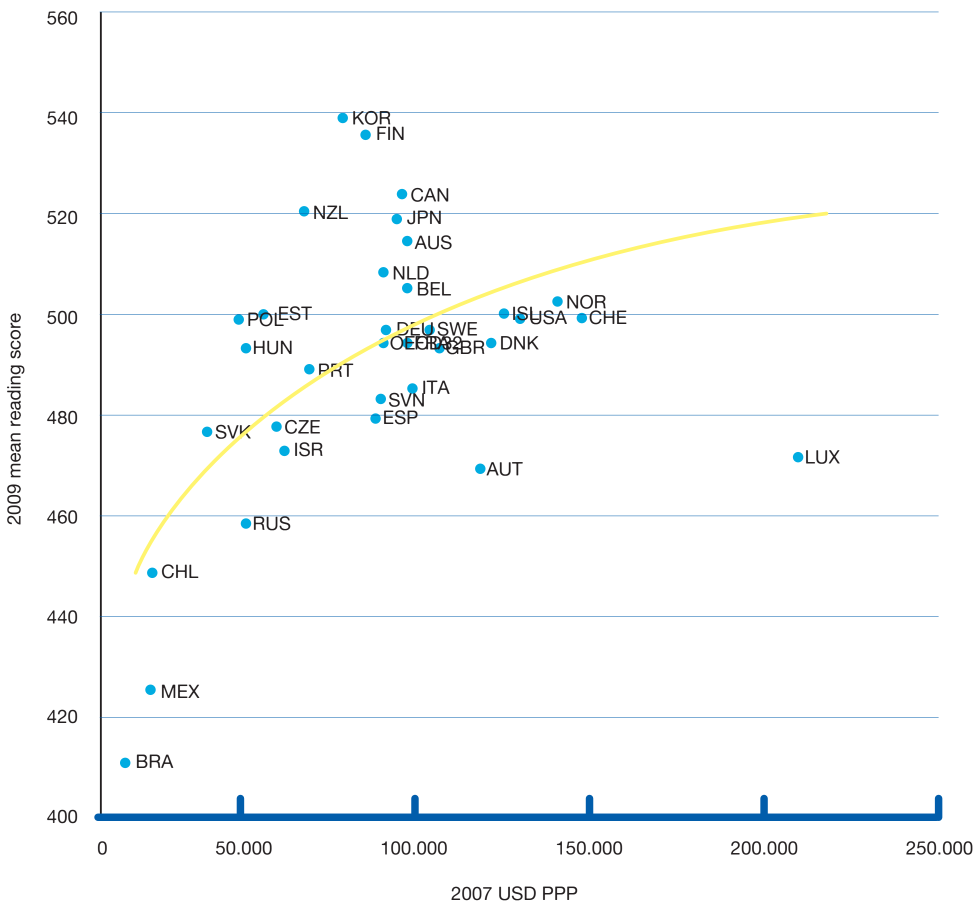
[70] F. Gonand, I. Joumard and R. Price, *Public Spending Efficiency: Institutional Indicators in Primary and Secondary Education*, Economics Department Working Paper no. 543, Organisation for Economic Co-operation and Development (Paris, 2007), accessed at http://search.oecd.org/officialdocuments/displaydocumentpdf/?cote=ECO/WKP(2007)3&doclanguage=en on 18 March 2013.

Increased efficiency in education expenditures and a recommendable limited increase in education spending can have several beneficial effects (see Appendix):

- a significant contribution to fiscal consolidation due to efficiency savings which is reduced by the limited spending increase;
- fostering long-term growth potential (see above)—for example, increasing the average number of years of schooling by one year at unchanged inputs could raise GDP by 3% to 6% over the long run on average for OECD countries;[71]
- a limited positive effect on short-term domestic demand and growth due to the limited spending increase; and
- improving social fairness if reforms specifically target the education achievements of disadvantaged children and enhance their later employability.

[71] R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?*, 16.

Figure 7 Results of the 2009 Programme for International Student Assessment (PISA) reading tests and total cumulative expenditure per student for primary and secondary education in USD PPP (2007)



Source: OECD, *Government at a Glance.*

Figure 7 shows that countries far below the line have greater efficiency potentials as they have relatively high expenditures and relatively low educational attainments.

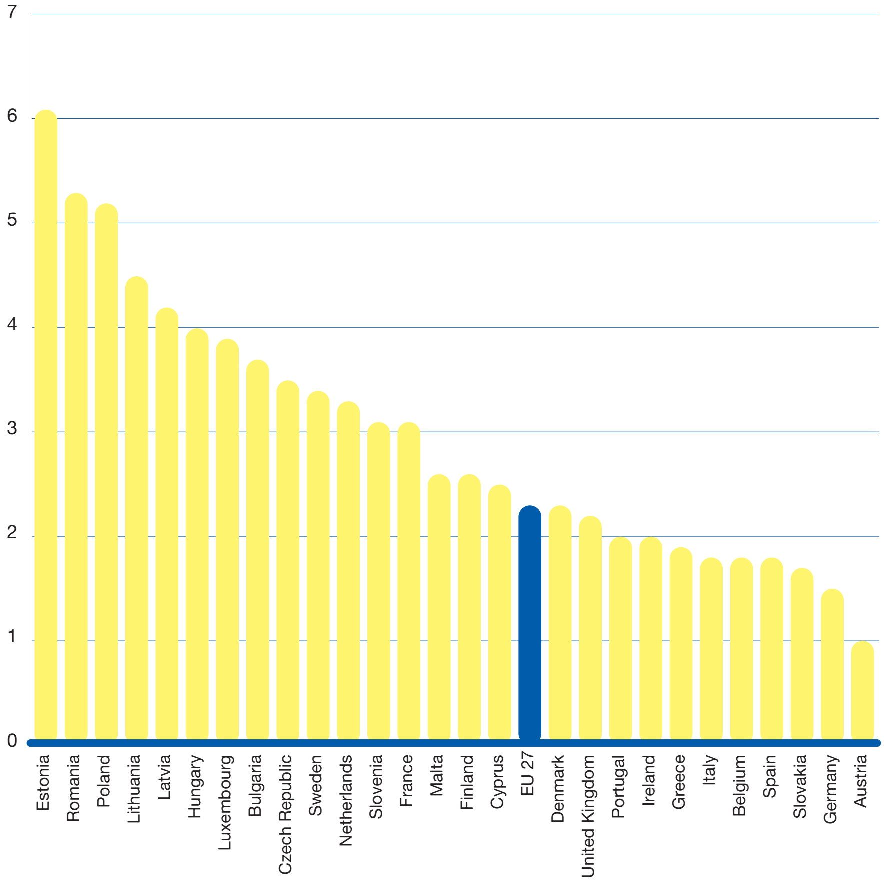
Public investment expenditure

Public investment expenditure accounts for a small and declining share of public spending in most of the countries—it amounted to 2.3% of GDP in the EU27 in 2012—with a large cross-country difference (Figure 8). Yet it can be essential for economic growth if provided efficiently. In the short term, public investment can generate favourable demand effects, and in the long term it can raise the growth potential by increasing the capital stock of the economy. Empirically the effect of public investment on economic growth is not clear-cut,[72] however, probably because not all public investment projects are well-suited, implemented and effective.[73]

[72] For an overview, see W. Pfähler, U. Hofmann and W. Bönte, 'Does Extra Public Infrastructure Capital Matter? An Appraisal of Empirical Literature', *Finanzarchiv* 53/1 (1996), 68–112. Positive growth effects of public investment expenditure have been confirmed in many empirical studies (see, for example, D. Aschauer, 'Is Public Expenditure Productive?', *Journal of Monetary Economics* 23 (1989), 177–200, P. Cashin, 'Government Spending, Taxes and Economic Growth', *IMF Staff Papers* 42 (1995), 237–69, E. Shioji, 'Public Capital and Economic Growth: A Convergence Approach', *Journal of Economic Growth* 6/3 (2001), 205–27, C. Kamps, *New Estimates of Government Net Capital Stocks for 22 OECD Countries 1960–2001*, Working Paper no. 04/67, International Monetary Fund (Washington, DC, 2004), accessed at http://www.imf.org/external/pubs/ft/wp/2004/wp0467.pdf on 18 March 2013). However, several authors present evidence that the effect of public investment on economic growth is not significant (see, for example, D. Holtz-Eakin, 'Public Sector Capital and the Productivity Puzzle', *Review of Economics and Statistics* 76/1 (1994), 12–21, S. Cassou and K. Lansing, 'Fiscal Policy and Productivity Growth in the OECD', *Canadian Journal of Economics* 32 (1999), 1215–26).

[73] For example, a study by the McKinsey Global Institute, N. Garemo and J. Mischke, 'Infrastructure: The governance failures', *voxeu.org*, 30 March 2013, accessed at http://www.voxeu.org/article/infrastructrue-governance-failures on 12 April 2013, estimates that the EU could boost its infrastructure productivity by 60%, equivalent to €180 billion a year by improving infrastructure governance.

Figure 8 Government investment expenditures (2012), in percentage of GDP



Source: AMECO database.

Note: Gross fixed capital formation of general government; Commission estimate for 2012; general government.

Thus, a smart fiscal consolidation programme should aim at keeping up and possibly even increasing public investment expenditures. Moreover, existing investment projects should be evaluated for their effectiveness, made more effective if necessary or be cancelled if this is too cumbersome. Overall, this approach should make a positive contribution to consolidation, even if public investment is increased to a limited extent.

In the following, different fields for public investments and their potential to foster long-term growth are briefly highlighted.

Infrastructure Investments

Theoretically, a positive effect of public investment on economic growth is observed if public expenditure is used to build infrastructure which serves as input to private investment or activity.[74] Investments in transport, communication and public utilities can then bring positive growth effects, depending on the starting conditions in the particular country. Empirical analyses show that investment in telecommunications and electricity networks has a more positive impact on economic growth than investment in road and rail infrastructure.[75]

Expenditures on Research and Development

The connection between public investment in research and development and economic growth is less clear-cut. If public and private R&D activities are considered substitutes, then public expenditures in this area can crowd out private activity.[76]

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[74] A. Afonso et al., *Quality of Public Finances and Growth.*

[75] B. Égert, T. Kozluk and D. Sutherland, *Infrastructure and Growth: Empirical Evidence*, Economics Department Working Paper no. 685, Organisation for Economic Co-operation and Development (Paris, 2009), accessed at http://search.oecd.org/officialdocuments/displaydocumentpdf/?doclanguage=en&cote=eco/wkp(2009)26 on 18 March 2013.

[76] See, for instance, A. Bassanini and S. Scarpetta, 'Does Human Capital Matter for Growth in OECD Countries? Evidence from Pooled Mean-Group Estimates', *Economic Letters* 74/3 (2002), 399–405.

If, however, public R&D spending is done as a complement to private activity, the effect of public expenditures in this area on economic growth should be positive.[77] Therefore, an in-depth examination is required *ex ante.*

A promising approach is to publicly fund basic research projects, as these generate positive external effects on other private firms and are thus likely undersupplied by the market. Moreover, tax incentives for private R&D expenditure can be considered if fiscal consolidation pressures allow for this. In order to improve the conditions for high-tech industries, complementary reforms should enhance tertiary education and increase competition by way of product market reforms.[78]

Private co-financing of investment projects

One option for increasing the efficiency of infrastructure projects—and reducing the budgetary burden—is the private (co-) financing of projects.[79] This policy can stimulate innovations and the better use of resources because innovation incentives are usually larger in private business activities.

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[77] See, for example, M. Robson, ‘Federal Funding and the Level of Private Expenditure on Basic Research’, *Southern Economic Journal* 60/1 (1993), 63–71; A. Diamond, ‘Does Federal Funding “Crowd In” Private Funding of Science?’, *Contemporary Economic Policy* 17/4 (1999), 423–31.

[78] G. Zachmann, ‘Smart Choices for Growth’, *Bruegel Policy Contribution* 2012/21, Bruegel (Brussels, 2012), accessed at http://www.bruegel.org/publications/publication-detail/publication/761-smart-choices-for-growth/ on 18 March 2013.

[79] D. Sutherland and S. Araujo, *Public-Private Partnerships and Investment in Infrastructure*, Economics Department Working paper no. 803, Organisation for Economic Co-operation and Development (Paris, 2010), accessed at http://www.oecd-ilibrary.org/docserver/download/5km7jf6q8f0t.pdf?expires=1363600800&id=id&accname=guest&checksum=A616EA23B94D68A772D4F611ADF36F22 on 18 March 2013.

The welfare system and social insurance

According to the above-mentioned role of the state, important elements of the social market economy redistribute market-generated incomes by providing a social safety net and social insurance. Redistributive spending of this kind can undermine growth by reducing incentives to work, to invest and generally to exercise private activity.[80] For instance, generous social or unemployment assistance and early retirement schemes tend to reduce the labour supply and, in part, the incentive to maintain human capital. In contrast, basic social safety nets reduce the need for precautionary savings and promote risk-taking behaviour which is sometimes essential for entrepreneurial activity. Therefore, core redistributive spending is essential to promote growth while increasing non-core spending beyond basic safety nets can hamper economic activity.

It is not easy exactly to define this core and thus to achieve the right balance of redistributive spending. However, as social transfers amount to nearly 22% of GDP in the EU27 (and reach up to 26% in France and Belgium), there is ample scope for targeted expenditure cuts in most countries (see Figure 9). Moreover, large efficiency gains are achievable by improving incentives to join the labour market.[81]

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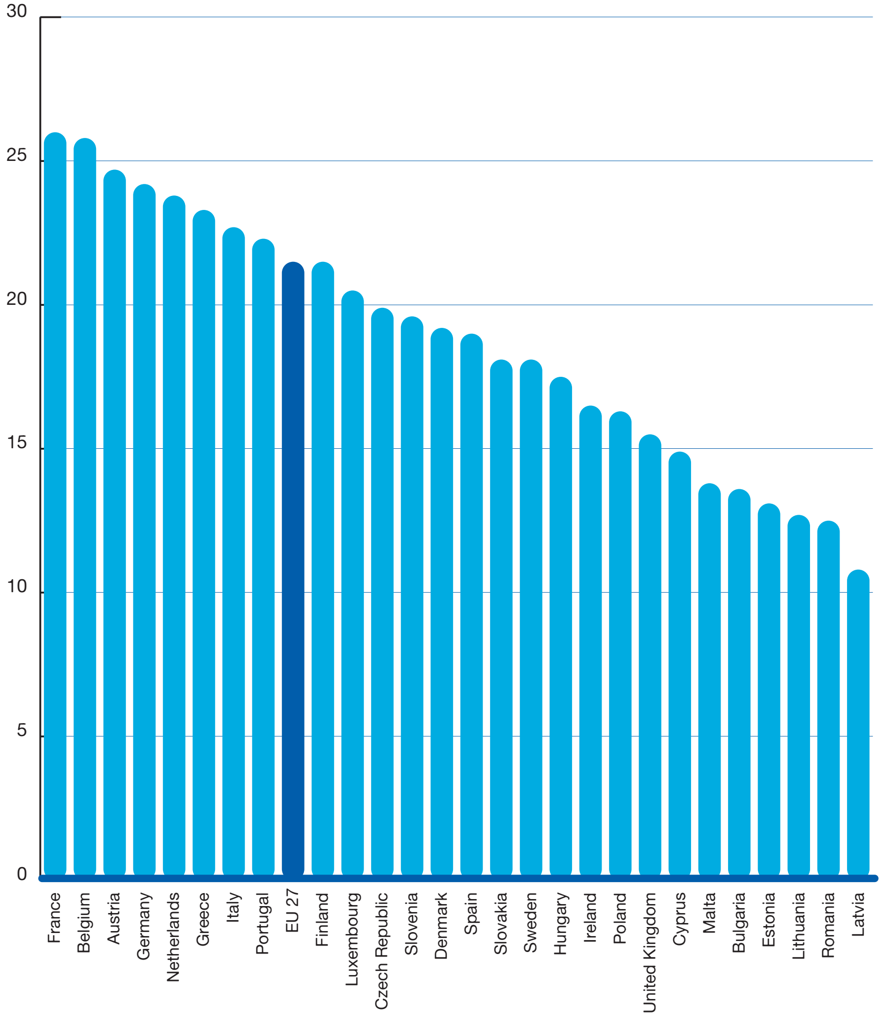
[80] A. Afonso et al., *Quality of Public Finances and Growth.*

[81] See, for example, R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?.*

Figure 9 Social transfers in the EU27 (2012), as percentage of GDP



Source: Authors' calculations based on AMECO database.

Note: Including social transfers in kind; general government.

Unemployment insurance and social assistance

Important efficiency and employment gains can be achieved in the field of unemployment insurance (and also social and family benefits), as pointed out, for instance, by the restated OECD Jobs Strategy.[82] A large body of research has highlighted several impediments to employment.[83] While basic insurance against unemployment risk is an essential element of a social market economy and can support individual incentives to invest in human capital formation (which fosters long-term growth), an overly generous system can generate important disincentives to take up employment.

Therefore in the framework of smart fiscal consolidation it can be essential to increase these incentives by

- reducing replacement rates,
- shortening the duration of the first layer of unemployment benefits, and
- basing the second layer on lump-sum benefit payments related to basic needs and user means testing.

However, the concept of flexicurity which originated in the Nordic countries combines more labour market flexibility and job search incentives (also in terms of lower job protection for

[82] OECD, *Boosting Jobs and Incomes: Policy Lessons from Reassessing the OECD Jobs Strategy* (Paris, 2006).

[83] S. Nickell, L. Nunziata and W. Ochel, 'Unemployment in the OECD since the 1960s. What Do We Know?', *The Economic Journal* 115 (2005), 1–27; O. Blanchard, *European Unemployment: The Evolution of Facts and Ideas*, Working Paper no. 11750, National Bureau of Economic Research (Cambridge, MA, 2005), accessed at http://www.nber.org/papers/w11750.pdf?new_window=1 on 14 March 2013; A. Bassanini and R. Duval, *Employment Patterns in OECD Countries: Reassessing the Role of Policies and Institutions*, Social, Employment and Migration Working Paper no. 35, Organisation for Economic Co-operation and Development (Paris, 2006), accessed at http://www.oecd-ilibrary.org/docserver/download/519pt95cn79n.pdf?expires=1363271257&id=id&accname=guest&checksum=A46F97FE6076A28DFD1ED4BE7C7B1B9B on 14 March 2013.

insiders; see Chapter 3) with more assistance.[84] Thus, particularly for the long-term unemployed, enhancing employability plays a key role by making active labour market policies (for instance, requalification initiatives) and job centres more effective.

Regarding family benefits, a recent study[85] proposes several reforms including shifting spending away from child allowances toward child-care support as a way to increase labour force participation of women and better linkages between continued receipt of benefits and job search responsibilities. According to his data, better targeting of family benefits could bring gross savings in public expenditure of more than 0.85% of GDP in some countries.

Moreover, according to this study,[86] there is a range of indicators which suggest that disability benefits are poorly targeted as well: a rise in the number of registered disabled close to retirement age, indicating that some people use disability benefits as alternative to early retirement; negative correlation of take-up rates with general economic conditions (disability benefits as an alternative to unemployment) and others. Reducing total disability benefit payments to the OECD average could yield savings of around 0.6% of GDP in the 17 countries where disability payments are above-average (most notably Nordic countries).

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[84] J. Driffill, 'European labour-market reform', *voxeu.org*, 8 March 2013, accessed at http://www.voxeu.org/article/european-labour-market-reform on 12 April 2013; The Economist, 'The Nordic countries: The next supermodel—Politicians from both right and left could learn from the Nordic countries', 2 February 2013, accessed at http://www.economist.com/news/leaders/21571136-politicians-both-right-and-left-could-learn-nordic-countries-next-supermodel on12 April 2013.

[85] R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?.*

[86] Ibid.

Possible reforms that would allow better targeting of these types of social transfers include:

- linking disability benefit payments to needs (means testing),
- tightening qualification criteria for benefits,
- limiting the duration of sickness benefits.

Better targeting and reducing disincentives of social and unemployment assistance, together with a limited increase in active labour market policies, should be important elements of smart fiscal consolidation because of largely positive effects:

- These reforms will substantially contribute to an increase in employment and thus also in growth potential.
- Social fairness can be increased if the long-term unemployed, in particular, succeed in getting back into employment and if recipients who exploited the generosity of the unemployment system (at the expense of the other contribution payers) are brought back to work. On the other hand, those unemployed who actively but unsuccessfully search for employment are worse off due to lower unemployment transfers.[87]
- The short-term effect on economic growth is unclear. It can be negative if unemployment transfers are cut and the unemployed do not find new jobs soon. But it should be positive if increased employment incentives raise employment in the short run.

[87] This disadvantage could be limited if the first layer of unemployment benefits is extended for those unemployed who can clearly prove very active job search efforts. While there is some positive experience with this approach in Belgium, it can open new doors for fraud and increase bureaucracy costs.

- The effect on government expenditures should be moderately positive, because smaller social transfers and higher revenues (due to higher employment) are unlikely to be outweighed by the limited increase in spending for active labour market policies.

Public pension system

Reform of public pension systems is part of fiscal consolidation programmes in many countries. If left unchanged, pension payments are going to increase in parallel with the foreseeable rise in life expectancy, challenging the sustainability of public finances sooner or later (see Chapter 1.5). Recommendable reforms include:

- Raising the minimum age for full pension payments or the number of years of required contributions to achieve a certain pension level;[88] lengthening working lives and reducing pension lives holds great potential for improving the sustainability of pension systems and therefore of public finance as a whole. Furthermore, if accompanied by policy measures to stimulate labour market participation of the elderly, this policy instrument can also increase the labour force of the country in question.
- Limiting early retirement schemes promises similar benefits (see also the above discussion of disability benefit schemes).
- Linking the duration of working life to changes in life expectancy. This is one of the most discussed possibilities in

[88] See R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?*; J. Martin and E. Whitehouse, *Reforming Retirement-Income Systems: Lessons from the Recent Experiences of OECD Countries*, Social, Employment and Migration Working Paper no. 66, Organisation for Economic Co-operation and Development (Paris, 2008), accessed at http://www.oecd.org/social/soc/40962388.pdf on 18 March 2013; D. Sutherland, P. Hoeller and R. Merola, *Fiscal Consolidation: How Much, How Fast and by What Means?.*

the related literature to achieve permanent improvement of pension systems' finances.[89]

- A similar approach—employed, for instance, in Germany—is to limit pension increases when (broadly speaking) the relationship between the number of pensioners and the number of employed social contributors increases. Thus, pensions rise less if there are relatively more pensioners.

Public pension reforms which are mainly oriented towards the medium- and long-term can substantially contribute to lower expenditures in the future and partly also in the short term (see Appendix). This should result in a positive effect on long-term growth (compared to a scenario without reforms) despite lower future expenditures of pensioners, because lower pension insurance contributions foster a growth driver—employment—and tend to increase competitiveness and thus net exports. In addition, the improvement in sustainability can lead to lower interest rates and thus support domestic demand. Most of these effects are also relevant in the short term. Moreover, pension reforms also tend to improve intergenerational equity.

Reforming overly generous civil service pensions can also contribute to a fairer income distribution. Often, public pension systems are more generous for public than for private employees.[90] For example in Portugal, an average pension in the civil service retirement system is nearly three times higher than an average pension in the general contributory regime.[91]

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[89] See, for example, R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?*; D. Sutherland, P. Hoeller and R. Merola, *Fiscal Consolidation: How Much, How Fast and by What Means?.*

[90] There are different public pension systems for private and public employees respectively.

[91] IMF, *Portugal: Rethinking the State—Selected Expenditure Reform Options*, Country Report no. 13/6 (Washington, DC, 2013), accessed at http://www.imf.org/external/pubs/ft/scr/2013/cr1306.pdf on 18 March 2013, 7.

Health care system

A further pillar of the welfare state and social insurance system is the health care system. According to OECD data for the year 2007, expenditures in the field of health care accounted for about 15% (and rising) of total government spending in the OECD area.[92] Although the positive relationship between health expenditures and economic growth has been empirically confirmed,[93] it is not yet clear whether this relationship is not driven by reverse causality[94] as higher income levels allow for more health-promoting activities and higher expenditures on healthy products.

Even if public expenditures in the field of health policy do increase economic growth, in many countries there is scope for efficiency gains in the provision of health services. In fact, a significant portion of the growth of health care spending can be attributed to growth beyond what could be expected as a result of rising incomes and demographic factors. This so-called excess cost growth[95] is due to failures in health policies and institutions as well as in the usage of costly advances in medical technology.[96]

[92] OECD, 'Health Care Systems: Getting More Value for Money', *OECD Economics Department Policy Notes*, No. 2 (Paris, 2010).

[93] See, for example, M. Bleaney, N. Gemmell and R. Kneller, 'Testing the Endogenous Growth Model: Public Expenditure, Taxation and Growth over the Long-run', *Canadian Journal of Economics*, 34/1 (2001), 36–57; D. Bloom, D. Canning and J. Sevilla, *The Effect of Health on Economic Growth: Theory and Evidence*, Working Paper no. 8587, National Bureau of Economic Research (Cambridge, MA, 2001), accessed at http://www.nber.org/papers/w8587.pdf?new_window=1 on 14 March 2013.

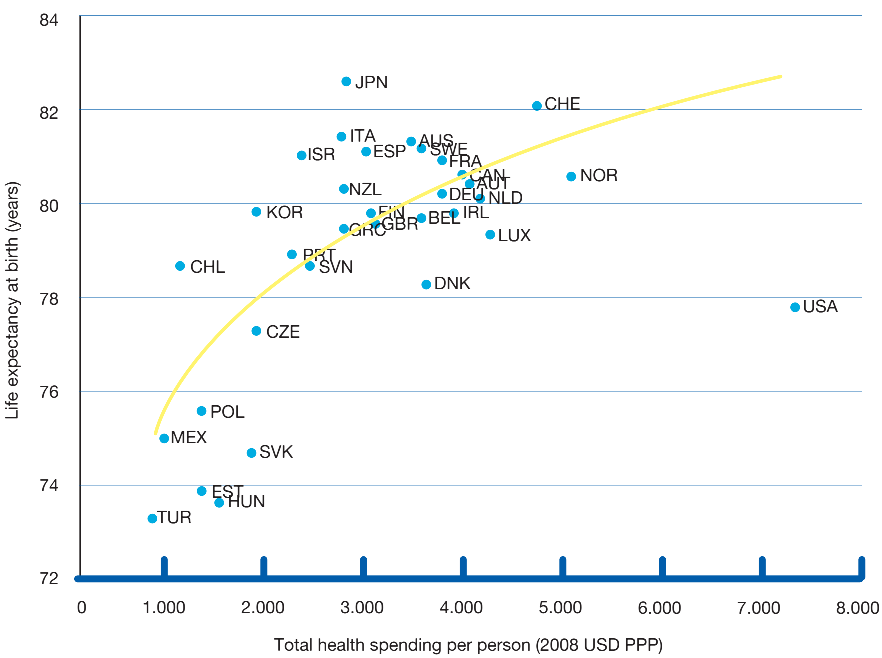
[94] B. Rivera and L. Currais, 'Economic Growth and Health: Direct Impact or Reverse Causation?', *Applied Economic Letters* 6/11 (1999), 761–64.

[95] R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?.*

[96] IMF, *Macro-Fiscal Implications of Health Care Reform in Advanced and Emerging Economies* (Washington, DC, 2010), accessed at http://www.imf.org/external/np/pp/eng/2010/122810.pdf on 18 March 2013.

Efficiency gains through best practices can be realised both on the input and the output side. Some researchers[97] show that life expectancy at birth could be raised by more than two years on average across the OECD, holding health care spending unchanged if all OECD countries achieve the same level of efficiency as the best performers (see figure 10). Increasing the efficiency of the health care system could contribute to the objectives of fiscal consolidation, the estimated effect ranging between 1.0% for Portugal and 4.8% for Ireland.

Figure 10 Life expectancy at birth and total expenditure on health per person (2008)



Source: OECD, *Government at a Glance.*

[97] I. Journard, C. André and C. Nicq, *Health Care Systems: Efficiency and Institutions*, Economics Department Working Paper no. 769, Organisation for Economic Co-operation and Development (Paris, 2010), accessed at http://search.oecd.org/officialdocuments/displaydocumentpdf/?cote=eco/wkp(2010)25&doclanguage=en on 18 March 2013.

As health care systems differ considerably, the focus has to lie on general policy recommendations:[98]

- enlarging the sources of revenue and increasing the contributory base;
- fighting tax and contribution evasion;
- reducing the unnecessary use of specialist and hospital care;
- ensuring a cost-effective use of medicines, for instance a greater use of generic medicines, while allowing for innovation in the health sector;
- strengthening the role of incentives in conditioning the demand for medical services;
- introducing or increasing the role of cost-sharing to enhance patient cost-consciousness and cost-effective use of health care;
- increasing the role of private insurance.

Apart from the above-mentioned substantial effect of health care reforms on consolidation (and sustainability of government finances), lower future health insurance contributions (compared to a baseline scenario without reforms) raise employment and improve the competitiveness and thus net exports (see Appendix). These effects should foster economic growth in the longer term despite lower future public health expenses. These recommendations have different implications; no general conclusion can be drawn on the effects of health care reforms on short-term growth and inequality.

[98] R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?.*

Tax system

On the revenue side, possible measures to contribute to fiscal consolidation efforts can include increasing tax rates. However, this strategy should be used cautiously, because consolidation via the revenue side has been shown (above) to stifle growth more than do spending cuts.

Broadening tax bases (and reducing marginal income tax rates)

In fact, progressive income and corporate taxes are distortive and can harm economic growth by reducing incentives to work or to invest. Some researchers[99] find that the 'dead-weight cost' of taxes increases with the square of the marginal rate. Moreover, they imply a transfer of resources from the private to the public sector where they are often used in a less efficient way.[100]

These efficiency losses notwithstanding, progressive income taxes are an indispensable instrument for redistribution and thus for equity in a social market economy. However, there are smart ways to tackle this efficiency–equity trade-off by combining a decrease in marginal tax rates with a cancellation of tax exemptions, which are mostly used by high-income taxpayers.

Therefore, even revenue neutral tax reforms which lower marginal tax rates and broaden tax bases in this way should be part of smart fiscal consolidations. They can help achieve fiscal consolidation objectives by lowering efficiency losses from harmful distortions.[101] If revenue is to be increased, the marginal tax rates can be reduced by less than required for revenue neutrality.

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[99] A. Afonso et al., *Quality of Public Finances and Growth.*

[100] Ibid.

[101] R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?.*

The elimination of tax exemptions offers significant scope to broaden tax bases, the main candidates being retirement-savings incentives or favourable treatment of owner-occupied housing.[102] As tax exemptions and loopholes are mostly used by high-income taxpayers, reducing exemptions can contribute to more equality and social fairness (see Appendix). The impact on short-term growth may be moderately negative if the effective tax burden is increased to a limited extent. However, despite this increase, long-term growth is moderately supported by higher marginal incentives to work and to invest.

Shifting the tax burden from income to consumption

Furthermore, overall tax efficiency can be improved by partly replacing progressive income taxes with proportional sales taxes such as value added taxes (VAT). In fact, one strongly recommended approach in the literature, and also in the context of smart fiscal consolidation, consists of shifting taxes and social security contributions from labour to consumption or to other less mobile tax bases such as property or the environment (see below). It is, for instance, shown[103] that income taxes are more likely to hamper economic growth than are taxes on consumption and property.

[102] Ibid. Tax incentives for private retirement savings could be means tested and thus focused on poorer economic actors. Tax incentives to invest in residential housing often benefit mostly high-income households. Moreover, they tend to hinder labour market mobility and negatively affect the appropriate allocation of capital.

[103] J. Arnold, *Do Tax Structures Affect Aggregate Economic Growth?* Empirical Evidence from a Panel of OECD Countries, Working Papers no. 643, Organisation for Economic Co-operation and Development (Paris, 2008), accessed at http://search.oecd.org/officialdocuments/displaydocumentpdf/?doclanguage=en&cote=eco/wkp%282008%2951 on 14 March 2013.

This shifting approach has several benefits because lower marginal and average income taxes on labour

- reduce the disincentives to work and the dead-weight losses;
- decrease the price of labour in relation to capital and should thus increase the incentives of businesses to increase employment;
- can help break a possible vicious circle between rising unemployment, which leads to higher social contributions, and labour taxes, which again tend to raise unemployment; and
- raise international price competiveness (see Box 2 on fiscal devaluation).

These effects generate higher employment and thus a growth potential in the future, especially if a limited increase in the overall tax burden is effected (see Appendix). Already in the short term (and also in recessions), shifting the tax burden away from labour towards less mobile tax bases can support job recovery and thus economic growth.[104] However, raising consumption taxes also has the disadvantage of increasing income inequality because they burden consumers with lower income relatively more.[105] This effect is mitigated by higher job opportunities for long-term unemployed. To further counteract this tendency, income tax allowances for low-income groups could be increased if fiscal space is available.

[104] OECD, *Restoring Public Finances.*

[105] C. Wesselbaum-Neugebauer, *Wirkungen reduzierter Mehrwertsteuersätze auf nationale Steuerstrukturen im europäischen Kontext unter Berücksichtigung der Abgrenzungs- und Erhebungsproblematik* (Wuppertal, 2010), accessed at http://elpub.bib.uni-wuppertal.de/servlets/DerivateServlet/Derivate-3103/hb1002.pdf on 18 March 2013; T. Schaefer, 'Verteilung der Steuern und Sozialbeiträge in Deutschland', IW-Trends 40/1 (2013).

Box 2 Fiscal devaluation

Fiscal devaluation—that is, reducing labour costs via decreasing social contributions for employers while increasing consumption taxes in a revenue-neutral manner—is a way to mimic a nominal devaluation. Especially in cases of overvalued real exchange rates, it can be used to improve international price competitiveness in the short run and thus the trade balance.[106] Particularly in the context of the current economic and debt crisis within the eurozone, fiscal devaluation should be part of a smart consolidation package.

Many southern eurozone countries lost competitiveness in the last decade (and incurred ever-higher current account deficits). Within the eurozone there is no longer the option to devalue the national currency. Thus, internal devaluation, a relative reduction of wages and prices vis-à-vis trading partners, is the only way to regain competitiveness. This is a hard course, as it implies a longer phase of economic slump and unemployment. Fiscal devaluations could limit the need for internal devaluation and thus considerably ease the adjustment pressure. In parallel, structural reforms should increase product market competition in order to ensure that lower labour costs are passed on as lower prices.

Apart from raising the standard VAT rate, having a broader tax base or improving efficiency is another alternative. Some researchers[107] demonstrate that Italy, for example, could increase its VAT revenue by about 1.2% of GDP solely by increasing tax collection efficiency to the level found in France. Efficiency can be improved, for instance, by lowering non-compliance as well as by avoiding VAT rate differentiation and exemptions.

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[106] See, for instance, R. de Mooij and M. Keen, *Fiscal Devaluation and Fiscal Consolidation: The VAT in Troubled Times*, Working Paper no. 12/85, International Monetary Fund (Washington, DC, 2012), accessed at http://www.imf.org/external/pubs/ft/wp/2012/wp1285.pdf on 18 March 2013.

[107] R. de Mooij and M. Keen, *Fiscal Devaluation and Fiscal Consolidation: The VAT in Troubled Times.*

While consolidation pressures sometimes leave no choice but to increase consumption taxes (without shifting the tax burden away from labour),[108] the more growth-friendly consolidation proposals pointed out in this study should be used first.

New taxes

The introduction (or increase) of taxes or fees with no or only small distortive effect has further potential to target smart fiscal consolidation on the revenue side. The catalogue includes taxes on immovable property, environmental taxes and user fees, as well as well-designed financial sector levies. This approach may harm short-term growth due to lower disposable incomes, but need not substantially impede long-term growth (see Appendix).

Property taxation, for instance, is less distortive than other taxes because of the immobility of real estate. Revenue gains of up to 0.9% of GDP could be achieved by introducing or raising taxation of immovable property to the OECD average.[109]

Well-designed environmental taxes can contribute both to the objectives of fiscal consolidation and to protection of the environment. According to a recent study,[110] the introduction of carbon taxes in the 1990s in Denmark, Finland and Sweden turned out to be an effective way of increasing revenues. In 2007, carbon tax revenues totalled between 0.3% and 0.7% of GDP in these countries. The introduction of environmental taxes should

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[108] Raising VAT has indeed become a popular way to target fiscal consolidation. Ibid. In this study it is reported that 13 of the 27 EU Member States raised their standard rate of VAT between 2009 and 2011 (most notably Greece and Portugal by four and three percentage points respectively, to 23%).

[109] R. Hagemann, *Fiscal Consolidation: Part 6. What Are the Best Policy Instruments for Fiscal Consolidation?*, 9–10.

[110] Ibid.

create the incentive not only to reduce pollution, but also to invest in research and development in the field of green technologies. However, it should be done as part of an international cooperative effort in order to avoid competitiveness losses of national industries.

Further measures could include eliminating fuel subsidies for agriculture and fisheries or targeting the environmental impact of road traffic. This can be achieved, for instance, by user fees for motorways or for entry to large cities. As a result, government revenues could be increased and traffic-related pollution and congestion reduced.[111]

A financial transaction tax (FTT) is meant to discourage speculation in financial markets and to contribute to the stability of the financial system in general. Other objectives are generating additional revenues and sending a signal to the general public that financial actors take part in financing the costs of the global financial crisis.

Eleven eurozone countries are currently planning to impose an FTT. The EU Commission has calculated that a (former version) of FTT would lead only to very limited negative long-term effects on economic growth of 0.28% until 2050. If FTT revenues were used to finance new government investment or to lower labour or corporate taxes, even positive effects would be possible, according to the EU Commission. However, a plausible argument can be made that growth effects could be more negative, due to the limited range of participating EU countries and the danger that financial value added and jobs could be dislocated.

[111] J. Persson and D. Song, *The Land Transport Sector: Policy and Performance*, Economics Department Working Paper no. 817, Organisation for Economic Co-operation and Development (Paris, 2010), accessed at http://www.oecd-ilibrary.org/docserver/download/5km3702v78d6.pdf?expires=1363599577&id=id&accname=guest&checksum=CD1AFE5F3F1FC392B656BB47532A1742 on 18 March 2013.

Moreover, scepticism is justified about the effect on financial market stability. The main causes of the financial crisis, which lay mainly in the banking sectors, are not addressed by FTT. In addition, in cases of relatively high tax rates there can even be counterproductive effects, such as a potential increase in volatility[112] or a reduction in short-term financial transactions which tend to stabilise the financial system.

The impact on income inequality differs between these proposals (see Appendix). Taxes on the environment tend to disadvantage low-income households, while taxes on property and financial transactions would fall disproportionately on those with higher incomes.

Privatisation of government assets

Privatisation of government assets and particularly of public companies should also be part of smart fiscal consolidation because it can achieve multiple objectives (see Appendix):

- A reduction of fiscal deficits and public debts is possible due to the receipts from privatisation and potentially higher future tax revenues (from more profitable privatised firms). In fact proceeds from former privatisations have been substantial.[113]
- A positive effect on social fairness can be achieved if prices fall for what were once publicly supplied goods (which are supposedly used more by low-income groups) and if former overpayment and overstaffing prevailed in SOEs.

[112] M. Demary, 'Transaction Taxes and Traders with Heterogeneous Investment Horizons in an Agent-Based Financial Market Model', *Economics: The Open-Access, Open-Assessment E-Journal* 4/8 (2010), 1–44, accessed at http://dx.doi.org/10.5018/economics-ejournal.ja.2010-8 10 May 2013; F. Westerhoff, 'The Use of Agent-Based Financial Market Models to Test the Effectiveness of Regulatory Policies', *Jahrbücher für Nationalökonomie und Statistik* 228/2+3 (2008), 195–227.

[113] F. Schneider, 'Privatisation in OECD Countries: Theoretical Reasons and Results Obtained', *CESifo DICE Reports* 1/3 (2003), 24–9.

- Short-term-growth prospects can be enhanced, as the privatisation receipts allow for smaller (possibly growth-impeding) current consolidation measures to achieve a certain fiscal deficit target.
- The long-term growth potential of the economy is improved as privatisation tends to increase the allocative efficiency of an economy.[114]

This effect is mainly due to the fact that competition is introduced or increased in the respective markets (for instance, by breaking up monopolies) and that private firms tend to be more efficient. The incentives for private managers to increase productivity (and thus growth potential) of the firm are not only fostered by competitive market pressures, but also by compensation policies that link remuneration to firm success. Moreover, in incorporated companies shareholders exert additional pressures to generate profits. The growth potential of the economy can also be further raised by privatisations, as there is evidence that private companies tend to invest more than public utilities, partly because they have better access to finance[115] and again due to higher competitive pressures.

What is more, higher competitive pressures should also lead to lower prices. This will not only benefit consumers but also those industries that rely on inputs from privatised companies, such as the energy, telecom or postal service markets.

However, there are also concerns in the general public about potential disadvantages of privatisation. Most of which can, however, be mitigated:

[114] OECD, *Privatisation of Public Utilities: The OECD Experience* (Paris, 2000).
[115] Ibid.

- The quality of products and services could deteriorate if competitive pressures on prices are large. This would be particularly problematic in important fields such as water and energy supply or health care. However, the government can and should set strict minimum quality standards in these cases. In addition, network industries (natural monopolies) such as water, energy and telecoms need a strong regulatory oversight, ideally carried out by an autonomous government agency (as, for example, in Belgium, Sweden and Germany).

- There can be strong public resentment about selling government assets (particularly land) to foreign companies. This concern can be addressed by leasing land or by only partly or gradually selling off public companies or shares.[116] Alternatively, the state could retain a golden share and thus a blocking majority in the privatised (incorporated) company. Moreover, operator or cooperation models can be used, where private companies operate a formerly public business, but the government remains the responsible owner.

- Sometimes the experience of some Eastern European countries is evoked, where large-scale privatisation was abused by 'oligarchs'. If privatisations are implemented in the form of initial public offerings (IPOs) on equity markets, the ownership of the privatised (incorporated) firm will most likely be broadly disseminated.[117] In the case of smaller public companies, where IPOs might be difficult, a highly transparent approach is called for and the buyer should be known to have a high reputation; an example might

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[116] OECD, *Privatisation in the 21st Century—Recent Experiences of OECD Countries* (Paris, 2009).

[117] An additional advantage of IPOs lies in the broadening of equity markets. For example, in Italy and Spain the privatisation of the 1990s represented more than 70% of the total market capitalisation (see OECD, Privatisation of Public Utilities: The OECD Experience (Paris, 2000)).

be a renowned multinational company. A possible way to maximise privatisation receipts when selling to individual investors is through auctions.

- There is also the concern that privatisations will lead to redundancies. If public companies are overstaffed (and thus highly unproductive), this will surely be true (see Chapter 2.3). However, unproductive and loss-making companies are a burden for taxpayers who must pay for the employees in those public companies, employees who are often overpaid compared with private workers. In these cases, the privatisation would increase efficiency and equity at the same time. Thus, the foreseeable resistance against such moves from public sector trade unions representing those particular vested interests should be no hindrance to the privatisation.

- In an economic crisis such as the current one in the southern European countries, there is an urgent need to generate privatisation receipts to support consolidation efforts. However, the urgency can be counterproductive when selling government assets, because there is the danger of fire sales at rather poor prices in a market where confidence is low. Moreover, the urgency weakens the negotiating position of the government. This problem could be avoided by creating a privatisation agency which is tasked to sell government assets (which have been transferred to it) gradually over a longer time horizon. The agency could use the time also to restructure public companies under its auspices, so that higher future privatisation receipts could be expected. In addition, it would be possible to generate revenues for the state even in the short run if the agency sold bonds to private investors who could benefit from future sales. While this approach appears attractive, the devil lies in the details of the legal and technical implementation. For this approach to work, for instance, the agency would need formal and irrevocable guarantees that its asset ownership cannot be reversed by future governments. But the agency would also have to be accountable to the national parliament and would have to work under very high transparency standards. Moreover, a privatisation agency is costly and thus only to be recommended when the volume of privatisation assets is sufficiently large.[118]

Public administration management

In the field of public and fiscal administration management several reform approaches, which can be mentioned only briefly in this study, should be taken to increase effectiveness and to avoid overspending:

- In several countries, particularly in southern Europe, fiscal management and budget controls have proved to be highly ineffective in the past, leading to overspending especially at the regional and local level (figure 11). Thus, comprehensive and professional fiscal planning (in line with the medium-term framework of the SGP), stricter budget disciplines and transparent inter-annual detailed reporting requirements down to the local government level should be introduced, as is the case, for instance, in Portugal.[119]
- The lack of efficiency of SOEs should be targeted particularly by addressing overstaffing and overly generous remuneration. Moreover, the incentives for management to generate profits should be enhanced and opportunities for privatisation evaluated (see Chapter 2.7). These reforms are

[118] OECD, *Privatisation in the 21st Century—Recent Experiences of OECD Countries.*
[119] OECD, *Economic Survey: Portugal* (Paris: OECD Publishing, 2012).

highly relevant if SOEs incur significant losses and increase the government's debt burden, as is the case for example in Greece and Portugal.[120]

- Tackling tax evasion can contribute effectively to consolidation objectives and also to social fairness, because it is often high-income groups that manage to use tax loopholes. This applies particularly to taxes on rents and incomes from self-employment as, for instance, in Greece.[121]

- Sunset legislation, which introduces new laws or regulations for a limited time span, can reduce the number of rules (and the bureaucratic burden for private companies) and at the same time increase the effectiveness of regulation, as any continuation of it has to be justified.[122]

- To increase the effectiveness, quality and accountability of public administration services, the concept of performance-based management has gained ground in recent years. It requires linking budgeted funds to measurable results. Researchers at the European Commission[123] point out, using four case studies, that this approach, while having to be country-specific, was successful in generating significant efficiency gains and savings without lowering the quality of public service. For example, Sweden pooled public office services, reduced the total number of agencies by 20% without reducing public competences and established one-stop shops for end users (tax, justice and social security)

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[120] European Commission, *Fiscal Sustainability Report 2012* (Brussels, 2012), accessed at http://ec.europa.eu/economy_finance/publications/european_economy/2012/fiscal-sustainability-report_en.htm on 18 March 2013; OECD, *Economic Survey: Portugal.*

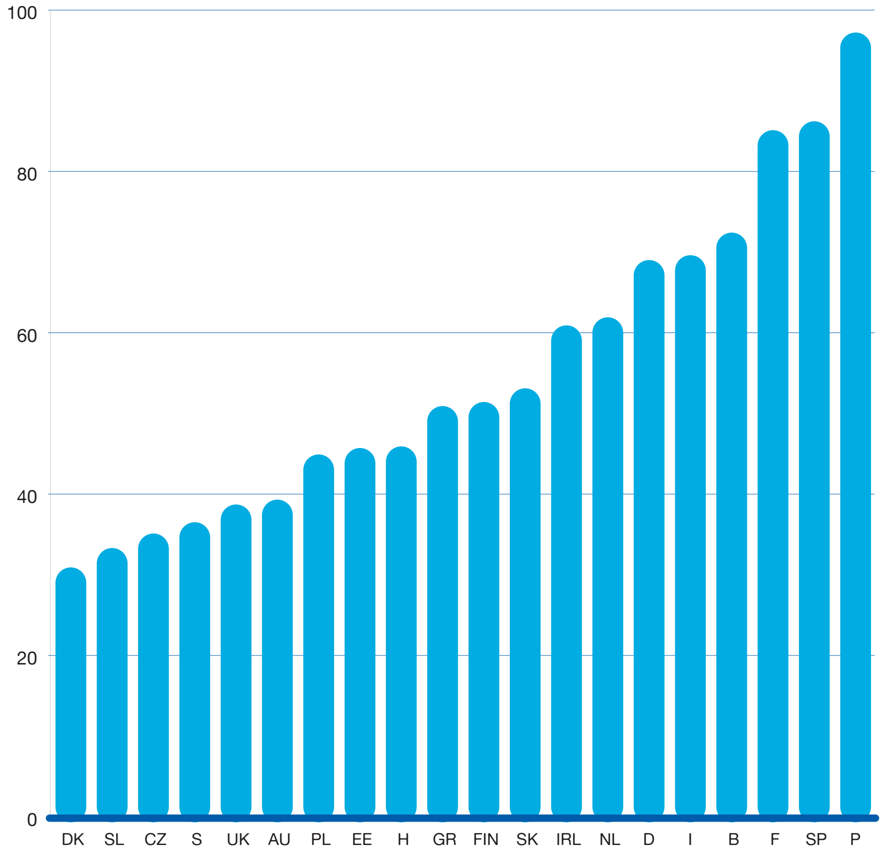
[121] European Commission, *Fiscal Sustainability Report 2012.*

[122] K.-H. Röhl, 'Systematischer Bürokratieabbau und einfachere Regeln', in Institut der Deutschen Wirtschaft Köln (ed.), *Politik ohne Geld—Was trotz knapper öffentlicher Kassen getan werden muss* (Köln, 2011), 241–59.

[123] European Commission, *The Quality of Public Expenditures in the EU*, European Economy, Occasional Paper no. 125 (Brussels, 2012), accessed at http://ec.europa.eu/economy_finance/publications/occasional_paper/2012/pdf/ocp125_en.pdf on 14 March 2013.

in municipalities. And the Netherlands established regular policy reviews to suggest policy alternatives that would enhance efficiency.

Figure 11 Local government debt (2010), as percentage of local government revenue



Source: OECD, *Economic Survey: Portugal*, 69.

Note: Non-consolidated debt; total liabilities excluding insurance technical reserves.

• In close connection, two OECD studies[124] highlight the benefits of performance-related salaries for the civil service that should replace or complement the traditional remuneration system where salary increases are automatic and merely based on length of service. Figure 12 shows the extent of performance assessments in human resources decisions in central governments across EU countries.

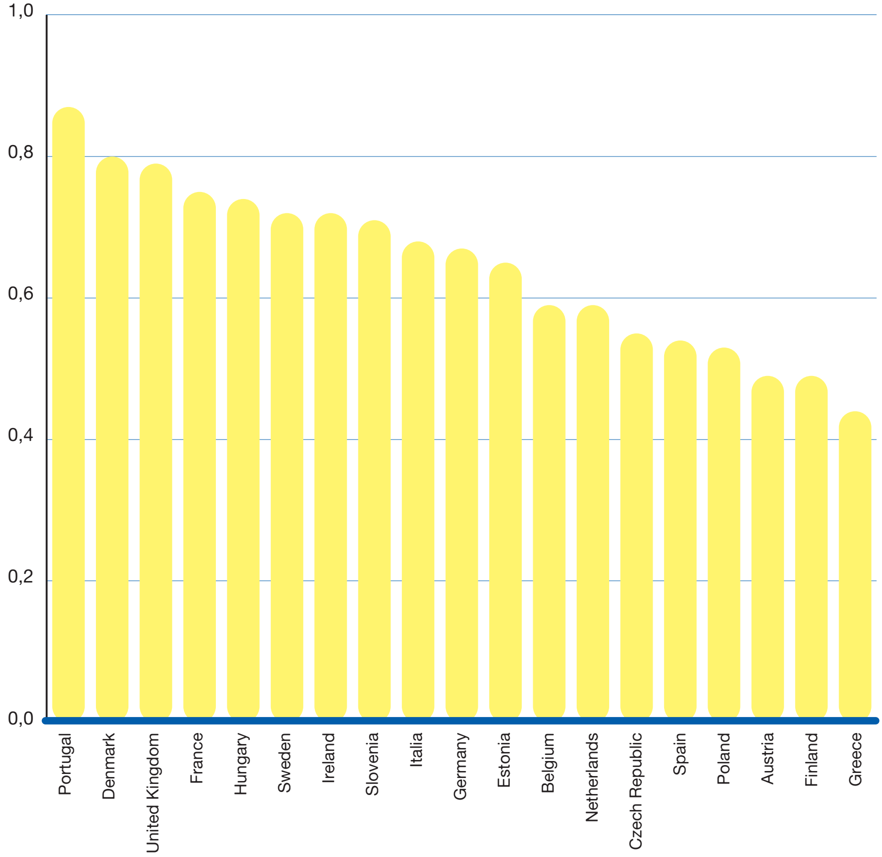
• The reform pressures on public sector administration have been significant for some time. Experience with restructuring and reform to increase efficiency has shown that it is paramount to manage this change professionally so that the employees in the administration support the reform progress. For this aim, the OECD has developed useful recommendations.[125]

• Where the competences within the public administration are lacking, the EU could offer support, comparable to the Task Force for Greece.

[124] See OECD, 'Public Sector Modernisation', *Policy Brief* (Paris, 2004); OECD, 'Paying for Performance', *Policy Brief* (Paris, 2005).

[125] O. Huerta Melchor, *Managing Change in OECD Governments*, Working Papers on Public Governance no. 12, Organisation for Economic Co-operation and Development (Paris, 2008), accessed at http://www.oecd.org/regreform/regulatory-policy/42142231.pdf on 18 March 2013.

Figure 12 Use of performance based management in EU countries (2010): index ranging from zero to one



Source: OECD, *Government at a Glance.*

Note: Data not available for all EU27 countries.

More generally, fiscal rules can play an important role in reducing the deficit bias of fiscal policies in many countries.[126] The SGP and the balanced budget rule of the Fiscal Compact are prominent examples. On the national level, they could be complemented by medium-term expenditure rules. An explicit ceiling for expenditure (increases) should be defined (ideally on the level of ministries) which depends on the targets for fiscal deficits and debts as well as on current growth in GDP and government revenues. The advantage would be that such a rule could more easily be monitored and controlled than rules based on cyclically adjusted measures such as the structural deficit or an expenditure rule in relation to the trend of GDP growth (as in the SGP).

The introduction of fiscal rules has been analysed for its effect on the success of fiscal consolidation.[127] By and large, the positive effect of the introduction of fiscal rules has been confirmed.[128] A recent analysis[129] has studied this relationship in the case of European countries. They find that announced budgetary consolidation plans are more likely to be implemented in the presence of stronger national fiscal rules. An econometric study[130]

[126] J. Ayuso-i-Casals, 'National Expenditure Rules: Why, How and When', *European Economy*, Economic Papers no. 473, European Commission (Brussels, 2012), accessed at http://ec.europa.eu/economy_finance/publications/economic_paper/2012/pdf/ecp473_en.pdf on 12 April 2013.

[127] F. Heylen, A. Hoebeeck and T. Buyse, *Fiscal Consolidation, Institutions and Institutional Reforms: A Multivariate Analysis of Public Debt Dynamics*, Working Paper no. 2011/763, Universiteit Gent (Ghent, 2011), accessed at http://www.feb.ugent.be/nl/Ondz/wp/Papers/wp_11_763.pdf on 18 March 2013.

[128] See, for example, S. Guichard et al., *What Promotes Fiscal Consolidation: OECD Country Experiences*, Economics Department Working Paper no. 553, Organisation for Economic Co-operation and Development (Paris, 2007), accessed at http://search.oecd.org/officialdocuments/displaydocumentpdf/?doclanguage=en&cote=eco/wkp(2007)13 on 18 March 2013; M. Larch and A. Turrini, 'Received Wisdom and Beyond: Lessons from Fiscal Consolidation in the EU', *National Institute Economic Review* 217/1 (2011), R1–R18.

[129] S. A. Abbas et al., 'The Performance of Large Fiscal Plans in the European Union: A Cross-Country Statistical Analysis', in P. Mauro (ed.), *Chipping Away at Public Debt* (Hoboken, NJ, 2011), 213–46.

[130] M. Molnar, *Fiscal Consolidation: Part 5. What Factors Determine the Success of Consolidation Efforts?*, Economics Department Working Papers no. 936, Organisation for Economic Co-operation and Development (Paris, 2012), accessed at http://www.oecd-ilibrary.org/docserver/download/5k9h28mzp57h.pdf?expires=1363598547&id=id&accname=guest&checksum=E3C03C04D88BCF6564AA31840F5B3DE3 on 18 March 2013.

delivers further support that countries with either spending or budget balance rules (or a combination of the two) are more likely to successfully stabilise public debt.

The introduction or increased use of independent fiscal councils which, inter alia, could supplement and monitor the correct implementation of fiscal rules is also a reform item that deserves more attention.

Independent fiscal councils

A basic problem with fiscal policies in many countries in the past was a deficit bias which led to increasing government debts, partly due to a 'common pool' problem and also to myopic politicians and voters.[131] One reason that government expenditures often exceeded revenues lay in overly optimistic forecasts in the budget plans. Moreover, the rules of the SGP were not sufficiently adhered to at the national level in the EU.

Thus, there have been proposals in the academic literature to introduce independent fiscal councils without formal fiscal power but with the task of providing unbiased economic policy advice.[132] In fact, the new fiscal treaties in the EU—the Fiscal Compact and the envisaged 'Two-Pack'—explicitly demand

- an independent macroeconomic forecast for the draft national budgetary plans to be submitted to the EU Commission by 15 October of each year, and

[131] S. Krogstrup and C. Wyplosz, 'A Common Pool Theory of Supranational Debt Ceilings', *European Economic Review* 54/2 (2010), 70–84; X. Debrun and K. Takahashi, 'Independent Fiscal Councils in Continental Europe: Old Wine in New Bottles?', *CESifo DICE Report* 9/3 (2011), 44–9.

[132] For example, D. Snower, J. Burmeister and M. Seidel, *Dealing with the Eurozone Debt Crisis: A Proposal for Reform*, Policy Brief no. 33, Kiel Institute for the World Economy (Kiel, 2011), accessed at https://www.econstor.eu/dspace/bitstream/10419/52504/1/668626364.pdf on 18 March 2013.

- the introduction of an independent (fiscal) institution which shall monitor compliance with the country-specific medium-term objectives (MTO) defined by the SGP.

Several countries already have experience with such independent institutions of different sizes and remits and there is a substantial volume of economic research on this issue.[133] Possible tasks of fiscal councils include the provision of macroeconomic and budgetary forecasts, analyses of current, planned or alternative policies, and the monitoring of the adherence to fiscal rules. A recent study[134] points to a largely positive experience with fiscal councils. The forecasting bias was indeed reduced and the compliance with fiscal rules improved in many cases.

However, there are also cases where fiscal councils had issued critical analyses and afterwards came under pressure from their national governments and had to suffer cuts in budgets or staffing. Hungary, Canada and to some extent Sweden are examples.[135] This raises the decisive question of how the functionality and independence of fiscal councils can be assured institutionally. Several prerequisites, which are partly derived from economic literature,[136] are important: Fiscal councils should

- have full autonomy and independence supported by formal guarantees from the government, ideally laid down in the constitution;

[133] X. Debrun and K. Takahashi, 'Independent Fiscal Councils in Continental Europe: Old Wine in New Bottles?'; L. Calmfors and S. Wren-Lewis, *What Should Fiscal Councils Do?*, Working Paper no. 3382, ifo Institut–Center for Economic Studies (Munich, 2011), accessed at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1793703 on 14 March 2013; D. Snower, J. Burmeister and M. Seidel, *Dealing with the Eurozone Debt Crisis: A Proposal for Reform.*

[134] R. Hagemann, 'How Can Fiscal Councils Strengthen Fiscal Performance?', *OECD Journal: Economic Studies* 2011 (2011), 75–98.

[135] L. Calmfors and S. Wren-Lewis, *What Should Fiscal Councils Do?.*

[136] X. Debrun and K. Takahashi, 'Independent Fiscal Councils in Continental Europe: Old Wine in New Bottles?'.

- have adequate staffing and a formally guaranteed budget;
- be bound to academic soundness and neutrality;[137]
- consist of highly renowned economists in their prime who would have strong incentives not to put their reputation at stake by biased analyses;
- have its (new) members chosen by the government on the basis of academic excellence;
- in order to minimise ideological biases, have the choice of new members made only after a consultation in the parliament and with the consent of its existing members;
- have their analyses published and disseminated actively and widely; and
- have them based on broad political ownership in the political arena.

While creating a new institution is a financial burden for the current budget and could thus impede consolidation aims, a fiscal council does not need to be large and overly costly in order to be effective.

[137] In the Netherlands, an independent fiscal council prepares fiscal projections for opposition parties before an election (L. Calmfors and S. Wren-Lewis, *What Should Fiscal Councils Do?*).

Structural reforms supporting smart fiscal consolidation

As explained above (Chapter 1.3), expansionary fiscal consolidations in the past were often associated with expansionary monetary policy and market-based exchange rate depreciations. Unfortunately, the supportive effect of these macroeconomic policy instruments is not available to members of the eurozone. Instead, despite the fact that ECB interest rates are very low, the transmission channel to interest rates for private actors is currently largely broken in southern European countries. Thus, it is all the more important that other policy instruments are used to support the consolidation course and particularly to limit short-term negative growth effects and to foster long-term growth potential.

Structural policy reforms which liberalise highly regulated markets are key in this respect; in particular, product market reforms (for instance lowering market entry barriers and reducing minimum prices for certain professional services) have been widely shown to improve the long-term growth potential. The main lever is the increase in competition and the resulting positive effects on efficiency in allocation and production, as well as improvements in dynamic efficiency.[138] Higher competitive pressures induce companies to be more productive and innovative and lead to a more efficient use of the factors of production in an economy. Moreover, product market reforms

[138] G. Nicodème and J.-B. Sauner-Leroy, *Product Market Reforms and Productivity: A Review of the Theoretical and Empirical Literature on the Transmission Channels*, Economic Papers no. 218, European Commission Directorate-General for Economic and Financial Affairs (Brussels, 2004), accessed at http://128.118.178.162/eps/dev/papers/0412/0412014.pdf on 18 March 2013; European Commission, *The Microeconomic Roots of Growth Performance and Trade Competitiveness in the EU, Product Market Review 2010–11* (Brussels, 2010), accessed at http://ec.europa.eu/economy_finance/publications/european_economy/2010/pdf/ee-2010-8_en.pdf on 18 March 2013.

which lower entry barriers generally have positive effects on innovation, employment and growth.

Structural reforms usually develop their positive effects fully only in the long run, because the reallocation and incentives effects take time to materialise.[139] However, while structural reforms are often resented by vested interests, their great advantage is that they are largely costless because their implementation involves only regulatory change and thus little additional government expenditure.

There is ample empirical and model-based evidence that less burdensome business regulations and product-market reforms (measured usually as lowered price-cost margins) positively influence economic growth,[140] (multifactor) productivity growth,[141] and employment and investment.[142]

Moreover, labour market reforms (in particular of strict dismissal rules) were shown to have positive effects on (total factor) productivity growth[143] and economic growth.[144] Theoretically

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[139] R. Bouis et al., *The Short-Term Effects of Structural Reforms: An Empirical Analysis*, Economics Department Working Paper no. 949, Organisation for Economic Co-operation and Development (Paris, 2012), accessed at http://www.oecd-ilibrary.org/docserver/download/5k9csvk4d56d.pdf?expires=1363272385&id=id&accname=guest&checksum=E75D84E63C8F914DCAF0AFB6CF411664 on 14 March 2013.

[140] S. Djankov, C. McLiesh and R. M. Ramalho, 'Regulation and Growth', *Economics Letters* 92 (2006), 395–401.

[141] G. Nicoletti and S. Scarpetta, *Regulation, Productivity and Growth: OECD Evidence*, Economics Department Working Papers no. 347, Organisation for Economic Co-operation and Development (Paris, 2003), accessed at http://search.oecd.org/officialdocuments/displaydocumentpdf/?doclanguage=en&cote=eco/wkp(2003)1 on 18 March 2013; O. de Bandt and O. Vigna, 'The Macroeconomic Impact of Structural Reforms', *Quarterly selection of articles—Bulletin de la Banque de France* 11 (2008), 5–32, accessed at http://www.banque-france.fr/fileadmin/user_upload/banque_de_france/Economists_and_researchers/qsa11etud_1.pdf on 14 March 2013.

[142] R. Griffith and R. Harisson, *The Link between Product Market Reform and Macro-economic Performance*, Economic Papers no. 209, European Commission Directorate General for Economic and Financial Affairs (Brussels, 2004), accessed at http://ec.europa.eu/economy_finance/publications/publication652_en.pdf on 18 March 2013.

[143] A. Bassanini, L. Nunziata and D. Venn, *Job Protection Legislation and Productivity Growth in OECD Countries*, IZA Discussion Papers no. 3555, Institute for the Study of Labor (Bonn, 2008), accessed at http://ftp.iza.org/dp3555.pdf on 14 March 2013.

[144] L. Lusinyan and D. Muir, *Assessing the Macroeconomic Impact of Structural Reforms: The Case of Italy*, Working Paper no. 13/22, International Monetary Fund (Washington, DC, 2013), accessed at http://www.imf.org/external/pubs/ft/wp/2013/wp1322.pdf on 18 March 2013.

this results from the fact that job-protection rules hinder the (re) allocation of labour to more productive uses in the course of ongoing structural change.

The positive effects of structural reform can be illustrated, for instance, in the case of Italy. A substantial increase in GDP—nearly 11%—has been estimated to be achievable in the long run after about 10 years if either half of the gap between Italian practices and a best practice measure in the flexibility of product and labour markets is closed within five years[145] or if the price-cost mark-up in the service sector is reduced to the eurozone average.[146] Broadly similar results for Germany and Portugal are simulated in a recent study.[147]

Structural reforms can also have positive effects on economic growth in the short run.[148] In a recent analysis[149] it is shown with a model-based approach that if significant short-run effects of structural labour, product and tax reforms are found they are mostly positive. However, reforms of job protection rules (and unemployment benefits) can also have negative short-term effects if enacted during severe recessions. Thus a case could be made for postponing such reforms until an upswing has developed.[150] However, lowering entry barriers into the labour

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[145] L. Lusinyan and D. Muir, *Assessing the Macroeconomic Impact of Structural Reforms: The Case of Italy.*

[146] L. Forni, A. Gerali and M. Pisani, 'Macroeconomic Effects of Greater Competition in the Service Sector: The Case of Italy', *Macroeconomic Dynamics* 14/5 (2010), 677–708.

[147] S. Gomes et al., *Structural Reforms and Macroeconomic Performance in the Euro Area Countries: A Model-Based Assessment*, Working Paper Series no. 1323, European Central Bank (Frankfurt am Main, 2011), accessed at http://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1323.pdf on 18 March 2013.

[148] OECD, *Economic Policy Reforms 2012: Going for Growth* (Paris: OECD Publishing, 2012).

[149] R. Bouis et al., *The Short-Term Effects of Structural Reforms: An Empirical Analysis*, Economics Department Working Paper no. 949, Organisation for Economic Co-operation and Development (Paris, 2012), accessed at http://www.oecd-ilibrary.org/docserver/download/5k9csvk4d56d.pdf?expires=1363272385&id=id&accname=guest&checksum=E75D84E63C8F914DCAF0AFB6CF411664 on 14 March 2013.

[150] From a political economy point of view, however, the typical resistance against such reforms suggests the need to use the imminent reform pressure of the crisis.

market and particularly into certain often sheltered services (such as retail trade and professional services) can improve growth and employment in the short term.[151] Moreover, to foster short-term growth, a clear communication strategy is recommended by the OECD in order to generate positive confidence effects.

While the effect of structural reforms on the success of fiscal consolidation is not clear-cut,[152] the opening up of product and labour markets tends to have a positive effect on social fairness and equality. Often strict regulations protect insiders (job holders or certain self-employed persons in professional services) from outside competition and allow for unjustified economic rents at the expense of outsiders, particularly of the highly qualified young and other unemployed persons. Tearing down the exit barriers to labour and product markets will therefore be strongly resented by the insiders but will substantially benefit the outsiders and contribute to social fairness.

[151] OECD, *Economic Policy Reforms 2012: Going for Growth*; A similar positive short-term effect can be shown for unemployment benefit reforms, such as a shortened duration (M. Cacciatore, R. Duval, R. and Fiori, G., *Short-Term Gain or Pain? A DSGE Model-Based Analysis of the Short-Term Effects of Structural Reforms in Labour and Product Markets* Economics Department Working Paper no. 948, Organisation for Economic Co-operation and Development (Paris, 2012), accessed at http://www.oecd-ilibrary.org/docserver/download/5k9csvkkr3xn.pdf?expires=1363272819&id=id&accname=guest&checksum=20DA5A3B18E2592C6E47F3EA04FEF161 on 14 March 2013; R. Bouis et al., The Short-Term Effects of Structural Reforms: An Empirical Analysis'), and also for growth-friendly tax reforms (see above) that shift the tax burden away from labour towards taxes on less mobile bases, such as consumption, property or the environment (OECD, *Economic Policy Reforms 2012: Going for Growth*).

[152] A. Tagkalakis, 'Fiscal Adjustment: Do Labor and Product Market Institutions Matter?', *Public Choice* 139/3 (2009), 389–411; M. Larch and A. Turrini, 'Received Wisdom and Beyond: Lessons from Fiscal Consolidation in the EU'.

Conclusion and recommendations

Since the global financial crisis (and, in part, fiscal profligacy) has contributed significantly to a sharp rise in government debt levels in Europe, it has once again become crucial to reduce excessive public deficits and debts. However, the course of fiscal consolidation is being hotly debated. On one hand, there was the hope that decisive and front-loaded consolidation programmes would have expansionary effects, as they often had in the past. This expectation has been largely disappointed; fiscal multipliers have been larger than expected for several reasons, including the impossibility of currency devaluations for eurozone countries and the existence of slack in world trade. On the other hand, several economists point to the deep recessions in southern European countries and argue that austerity could be self-defeating. Some even commend fiscal stimulus programmes. The high debt and deficit burden in some countries—attributable, for example, to endangered debt sustainability and depressing growth effects—leaves no choice but to continue the course of fiscal consolidation. This difficult situation calls for smart means of fiscal consolidation in terms of the structure, timing and choice of individual measures. The aim is to set up effective smart consolidation programmes that foster long-term growth, minimise the potentially negative short-term effect on economic activity and ideally contribute to social fairness and equality. Regaining credibility by means of decisive and wide-ranging reform programmes is key.

Regarding the structure of smart consolidation programmes, raising taxes has been proven to be more detrimental to economic growth and the success of consolidation programmes than have expenditure cuts, which have often been the major part of expansionary fiscal adjustments. Moreover, the timing of fiscal adjustments has influence on potential negative short-term effects of consolidation. Thus, several recommendations can be formulated:

- The focus of consolidation should be on spending cuts.
- Comprehensive expenditure reviews should be used to identify efficiency potentials, that is, to single out spending items that can be reduced without significantly endangering the effectiveness of government spending (see below).
- Concerning the timing of smart consolidation, countries with sufficient fiscal space should aim at a gradual fiscal adjustment, while countries with high or increasing government debts which are under pressure from financial markets have no choice but to front-load their programmes to some degree in order to avoid having the debt burden become unsustainable.
- The more these latter countries manage to regain credibility, the less front-loading is required. Credibility can be fostered through clearly defined medium-term consolidation courses, accompanying structural reforms and clear ownership of the fiscal rules of the eurozone's institutional framework (mainly of the Stability and Growth Pact (SGP) and the Fiscal Compact).
- As explicitly allowed for by these rules, the fiscal adjustment path should not focus on headline nominal fiscal deficits, but on cyclically adjusted structural matters. The EU

Commission is, therefore, justified in extending deadlines to achieve nominal fiscal-adjustment targets, but only in cases where the economic situation has worsened significantly and when countries reduce their structural deficits sufficiently.

This study identifies several smart fiscal consolidation measures that aim at being effective in terms of consolidation, long-term growth, short-term growth and social fairness (see the Appendix for a detailed and evaluated list). The recommendations are broadly ranked by their degree of smartness as defined by these four objectives:

- *Pension and health system reforms* (focused on long-term sustainability) have limited positive effects on current consolidation and large positive effects on future consolidation. They can support long-term growth by fostering employment through lower social security contributions (which are a tax on labour) and possibly by leading to lower interest rates that result from better fiscal sustainability. Such reforms also tend to have positive short-term-growth impacts, partly because of the focus on long-term sustainability, which can lead to lower interest rates. Moreover, intergenerational equity is fostered in the probable case that the current pension system disadvantages future generations.
- *Privatisation* contributes directly to fiscal consolidation (also in the longer run if loss-incurring state-owned enterprises (SOEs) are privatised), moderately raises long-term growth as a result of higher efficiency (of allocation and private firms), does not impede short-term growth and contributes to social fairness if the prices of former publicly supplied goods fall (which are supposedly used more by low-income groups) and if former overpayment and overstaffing prevailed in SOEs.

- The government should support long-term growth prospects by *keeping up and, ideally, moderately increasing public investment and education expenditures.* A moderate positive contribution to consolidation can be reached despite this spending increase if as many efficiency potentials as possible are used (in existing spending patterns) to stop ineffective investment projects and raise the effectiveness of education. Particularly with public investment, a moderate increase would generate positive effects, short-term demand and, thus, growth. Education reforms focused on disadvantaged groups could contribute significantly to social fairness and equality.

- In particular, both *reducing the public wage bill* (by wage cuts and number of staff reductions, the latter in case of overstaffing) and *broad-based public sector reforms* lead directly to lower fiscal deficits. They can, to some extent, foster long-term growth (the result of increased efficiency in the public sector, including less bureaucracy and better regulation of private businesses). They have only limited negative macroeconomic effects on short-term growth and can contribute to social fairness, particularly if tax evasion is reduced and if overpayment of public employees was previously the norm.

- *Better targeting and reducing the disincentives of social and unemployment assistance and moderately increasing active labour market policies (ALMPs)* can be important elements in the implementation of ‘flexicurity’, a concept which originates in Nordic countries. These reforms foster long-term growth by increasing employment, contribute to consolidation by reducing transfers, contribute to higher future revenue growth (despite a moderate spending increase for ALMPs) and should contribute to social fairness and equality through enhanced employment opportunities for the long-term unemployed as well as through reduced abuse of the social system (even though people actively but vainly searching for work have to cope with lower transfers). As the effect of such a reform on short-term growth can be negative in deep recessions, it should ideally be taken during upswings when labour demand increases.

- *Cutting public subsidies* has the (limited) potential to reduce government expenditures and to increase long-term growth potential if it is focused on decreasing financial support for old industries. The short-term-growth impact can be slightly negative, but cutting subsidies can enhance social fairness as particular vested interests are no longer fostered at the cost of taxpayers.

- *Shifting the tax burden from labour to consumption, with a limited increase in the effective burden,* fosters short- and long-term growth by supporting employment and net exports (via an increase in price competitiveness) even though this positive effect is slightly dampened by the limited increase of the effective tax burden. The contribution to consolidation is positive but limited. The effect on social equality should be moderately negative, as better employment opportunities for the long-term unemployed are outweighed by the effect of consumption taxes, which are a heavier burden for poorer households than for richer ones.

- *Increases in various taxes (on property, the environment, or financial transactions)* are effective in terms of consolidation needs and can partly contribute to social fairness. However, they have negative effects on economic growth in the short run (and to some extent, in the long run as well).

Apart from these fiscal consolidation measures, a broad approach to reform is advisable, including thorough structural reforms of labour and product markets, because such reforms display a high degree of smartness. They strongly support long-term productivity and thus economic growth and their short-term effects can also be positive (for example, lowering entry barriers to professional services), although certain reforms (such as lower job protection) can stifle short-term growth during recessions. Their effect on consolidation depends on the measures taken, but generally, structural reforms improve social fairness and equality because they often enhance the opportunities of outsiders.

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Appendix

Evaluation of recommendations for smart fiscal consolidation measures: an overview

	Effect of the reform on				Average score	Weighted score
	Consolidation success	**Long-term growth**	**Short-term growth**	**Social fairness/ equality**		
Reducing the public sector wage bill by wage and pension decreases and staff reduction	**++** High share of public wage bill in total expenditure, direct effect	**+** Efficiency rise in the allocation of skilled labour and enhanced productivity in public sector	**o / –** Income and consumption decline, but small macroeconomic relevance	**+** If overpayment and overstaffing prevailed before	$+^-$	$+^+$
Reducing public-expenditure based subsidies	**+/++** Direct spending reduction but limited share of public expenditure	**+** Increase in overall efficiency, particularly if subsidies for old industries are cut	**o / –** Decline of recipient incomes, but very small macroeconomic relevance	**+** Reduction in fostering particular vested interests	$+/o^+$	$+^-$
More efficient and limited increase in education spending	**o / +** Efficiency savings but limited spending increase	**++ / +** Fosters growth driver directly but only limited spending increase	**+ / o** Limited spending increase can partly foster domestic demand	**++ / +** If targeted to disadvantaged or if levy on tertiary education	$+^+$	$+^+$
More efficient and limited increase in public investment	**+ / o** Efficiency savings and higher future revenues but limited spending increase	**++ / +** Fosters growth driver directly but only limited spending increase	**+** Rapid short-term demand effect but only limited spending increase	**n. a.** Depends on specific measure	$+^+$	$+^+$

	Effect of the reform on: Consolidation success	Long-term growth	Short-term growth	Social fairness/ equality	Average score	Weighted score
Better targeting and reducing disincentives of social and unemployment assistance, limited increase in active labour market policies	+/o Considerable savings from lower transfers and higher future revenues but limited higher spending for active labour market policies	+/ ++ Positive impact on work incentives and on chances to find a job; fosters growth driver employment	n. a. Depends on economic situation	+/o New jobs for long-term unemployed, less abuse of social system but lower transfers	$+^-$	$+^-$
Reform of general pension system focused on medium- and long-term sustainability	++ / + Expenditure reductions mainly in the medium- and long-term but to a limited degree also in the short-term	+/++ Lower contributions (burden on labour) support employment and foster competitiveness and net exports; potential interest rate decline fosters domestic demand but lower future expenditures of pensioners	+ Positive indirect impact with higher employment and net exports and interest rate decline; limited negative impact with short-term cuts	+ Fosters intergenerational equity, fosters fairness if overly generous pensions for public employees are reformed	$+/++^-$	+/++
Reform of health care system raising efficiency	++ Considerable savings and efficiency gains, also better sustainability in long term	+ Lower contributions support growth driver employment; fosters competitiveness and net exports but lower future health expenditures	n. a. Depends on specific measure (for instance, lower contributions vs. higher burden of more cost sharing)	n. a. Depends on specific measure	$(++/+^-)$	$(++/+^-)$

	Effect of the reform on				Average score	Weighted score
	Consolidation success	Long-term growth	Short-term growth	Social fairness/ equality		
Broaden tax bases, reduce marginal income tax rates with limited increase in tax burden	+ Efficiency savings and limited revenue increase	+/o Higher marginal incentives to work and to invest but limited increase of effective tax on labour	– / o Negative impact with higher tax burden but positive incentive effect which develops over time	+ Reduction of tax exceptions which are mostly used by higher income groups	+/o$^-$	+/o$^-$
Shifting tax burden away from labour (income tax or social insurance contributions) to consumption with limited increase in tax burden	+ / o Limited revenue increase	+ Lower burden on labour, supports growth driver employment; fosters competitiveness and net exports but limited increase in overall tax burden	+ Positive proven impact on employment, fosters competitiveness but slightly higher overall tax burden	– / o Consumption taxes have regressive distribution effects but employment increase can also help long-term unemployed	+/o$^-$	+/o$^-$
New or higher property taxes	++ Direct effect on fiscal deficit	– Higher tax dampens domestic demand	— Higher tax dampens domestic demand	++ Property highly unequally distributed	o/+$^-$	o/–
New or higher environmental taxes	++ Direct effect on fiscal deficit	o Higher taxes dampen domestic demand but possibly foster green growth	— Higher taxes dampen domestic demand	o Partly regressive distribution effects, e.g. when tax on energy use	o	o/+
Financial transaction tax	++ Direct effect on fiscal deficit	– / o Higher tax dampens domestic demand, but possible (though disputed) rise in financial stability	— Higher tax dampens domestic demand	+ Capital income unequally distributed, but also age related savings affected	o$^+$	o/+$^-$

	Effect of the reform on				Average score	Weighted score
	Consolidation success	Long-term growth	Short-term growth	Social fairness/ equality		
Privatisation	++ Direct effect on fiscal deficit, also in the longer term if loss-incurring SOEs are privatised	+/o Private firms more productive and higher allocative efficiency, but only limited macroeconomic impact	+ Considerably smaller short-term consolidation needs, but minor potential negative effects if lay-offs/ wage cuts in former SOEs	+ If lower prices and if former overpayment and overstaffing in SOEs	$+/++^{-}$	$+/++^{-}$
Public administration reform	+/++ Higher efficiency produces expenditure savings	o / + More efficiency of public service and better government services and regulations for private firms, but overall limited impact	n. a. Depends on measure taken	+ Positive impact if less tax evasion, SOE reforms and more performance pay	$+^{-}$	$+^{-}$
Structural reforms	n. a. Depends on measure taken	++ / + Proven positive growth effect of higher competition, entry conditions for firms and employees	+ / o If short-term effects, mostly positive but depends on measure taken	++/+ If targeted, improved chances for outsiders	+/++	$+/++^{+}$

Source: Authors' compilation.

Note: These scores can provide only a broad indication of how the recommendations should be evaluated, and, given this, the guidance they offer for reforms must be considered rather general and not entirely objective.

Scale: ++: very significant; +: significant; o: minor; –: negative; —: very negative (with intermediate steps); n. a.: not available.

Average score calculated with equal weights, weighted score calculated with double weights for consolidation success and long-term growth; + positive bias; – negative bias; brackets signal that at least two objectives received no score.

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