# The short-term fiscal implications of structural reforms

The economic and sovereign debt crisis revealed significant gaps in the economic resilience of several euro area countries, pointing to a strong need for structural reforms. Despite the long-term benefits of structural reforms, their implementation prior to the crisis was suboptimal. Typically, the main resistance to the adoption and implementation of structural reforms stems from the vested interests of affected groups in society. Besides this, the possible short-term economic and fiscal costs of structural reforms are also sometimes mentioned as a reason for postponing their adoption, suggesting a short-term trade-off between fiscal consolidation and reforms. The European Commission's Communication on making the best use of the flexibility within the existing rules of the Stability and Growth Pact (SGP)1 follows this logic and foresees an allowance for the direct short-term fiscal costs of reforms, enabling European Union (EU) Member States implementing structural reforms to delay fiscal adjustment compared with the SGP benchmark requirement. This article reviews the evidence of the short-term effects of structural reforms, given the prominence that the latter may gain in the application of the SGP. Their quantification is surrounded by uncertainty and is conditional on a large number of assumptions. That said, only a small set of structural reforms appear to have direct short-term fiscal costs, with "systemic" pension reforms being the most prominent example. This suggests that the structural reform clause should be carefully applied. In particular, it is important that the assumptions underlying the decision to apply such a clause are spelled out in a clear and transparent way, which will also ensure a consistent application over time and across countries.

#### 1 Introduction

The economic and sovereign debt crisis made it more pressing for structural reforms to be carried out in several euro area countries. Large fiscal imbalances, weak external competitiveness, a leveraged financial sector, indebted households and poor productivity weighed negatively on the euro area's capacity to adjust to the economic downturn caused by the financial crisis. The crisis revealed the deep-rooted nature of fiscal imbalances and, in some countries, masked more fundamental public sector inefficiencies. The weak resilience of several euro area economies was also to some extent due to insufficient reform efforts in the pre-crisis period.<sup>2</sup>

Communication COM (2015) 12 of 13 January 2015 from the Commission to the European Parliament, the Council, the European Central Bank, the Economic and Social Committee, the Committee of the Regions and the European Investment Bank on making the best use of the flexibility within the existing rules of the Stability and Growth Pact.

See Leiner-Killinger N., Lopéz Peréz, V., Stiegert, R. and Vitale, G., "Structural reforms in EMU and the role of monetary policy: a survey of the literature", Occasional Paper Series, No 66, ECB, Frankfurt am Main, July 2007. This paper points out that insufficient progress was made in terms of implementing structural reforms between the start of Economic and Monetary Union and 2007.

Both economic and political factors are often cited as holding back the adoption and implementation of structural reforms. Typically, the main resistance to the implementation of structural reforms stems from the vested interests of affected groups in society. The possible transitional (economic and fiscal) costs of structural reforms are also sometimes seen as factors that generate political resistance to reforms. This is compounded by the fact that governments have temporal horizons that are usually too short to capitalise politically on the long-run benefits of reforms and might not therefore be willing to tolerate the possible short-run costs of reforms.

The European Commission's Communication on making the best use of the flexibility within the existing rules of the SGP gave more prominence to the possible short-term fiscal costs of structural reforms. The SGP's structural reform clause was first introduced in 2005, although in its first ten years it was invoked only for "systemic" pension reforms by some Member States. In order to spur the adoption and implementation of structural reforms, the Communication gave more prominence to the clause that allows Member States implementing structural reforms to delay fiscal adjustment compared with the benchmark prescribed by the SGP, thus compensating for the potential short-term economic and fiscal costs of reforms.

Since only a small set of structural reforms might have short-term fiscal costs, flexibility under the SGP should be used carefully to avoid the risk of it being misused. This article reviews the channels through which structural reforms affect the economy and public finances, and discusses the main issues related to the assessment of their effects. Structural reforms encompass policy actions that increase the efficiency and competitiveness of the economy, with beneficial effects for long-term fiscal sustainability. Labour and product market reforms, as well as systemic pension reforms that benefit long-term fiscal sustainability, are typical examples of structural reforms. Structural reforms in the fiscal domain generally produce both short-term and long-terms gains, whereas short-term fiscal costs are limited to a few examples (see Box 1). This article finds that, with the notable exception of systemic pension reforms, no significant short-term fiscal costs are generally associated with structural reforms. When such costs exist, their quantification is often uncertain and largely a matter of judgement. This is in line with earlier studies which found that, although some reforms may have short-term budgetary costs, these appear to be rather low and the evidence is not always statistically significant.3 This suggests that the structural reform clause of the SGP should be carefully applied. In particular, it is important that the assumptions underlying the decision to apply such a clause are spelled out in a clear and transparent way, which will also ensure a consistent application over time and across countries. In general, however, the focus of the policy debate should be on better ways to incentivise the adoption and implementation of structural reforms. Section 2 summarises the structural reform provisions under the SGP, including the recent Communication from the European Commission. Section 3 provides a qualitative description of the main channels via which such reforms may affect public finances in the short term either directly or indirectly via their impact on the

See Deroose, S. and Turrini, A., "The Short-Term Budgetary Implications of Structural Reforms: Evidence from a Panel of EU Countries" CEPR Discussion Paper, No 5217, 2005.

macroeconomic aggregates. Section 4 discusses the difficulties of quantifying precisely and reliably such effects for use in the context of the EU fiscal surveillance framework. Section 5 concludes.

#### 2 Structural reforms under the Stability and Growth Pact

The 2005 reform of the SGP aimed to enhance its growth-oriented nature and to better account for country-specific economic circumstances. The structural reform clause introduced under the preventive arm of the SGP in 2005 gives special consideration to the implementation of structural reforms in the application of the framework. In particular, Member States may temporarily deviate from their medium-term budgetary objective (MTO) or the adjustment path towards it when implementing "major structural reforms with direct long-term positive budgetary effects, including by raising potential sustainable growth, and therefore a verifiable impact on the long-term sustainability of public finances" (Article 5 of Regulation (EC) No 1466/97). The aim is to avoid the implementation of structural reforms with significant short-term fiscal costs, but sizable long-term benefits for fiscal sustainability being held back by the risk of violating the framework. With the exception of so-called systemic pension reforms (see below), no direct connection is established in the Regulation between the scale of the short-term costs of reforms and the allowed deviation from the MTO.

Systemic pension reforms have received particular attention in the provisions laid down in the SGP governing structural reforms. Systemic pension reforms introduce a multi-pillar system including a fully-funded private pillar. These reforms have a direct and immediate negative impact on the general government deficit, as part of the social security contributions to the public pension pillar are diverted to a fully-funded private pension fund that is classified outside the general government sector. Over time positive budgetary effects materialise, since part of pensions and other social benefits will, following the reform, be paid by the fully-funded pension scheme with a corresponding reduction in pension-related government spending. The allowed deviation from the MTO shall only reflect the direct net cost of the reform, but should remain temporary, and an appropriate safety margin with respect to the 3% of GDP deficit reference value is to be preserved. The 2005 reform also introduced changes to the corrective arm of the SGP as it provided that due consideration shall be given to the implementation of systemic pension reforms when assessing compliance with the deficit and debt criterion and in subsequent steps of the excessive deficit procedure (EDP) (Article 2 of Regulation (EC) No 1467/97). Specifically, when launching and abrogating EDPs based on the deficit criterion, the related assessment of deficit figures shall consider the net costs of systemic pension reforms, which need to be verified by Eurostat. This implies an

See, for example, Morris R., Ongena, H. and Schuknecht, L., "The reform and implementation of the Stability and Growth Pact", Occasional Paper Series, No 47, ECB, Frankfurt am Main, June 2006.

Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies.

Council Regulation (EC) No 1467/97 of 7 July 1997 on speeding up and clarifying the implementation of the excessive deficit procedure.

allowance to deviate from the deficit reference value as long as the excess is fully explained by the reform costs and the deficit remains close to the reference value.<sup>7</sup>

The structural reform clause was applied in only a few cases and with reference solely to systemic pension reforms. Under the corrective arm, the EDP for Lithuania was abrogated in 2013 taking into account the net cost of the 2012 systemic pension reform, which explained why in 2012 the general government deficit exceeded by 0.2% of GDP the reference value of 3% of GDP set in the Treaty on the Functioning of the European Union (TFEU). Likewise, the EDP for Poland was abrogated in early 2015, based on validated data for 2014, one year ahead of the deadline set in the 2013 Council Recommendation<sup>8</sup>, because the remaining excess in the general government deficit over the reference value set in the TFEU was explained by the net cost of a previous pension reform. Under the preventive arm, Latvia benefited from the pension reform clause in 2013 and was granted a three-year allowance to deviate from the MTO.

In January 2015 the scope of the structural reform clause was broadened by the European Commission's Communication on making the best use of the flexibility within the existing rules of the SGP. To further promote Member States' reform efforts within the existing framework, countries under the preventive arm are granted a temporary deviation from the MTO or the adjustment path towards it of up to 0.5% of GDP - irrespective of the actual cost of the reform in case of implementation of a wider range of major structural reforms or reform packages, provided that a safety margin with respect to the deficit reference value is preserved. The European Commission's Communication also confirms that the implementation of structural reforms will be considered a relevant factor under the EDP. In the absence of a sound methodological framework to estimate the budgetary effects of structural reforms, the European Commission assesses eligibility for the structural reform clause on the basis of a dedicated reform plan - submitted by the Member State in spring in the context of the annual update of the Stability and Convergence Programmes. The programme needs to include detailed and verifiable information, as well as a credible timeline for adoption and delivery of the envisaged reform(s). However, contrary to the Code of Conduct of the SGP9, the Commission's Communication provides that "ex-ante" reform plans (as opposed to implemented reforms) can also be taken into account when granting the temporary deviation from the MTO or the adjustment towards it.10

A number of countries are benefitting from the increased flexibility under the SGP. In March 2015 the commitment to implement structural reforms was considered

The modalities of taking into account the net cost of systemic pension reforms in the context of the EDP were revised in 2011. While the 2005 reform of the SGP envisaged a gradual diminishing of the allowance over a five-year time frame, the 2011 reform of the SGP removed this time constraint, but introduced the condition of a government debt ratio below 60% of GDP.

See also the Recommendation for a Council Recommendation with a view to bringing an end to the situation of an excessive government deficit in Poland COM(2013) 393 final, which sets the deadline for correcting the EDP at 2015.

Specifications on the implementation of the Stability and Growth Pact and Guidelines on the format and content of Stability and Convergence Programmes, European Commission, available at http://ec.europa.eu/economy\_finance/economic\_governance/sgp/pdf/coc/code\_of\_conduct\_en.pdf

See the box entitled "Flexibility under the Stability and Growth Pact", Economic Bulletin, Issue 1, ECB, Frankfurt am Main, February 2015.

a relevant factor in granting France a two-year extension of its EDP deadline, rather than the one-year extension foreseen as a rule. At the same time, in deciding whether to open an excessive deficit procedure on account of the debt criterion for Italy and Belgium, pursuant to Article 126(3) of the Treaty on the Functioning of the European Union, the European Commission took into account in its reports that implementation of structural reforms was one of the relevant factors justifying the decision not to open an EDP. In addition, under the preventive arm, Italy was granted a generic allowance of 0.4% of GDP to deviate from the MTO adjustment path in 2016, on account of the structural reform plan presented by the Italian authorities which included a quantitative assessment of the short-term fiscal costs of structural reforms amounting to 0.2% of GDP.

This flexibility must be used carefully in order to preserve fiscal sustainability and the credible application of the SGP provisions. The possibility to apply the flexibility provisions also to ex-ante reform plans (as opposed to effectively implemented reforms) risks being counterproductive. Ensuring that ex-ante plans are effectively implemented requires continuous monitoring of reform implementation (see also Section 4) and timely follow-up in case of lack of progress, <sup>13</sup> otherwise countries may have an incentive to delay or even backtrack on their plans once the fiscal flexibility has been granted. The possibility to postpone the adjustment towards the MTO, without any compensation for the initial deviation, would further delay achievement of the MTO and contribute to making it a "moving target" instead of an anchor for budgetary planning. 14 Finally, and this is the main focus of this article, a proper application of the structural reform provisions requires a clear and transparent assessment of the short-term fiscal costs of structural reforms. This is important, since its application has recently been broadened to a wide set of reforms. So far, no common shared methodology has been developed and a qualitative approach to assessing the impact of structural reforms has been used.

# The effects of structural reforms – a review of the main channels

Structural reforms have positive long-term effects on output growth, employment and the sustainability of public finances. These beneficial effects are well documented in the literature and provide the foundation for the specific recommendations regularly addressed by the European Commission and the Organisation for Economic Co-operation and Development (OECD) to their member countries. For example, reforms that liberalise product markets and improve the

The European Commission had already referred to the need to implement structural reforms as early as 2013, notably in the context of the Macroeconomic Imbalances Procedure, when extending the EDP deadlines by two years for France, Slovenia and Spain.

See the Italian 2015 Stability Programme update (http://ec.europa.eu/europe2020/pdf/csr2015/sp2015\_italy\_it.pdf)

The European Commission Communication (op. cit. footnote 1) clarifies that, "In case a Member State fails to implement the agreed reforms, the temporary deviation from the MTO, or from the adjustment path towards it, will no longer be considered as warranted".

See the box entitled "The effectiveness of the medium-term budgetary objective as an anchor of fiscal policies", Economic Bulletin, Issue 4, ECB, Frankfurt am Main, June 2015.

business environment stimulate employment and investment, and ultimately benefit total factor productivity, while indirectly benefiting long-term fiscal sustainability. Increasing labour market flexibility reduces structural unemployment by inter alia enhancing labour mobility within and across countries. Systemic pension reforms which diversify the source of pension income and reduce the burden on public finances are beneficial for long-term fiscal sustainability in ageing societies.

The short-term fiscal implications of structural reforms have been less extensively explored, 16 but have become relevant in the application of the SGP structural reform provisions. Structural reforms can affect the economy via multiple channels. As concerns public finances, the effects of structural reforms can be either direct (for example, higher spending associated with active labour market policies) or indirect via induced changes in the underlying macroeconomic conditions (for example, revenue shortfalls reflecting temporary contractions in nominal wages). This section provides a qualitative review of the main channels through which the structural reforms considered in this article affect public finances and the economy in the short run. For each subsection, a table summarises the main reform actions and their short-term budgetary implications, both direct and indirect. The assessment is purely qualitative and is based on the assumption that, where there is a change in one instrument, all others are held unchanged.

#### 3.1 Product and labour market reforms

Different labour market reforms may vary in terms of their short-term direct budgetary effects, although in many cases the net effects are hard to pin down. Labour market reforms are largely motivated by the need to stimulate employment, increase private consumption and growth, thus resulting in higher government revenues and lower unemployment related spending. Some measures, such as higher spending on active labour market policies or on reforms that may temporarily lead to higher unemployment, may cause a short-run deterioration in the budget balance. These costs are compensated for by the positive effect of active labour market policies on employment and labour productivity, which also benefit government revenues in the medium to longer term.

Reforms of the wage-setting mechanisms have unclear short-term effects on the budget balance. Reforms that decentralise the wage bargaining system or decrease minimum wages usually have wage moderating effects, which might reduce labour tax revenues. At the same time, reductions in minimum wages also affect public sector employees, as they imply lower spending for the government as an employer, so that the net effect of this type of measure on the budget balance is unclear a priori. Similar effects can be expected from loosening employment protection legislation. Moreover, softening employment protection might temporarily

For an in-depth analysis of the channels via which labour and product market reforms affect the economy, see the article "Progress with structural reforms across the euro area and their possible impacts", Economic Bulletin, Issue 2, ECB, Frankfurt am Main, March 2015.

See also Caldera Sanchez, A., de Serres, A. and Yashiro, N., "Reforming in a Difficult Macro Context: What Should be the Priority?", OECD Economics Department Working Papers, 2015, forthcoming.

increase unemployment as a result of easier firing conditions during downturns, and therefore lower purchasing power of households. Nonetheless, looser employment protection legislation and more decentralised wage bargaining arrangements may support labour market adjustment and the creation of new vacancies.

The reform of unemployment benefits has positive short-term direct effects on public finances, whereas indirect effects depend on the evolution of employment. For example, measures that reduce the generosity of benefits have positive effects, as they reduce unemployment-related government spending. In addition, by reducing the workers' reservation wage, lower unemployment benefits may increase the propensity of the unemployed to find new jobs. Similarly, measures that reduce the coverage of unemployment benefits lead to a decrease in public spending. If the search and matching process is efficient, job vacancies will be filled faster, thus stimulating employment, consumption and government net revenues. In this connection, Box 2 assesses the German labour market reforms and their effects.

Product market reforms increase investment and, in some cases, have positive impacts on the budget balance. Reforms that increase access to finance enable an efficient allocation of resources, while safeguarding financial stability. As such, they do not necessarily have direct budgetary implications in the short term, but should increase growth and budget revenues in the longer run. Reforms that enhance firms' efficiency and productivity (such as reforms improving the business

Table 1
Short-term budgetary effects of labour and product market reforms

Main types of reform action	Direct effect on public finances	Indirect effect on public finances via impact on:		
		Employment	Investment	Consumption
ABOUR MARKET REFORM				
Decentralise the collective wage bargaining arrangement and decrease in minimum wages	?	?		?
Decrease employment protection legislation	?	?		?
Reform unemployment benefits (e.g. reduce generosity, reduce benefit coverage, stronger conditionality)	+	?		?
Increase spending on active labour market policies	-	+		+
PRODUCT MARKET REFORM				
Introduce reforms that enhance efficiency and productivity (including R&D)			+	
Reduce regulatory barriers to competition		?	+	?
Decrease the administrative burden (public sector)	+		+	
Increase access to finance			+	

Notes: Table 1 shows the direct and/or indirect short-term effects of structural reforms on the budget balance drawing on the findings of the literature. Indirect budgetary effects work via the impact of reforms on the main macroeconomic aggregates. The "+" points to a positive short-term effect on the budget balance that is either direct (second column) or indirect (last three columns). The "-" sign points to negative effects. Whenever the sign or significance of such effects is uncertain, the symbol "?" is used. Blank cells indicate that the reform is not expected to produce any short-term impact on that variable.

environment) and that reduce regulatory barriers to competition usually have no direct budgetary effects. While lowering regulatory barriers to competition stimulates the reallocation of resources and might force some less productive firms to close down their businesses, leading to lower employment, it will spur the creation of new and more competitive firms. In the medium to long run, all these measures stimulate investment and increase total factor productivity and growth, thereby increasing government revenues. Reforms that reduce red tape are immediately beneficial to private sector activity and may consequently have positive budgetary effects.

#### 3.2 Pension systems and healthcare reforms

Pension reforms, with the exception of systemic pension reforms introducing a private pillar, may generate short-run budgetary savings and some may foster employment. Reforms that reduce the long-term budgetary pressure of the ageing population have been at the top of the reform agenda of several EU countries over the past decade. As some reforms entail a reduction in future pension payments to workers entering the labour force, pension reforms imply a delicate trade-off between fiscal sustainability considerations and pension adequacy, especially for low earners. For this reason, most countries tend to protect the lowest earners from benefit cuts. Focusing on reforms that increase the long-term financial sustainability and affordability of pension benefits, Table 2 summarises the key reform actions and provides a qualitative assessment of their short-term effects.

Raising the effective retirement age and removing options for early retirement have positive effects on employment and reduce pension spending. This type of reform would increase the labour force participation rate at older ages. However, if these reforms are phased in over time (i.e. grandfathering clauses), as is usually the case, the positive budgetary effects in terms of a lower number of pension beneficiaries would materialise only over the medium and long run. Similarly, the impact on consumption and investment in the short term would be negligible. Measures that reduce the generosity of pension benefits (for example, the suppression or reduction of indexation mechanisms and/or changes to the reference wage used to calculate pension benefits) produce more immediate positive budgetary effects. To counter the effects of the lengthening of life expectancy on pension expenditures, linking pension contributions or the retirement age to an index of life expectancy is also foreseen. In these cases, negative effects on consumption would materialise only to the extent that agents anticipate changes in lifetime income.

Shifting from a defined benefit to a defined contribution mechanism has been at the core of several reforms over the past few years. In a defined contribution system, future pension benefits are linked to the amount of contributions paid by an individual and to the investment returns on such contributions. This increases the long-term sustainability of the pension system, whereas the short-run positive budgetary effects depend on how quickly the reform is phased in. In addition, many OECD countries have introduced a second private pension pillar – either voluntary or mandatory – (these are referred to as systemic pension reforms in the

Every three years, the European Commission in cooperation with the Economic Policy Committee's Ageing Working Group publishes the Ageing Report, which contains long-term projections of the budgetary impact of population ageing for the 28 EU Member States and Norway. The Ageing Report for the period 2013-2060 was published in 2015. For an in-depth analysis of the factors determining revisions to pension expenditure compared with the 2012 Ageing Report, see the Box entitled "The 2015 Ageing Report: how costly will ageing in Europe be?", *Economic Bulletin*, Issue 4, ECB, Frankfurt am Main, April 2015.

Pension reforms also pursue other goals (e.g. adequate coverage of workers via both mandatory and voluntary schemes and adequate retirement benefits), which are outside the scope of this article.

It is often claimed that early retirement options provide job opportunities for the young unemployed. However, as discussed in Jousten A., Lefèbvre, M., Perelman, S. and Pestieau, P., "The Effects of Early Retirement on Youth Unemployment: The Case of Belgium", Working Paper Series, No 08/30, IMF, February 2008 there is no theoretical foundation to this claim. In the case of Belgium, the authors observe a negative link between youth unemployment and early retirement. They show that the activity rates of both young and elderly workers are sensitive to business cycles.

Table 2
Short-term fiscal impact of pension systems and healthcare reforms

Main types of reform action	Direct effect on public finances	Indirect effect on public finances via impact on:		
		Employment	Investment	Consumption
Increase work incentives				
Increase retirement age and/or discourage early retirement	+	+		
Equalise retirement age for men and women	+	+		
Increase financial sustainability				
Index contributions or retirement age to life expectancy	+			-
Increase private contributions to funded pension schemes	+			-
Lower pension benefits (e.g. limits to pension indexation, lower the pension replacement ratio)	+			-
Increase diversification of income sources				
Introduce second pillar pension system (systemic pension reform)	-			
Shift from defined benefits to defined contribution financing	+			
Improve the quality and efficiency of healthcare services				
Cap healthcare-related spending (e.g. pharmaceuticals, salaries)	+			
Implement governance reforms (decision-making, management, contracting systems)	+			
More effective service provision (cost-effective use of medicines, enhance hospitals' efficiency, cost-sharing mechanism)	+			

Notes: Table 2 shows the direct and/or indirect short-term effects of structural reforms on the budget balance drawing on the findings of the literature. Indirect budgetary effects work via the impact of reforms on the main macroeconomic aggregates. The "+" points to a positive short-term effect on the budget balance that is either direct (second column) or indirect (last three columns). The "-" sign points to negative effects. Whenever the sign or significance of such effects is uncertain, the symbol "?" is used. Blank cells indicate that the reform is not expected to produce any short-term impact on that variable.

context of the structural reform clause of the SGP) in order to diversify the source of pension benefits and reduce pressure on public finances. This leads to lower public revenues not only in the short term, as part of the contributions are diverted to the second pillar, but possibly also over the medium to long term, as in many countries retirement savings through private pension plans enjoy a favourable tax treatment (for example, full or partial deductibility of contributions and investment returns, and lower tax rate for retirees).

### Healthcare reforms can contribute decisively to reducing long-term age-related costs and generally have positive short-term budgetary effects.

The 2010 joint EPC-EC report on healthcare systems<sup>20</sup> concluded that policy efforts need to be stepped up to ensure that budgetary targets are reached and age-related costs contained.<sup>21</sup> Healthcare reforms consist mainly of macro-type controls (for example, caps on current and investment spending, wage controls and agreements with pharmaceutical companies to contain spending) and governance reforms (more efficient decision-making processes and cost-effective contracting systems). Reforms at the micro-level are also very important and include, among others, the introduction of incentive-compatible, cost-sharing mechanisms, more cost-effective procurement practices and use of medicines (especially by encouraging the use of generics), together with an intensification of prevention therapies. All these actions can generate substantial budgetary benefits in the short term, when appropriately applied and sequenced.

European Commission and the Economic Policy Committee (Ageing Working Group), "Joint Report on Health Systems", European Commission Occasional Papers, No 74, December 2010.

Healthcare spending represents a growing share of public expenditure in the EU (about 15% of total spending in the EU in 2012, up from about 14% in 2003). For more details on the determinants and distribution of healthcare spending, see the 2015 Ageing Report, op. cit. footnote 17.

#### Box 1

#### The treatment of fiscal structural reforms

The lack of a precise definition of structural reforms in European Union legislation has led some observers to argue that fiscal structural reforms should also fall under the structural reform clause of the Stability and Growth Pact (SGP). This box first explains that fiscal structural reforms should be distinguished from discretionary policies that have an impact on the fiscal balance. It then recalls why fiscal structural reforms can have very positive effects on growth and fiscal performance in the long run. For most such reforms, the short-term effects are also positive. Overall, it does not therefore appear warranted to include fiscal structural reforms under the reform clause of the SGP.

Fiscal structural reforms need to be distinguished from the discretionary use of fiscal policy as a countercyclical tool or to achieve other short-term government objectives. Fiscal structural reforms aim first and foremost to improve the way the government works and to limit the perimeter of government action to those functions for which there is a clear economic rationale. As such, they have to be separated from fiscal policy actions dealing with the level of government's taxes and expenditures and rather consist of broad-based policy measures in the areas of both taxation and public financial management. Therefore, tax cuts adopted without compensating measures, or spending measures that are not accompanied by broader efforts to rationalise public spending, do not qualify as structural reform measures.

If properly designed and implemented, most fiscal structural reforms can yield positive gains in both the short and long run. In general, fiscal structural reforms do not have adverse budgetary impacts. They should thus not be subsumed under the structural reform clause of the SGP. In a few cases, however, reforms may generate short-term budgetary costs, which are expected to be outweighed by medium to long-term budgetary savings. In these cases, and in line with the Regulation and the Code of Conduct, application of the structural reform clause must be limited only to major reforms for which the benefits for long-term fiscal sustainability can be clearly quantified.<sup>22</sup> The following explains why fiscal structural reforms are important for growth and should rather improve the fiscal performance in the long run.

A revenue-neutral shift of the tax burden towards less distortionary taxes is a prominent example of structural tax reforms that are aimed at making the tax system more growth-friendly.<sup>23</sup> Direct income taxation is distortionary as it discourages investment by reducing the after-tax returns (in the case of corporate income taxes), as well as reducing labour supply and labour demand (hence reducing the long-run level of output) by creating a wedge between the costs firms pay to hire a worker and the net take-home pay (in the case of labour taxes).<sup>24</sup> Moreover, higher social security contributions paid by employers, achieved by increasing firms' labour costs,

Article 5.1 of Regulation 1997/1466 states that structural reforms can be accounted for if they "have direct long-term positive impacts, including by raising potential sustainable growth, and therefore a verifiable impact on the long-term sustainability of public finances".

These recommendations have featured regularly in the country-specific recommendations addressed to EU Member States in the context of the European Semester since 2011. In 2011 eleven countries received a country-specific recommendation; in 2015 this number fell to nine.

Higher labour taxes affect labour supply via both an income effect (higher labour supply, as lower disposable income reduces demand for leisure) and a substitution effect (i.e. lower labour supply owing to lower return on hours worked) so that the net effect is unclear a priori. Empirical evidence suggests that labour supply elasticity is low for male workers, whereas it is positive and higher for female workers.

would reduce labour demand. On the other hand, consumption taxes and property taxes are more neutral vis-á-vis agents' economic decisions. Consumption taxes are neutral to individuals' savings decisions, as they do not influence the rate of return on savings, 25 although they may have negative distributional effects (for example, on low income households, especially if reduced rates for certain goods are suppressed) that reduce the political incentives to adopt them. Recurrent property taxes support land development and land use patterns and help to limit housing booms and short-run volatility in prices around an upward trend.<sup>26</sup> The assessment value of the tax should be linked to the market value of property, although often the former lags behind market values, and moving to a fully market-based assessment is politically challenging. The Eurogroup supports Member States' efforts towards reducing taxes on labour in a budget-neutral way. In particular, given the limited fiscal space in many countries, reductions in the tax burden on labour should be accompanied by either a compensatory reduction in (non-productive) expenditure, or by shifting labour taxes towards taxes that are less detrimental to growth with a view to respecting fiscal targets in line with the SGP.<sup>27</sup> Reducing the tax burden on labour income and compensating for it via an increase in indirect taxes, notably VAT or property taxes, has been advocated as a tool to regain competitiveness domestically in the absence of the possibility of devaluing the nominal exchange rate (i.e. in a currency union). This policy is also known as fiscal devaluation.<sup>28</sup> Reforms of the tax structures can also involve changes in the structure of tax brackets in order to reduce the distortions associated with rate changes and/or make them more progressive.

## Reforms that improve tax administration effectiveness generate higher revenues and, by fostering tax compliance, support the redistributive function of the tax system.

Independence of the revenue administration from political interference (for example, regarding internal organisation and definition of performance standards) and the creation of an oversight board strengthen the transparent enforcement of the tax rules and enhance the accountability of the administration. Simpler procedures for the identification and registration of taxpayers via, for example, the issue of a unique taxpayer identification number, can help the correct filing of tax returns, and strengthen tax collection and assessment activities.<sup>29</sup> Audit and tax verification activities are at the core of the fight against tax evasion and collection of tax arrears and need to be supported by the use of new communication technology.

Consumption taxes exclude current savings from the tax base. As such, the present value of a consumption tax is the same whether the household consumes now or later. By contrast, an income tax (with no deductions for new saving) places a greater burden on savers, because savings enter the tax base. See Garner C.A., "Consumption Taxes: Macroeconomic Effects and Policy Issues", Federal Reserve Bank of Kansas Citv. 2004.

See Crowe C., Dell'Ariccia, G., Igan, D. and Rabanal, P., "How to Deal with Real Estate Booms: Lessons from Country Experiences", Working Paper Series, No 11/91, IMF, April 2011.

In September 2014 the Eurogroup set out common principles for the design of reforms to reduce the tax burden on labour. In addition to the budget-neutrality principle, the other principles are as follows:

1) the design of reforms should be targeted at the country-specific challenges and aimed at the relevant components of the tax burden and at specific groups facing the greatest employment challenges;

2) the impact of reducing the tax burden on labour can be significantly enhanced when they are part of a broader package of labour market reforms; 3) labour tax reforms with offsetting tax or expenditure measures can affect income distribution; it is therefore important to ensure broad societal and political support. This may be achieved inter alia through sharing impact assessments and consulting all the relevant stakeholders, as well as a gradual phasing in of the reforms.

For an analysis on the use of fiscal devaluation as a tool to regain competitiveness, see the box entitled "Fiscal devaluation – a tool for economic adjustment", *Monthly Bulletin*, ECB, Frankfurt am Main, December 2011.

Some revenue agencies operate registration systems that issue unique taxpayer identification numbers or use a citizen or business identification number that is used generally across government agencies. See Araki, S. and Claus, I., "A comparative analysis of tax administration in Asia and the Pacific", Asian Development Bank, 2014.

Improving the quality of fiscal institutions and budgetary frameworks supports the effective implementation of fiscal policies with positive effects on public finances. The adoption of medium-term budgetary frameworks, by lengthening the time horizon of fiscal planning, helps to overcome short-term biases and supports the formulation and implementation of policies, especially if they span several years. A timely monitoring and control of the use of resources is critical for the definition of the main policy objectives.

#### Public financial management reforms are necessary to correct or prevent fiscal imbalances.

They encompass all levels of government and include budget formulation, approval and execution, but also public debt management and the management of off-budget entities and implicit liabilities (for example, government guarantees and public private partnerships). These reforms are crucial to maintain a sustainable fiscal position, guarantee the effective allocation of resources and the efficient delivery of public goods and services. Given the degree of institutional change they often require, the efficiency-enhancing effects of public financial management reforms may take time to materialise.

#### Only a few public financial management reforms may entail short-term budgetary costs.

Reforms that rationalise the structure of the public administration may entail short-term costs when it comes to the payment of possible redundancy benefits. Reforms that rationalise the use of buildings may lead to the payment of termination fees of rental contracts for unused buildings. However, these costs are short-lived and of limited size when compared with the long-term benefits in terms of the improved productivity of the public sector. It should therefore be feasible to cater for them in the normal budgetary process, i.e. their treatment does not require a specific deviation from the SGP framework.

#### 4 Difficulties in measuring the impact of structural reforms

Measuring the quantitative impact of implemented structural reforms is important, not least given its relevance in the application of the provisions of the SGP. As shown in Section 2, the short-term effects of structural reforms implemented by governments are taken into account in the application of SGP provisions.

However, quantifying the impact of implemented structural reforms is subject to a high level of uncertainty. It is necessary to assess the effectiveness of the implementation of a reform or reform package and this depends not only on the adoption of the relevant legislation, but also on the adoption of, sometimes numerous, implementing rules.

Moreover, in order to quantify the effect of parametric reforms a considerable amount of information is required. For certain reforms, such as pension reforms or specific labour market reforms (for example, changes to unemployment benefits or active labour market policies), it is possible to identify direct and measurable costs and benefits. However, since this requires a large

amount of data and other information that is typically available only to governments, it is necessary to rely on official estimates, which are hard to verify. The difficulty of externally verifying government estimates creates a significant incentive problem, as estimates can be biased towards presenting a more favourable budgetary outlook. This is especially important if these estimates come to play an important role in the EU fiscal surveillance framework.

For non-parametric reforms, quantification often relies to a large extent on judgement, thus increasing the risk of a biased assessment. For product market reforms, which mainly entail changes in laws and regulations, costs and benefits are harder to quantify as they cannot be directly observed. Therefore, translating individual measures into effects on observable variables can require a significant amount of judgement and making a balanced assessment is simply not possible.<sup>30</sup>

The assessment of implemented structural reforms based on general equilibrium models needs to be taken with caution. Structural reforms may influence the economy simultaneously via several channels with complementary or offsetting effects, including second-round effects. General equilibrium models (e.g. dynamic stochastic general equilibrium (DSGE) models) can account for country-specific features and allow the effect of reforms on different macroeconomic variables to be simulated under different scenarios. However, the simulation exercise is complex, as it requires knowledge about the degree of implementation of reforms and the quantification of their effects when possible, as discussed above. The assessment can be further complicated by the difficulty of translating actual reform measures into model parameters, either because the necessary information is not available or because existing policies are subsumed under model parameters that do not fully capture the variety and complexity of such policies. As a result, the assessment of implemented reforms is either partial or relies on a significant degree of judgement as regards, for example, the speed and status of reform implementation and the credibility of the announcement.

It is not surprising, therefore, that most existing studies look at the impact of hypothetical structural reforms. Cacciatore et al. (2012)<sup>31</sup> use a DSGE model to simulate the effects of labour and product market reforms when the policy parameters are lowered to the level of a benchmark group of countries. They find that in the long run GDP and consumption increase, and unemployment falls. These effects materialise after two years, and some reforms (for example, job protection reforms) initially entail an increase in unemployment. For a wider range of reform areas (including market competition and regulation, tax structure and unemployment benefit "generosity") Varga and in't Veld (2014)<sup>32</sup> look at the medium to long-term effects of

The Code of Conduct of the SGP requires EU countries to explicitly report in their Stability and Convergence Programmes the effects of recently implemented structural reforms if these are included in the projections together with the underlying assumptions and/or model, including variables and parameters. However, this is not done on a systematic basis by all countries and typically only long-term effects are reported.

Cacciatore, M., 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", OECD Economics Department Working Papers, No 948, 2012, OECD Publishing.

Varga, J. and in't Veld, I. "The potential growth impact of structural reforms in the EU: A benchmarking exercise", *Economic Papers*, No 541, December 2014.

closing by one-half the gap vis-à-vis the three best-performing EU countries. They show that EU GDP increases by 3% after five years and by 6% after ten years. Gomes et al. (2011)<sup>33</sup> use a large-scale DSGE model to assess the impact of an arbitrary reduction in the price and wage mark-ups (by 5, 10 and 15 percentage points) in Germany and Portugal, and find positive long-run effects on GDP and some short-run negative effects in relation to the postponement of consumption in expectation of future lower prices. However, it does not necessarily follow that the benefits of reforms in one country would also materialise in other countries. Similar reforms can have very different effects depending on their interaction with other institutional features of the economy and the national context more generally. Box 2 illustrates the use of DSGE models for reform evaluation, taking the Hartz reforms in Germany as an example.

Empirical studies also have limitations in capturing the short-term impact of implemented reform measures. Isolating the impact of reforms on quantitative indicators may be difficult, because indicators can change for factors other than discretionary government action (for example, spending on active labour market policies) or because such reforms materialise over time. For a wide range of reform areas and indicators (such as labour market reforms, product market regulation and taxation) Bouis et al. (2012)<sup>34</sup> identify major reform shocks when the change in the policy indicator in a given year exceeds 2 standard deviations. They find that, in line with evidence from DSGE models, the gains from reforms take time to materialise. However, no type of reform is found on average to involve significant economic losses in the short run, and some of them are found to deliver some benefits in the short run (for example, reductions in unemployment benefits' replacement rates or reductions in benefits duration).

The short-term effects of structural reforms can be shaped by their interaction with macroeconomic conditions and other policy areas. Bouis et al. (2012) find that the short-term positive effects of some reforms are stronger during good economic times and weaker during bad times. For example, reforms reducing the unemployment benefit replacement ratio generate employment losses if implemented when the labour market is already depressed and labour demand is weak. Likewise, the effects of product market reforms are smoother if the labour market is already flexible and the matching efficiency is higher, allowing laid-off workers to find a new job more easily (Cacciatori et al., 2012).

**Box 2**Measurement of the costs and benefits of the German labour market reforms of the early 2000s

Between 2003 and 2005 Germany adopted fundamental labour market reforms commonly known as the Hartz reforms. These reforms were introduced in response to the comparatively high (long-term) unemployment and low GDP growth which had persisted over several years and were attributed to a fairly inflexible and rigid labour market structure (see Charts A and B).

Gomes S., Jacquinot, P., Mohr, M. and Pisani, M. "Structural reforms and macroeconomic performance in the euro area countries: a model-based assessment", Working Paper Series, ECB, No 1323, May 2011.

Bouis, R. et al., "The Short-Term Effects of Structural Reforms: An Empirical Analysis", OECD Economics Department Working Papers, No 949, 2012, OECD Publishing.

#### **Chart A**

#### Unemployment rate

(percentage of the labour force, monthly seasonally adjusted)

14

12

10

8

6

4

2

0

1970 1975 1980 1985 1990 1995 2000 2005 2010 2015

Sources: Deutsche Bundesbank/Haver Analytics.
Note: The vertical line marks the year in which the Hartz IV reform was

#### Chart B

#### Real GDP growth rate



Source: AMECO.

The Hartz reforms aimed to improve labour market performance. The main objective was to improve the labour market matching efficiency (Hartz I), promote self-employment and introduce more flexible arrangements for low-paid, parttime work (Hartz II); restructure the Federal Labour Agency to further promote the matching process between firms and workers (Hartz III) and increase incentives to work by decreasing unemployment benefits (Hartz IV). The Hartz IV reform entailed a fundamental overhaul of the unemployment benefit system and significantly reduced the level of unemployment benefits for the long-term unemployed. As of January 2005 the means-tested unemployment and social assistance benefits were merged into unemployment benefits II, whereas as of 2006, the duration of the unemployment benefits (renamed as unemployment benefits I) was shortened from 36 to 12 months (18 months for workers aged 55 and over). 35

The Hartz reforms entailed limited short-term economic costs. Following the Hartz IV reform, the unemployment rate initially spiked. This was largely a statistical artefact of the change in the official measurement of unemployment following the reform. Then, unemployment started to decline in the course of 2005 on the back, inter alia, of a pick-up in economic growth (see Charts A and B). As a consequence,

government spending on unemployment benefits increased initially, but started to decline thereafter. Between 2005 and 2014 labour market-related unemployment spending declined from 4% of GDP to 2.5% of GDP.<sup>36</sup>

The positive impact of the Hartz reforms on long-term unemployment and growth is undisputed in the literature. Among the studies assessing the long-run implications of the Hartz reforms there is a consensus that such reforms contributed to a significant reduction in long-run

Before the reform, the unemployment benefit was 60-67% of the last net wage earnings (depending on the number of dependent children) for a maximum of three years (based on age and years of contributions paid). Afterwards, a means-tested unemployment assistance equal to 53-57% of the former net wage was paid for an unlimited amount of time. Means-tested social assistance, amounting to about 45% of the average net wage covered the social welfare net and was granted to people for whom no other welfare benefits were available (for example, people unable to work). In 2008 the maximum duration of unemployment benefit I was extended to 24 months for workers aged 58 and above.

<sup>&</sup>lt;sup>36</sup> See Deutsche Bundesbank, "The Evolution of Labour Market-Related Expenditure in Germany", Monthly Report, 2015, April, pp. 13-33.

unemployment (mainly via wage moderation) and to boosting Germany's GDP growth rate.<sup>37</sup> Some studies find that during the Great Recession those reforms helped, along with short-time working policies, to mitigate the employment losses, as witnessed by the fact that, although Germany experienced a deeper contraction in GDP than the United States, the employment losses were more limited.<sup>38</sup> Finally, others attribute to these reforms Germany's increased international competitiveness.<sup>39</sup>

Model-based simulations of the Hartz reforms allow for an understanding of the main transmission channels of their effects. The Hartz reforms are simulated using FiMod,<sup>40</sup> a New Keynesian dynamic stochastic general equilibrium (DSGE) model. The model contains a complex labour market structure that draws a distinction between unemployed workers receiving unemployment benefits and those receiving unemployment assistance (unemployment benefits I and II respectively). Labour market participation decisions of households are determined endogenously and wages are determined on the basis of a bargaining process between workers and firms. The model also features a sophisticated public sector with multiple types of public revenue and expenditure and feedbacks to the private sector. The simulations of the effects of the labour market reforms considered in this box assume an increase in the efficiency of the job search process (matching efficiency) and a reduction in both the level and the duration of unemployment benefits.

The model simulations presented in this box are subject to some caveats. The model does not capture the increase in the unemployment rate that was recorded after the Hartz IV reform, as it cannot account for the change in the official unemployment classification method following the reform. Firing decisions in the model are exogenous. As such, the positive employment effects of lower wages materialise immediately and do not account for the possibility that, in response to a lower equilibrium wage, firms react initially by laying off the relatively more expensive labour force and later hire new (cheaper) workers.

Improving the matching efficiency of the labour market fostered employment. Following the restructuring of the Federal Labour Agency, unemployed workers were obliged to register with the Agency and were assigned a "personal" tutor to help them in the job search process. This led to an increase in the matching efficiency which, following Krebs and Scheffel (2013), is assumed to have increased by 10% in the model simulations. The increase in employment led to higher gross wages and salaries, thus augmenting private consumption and investment demand. The lower search costs also enabled firms to reduce prices through the marginal cost channel, which fostered international competitiveness and increased exports (see Chart C).

See Krebs, T. and Scheffel, M., "Macroeconomic Evaluation of Labor Market Reforms in Germany", IMF Economic Review, Vol. 61(4), 2013, pp. 664-701; Krause, M. and Uhlig, H., "Transitions in German Labor Market: Structure and Crisis", Journal of Monetary Economics, Vol. 59, 2012, pp. 64-79.

Burda, M. and Hunt, J., "What Explains the German Labor Market Miracle in the Great Recession?", Brooking Papers on Economic Activity, Spring, 2011, pp. 273-319 and Dustman, C., Fitzenberger, B., Schönberg, U. and Spitz-Oener, A., "From Sick Man of Europe to Economic Superstar: Germany's Resurgent Economy", Journal of Economic Perspectives, Vol. 28, 2014, pp. 167-188.

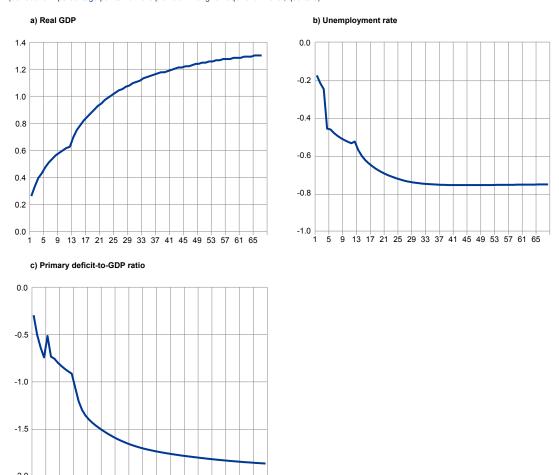
Kollman, R., Ratto, M., Roeger, W., in't Veld, J. and Vogel, L., "What Drives the German Current Account? And How Does It Affect Other EU Member States?", Economic Policy, Vol. 30, 2015, pp. 47-93.

FiMod is a two-region model of a monetary union. For the simulation at hand, it is calibrated to Germany and the rest of the European Monetary Union. For a full description of the base model, see Stähler, N. and Thomas, C., "FiMod – A DSGE Model for Fiscal Policy Simulations", *Economic Modelling*, Vol. 29, 2012, pp. 239-261.

**Chart C**Impact of Hartz reforms on selected macroeconomic aggregates in Germany

(deviations in percentage points from the pre-reform long-run equilibrium level; quarters)

5 9 13 17 21 25 29 33 37 41 45 49 53 57 61 65



The merging of unemployment and social assistance further decreased firms' unit labour costs by reducing the workers' reservation wage. The decline in unemployment assistance following the merger of the unemployment and social assistance led to a decrease in the workers' reservation wage and induced workers to accept lower wages. This allowed firms to further decrease prices and employ more workers. The reduction in the duration of unemployment benefits I had similar effects.

Overall, the Hartz reforms did not entail large short-term economic and fiscal costs. The model simulations contained in this box show that labour market reforms that reduce reservation wages and make the labour market more flexible would have positive effects on employment. This is supported by other studies (Cacciatore et al., 2012)<sup>41</sup> which find that labour market reforms aimed at reducing the workers' (reservation) wage tend to generate relatively little costs in terms of aggregate macroeconomic outcome.

Op. cit. footnote 31.

#### 5 Conclusions

The short-term fiscal effects of structural reforms have recently gained prominence in the implementation of the SGP. The structural reform clause introduced by the 2005 reform of the SGP allowed for a delay in fiscal adjustment if a Member State implemented a major structural reform with direct long-term positive budgetary effects, including by raising potential sustainable growth. However, the clause did little to spur reform momentum. The recent Communication of the European Commission on making best use of existing flexibility within the existing rules of the SGP attempts to revive the structural reforms clause, partly by relaxing the requirements for its application.

#### However, the structural reform clause of the SGP should be carefully applied.

Structural reforms can affect the economy, and public finances in particular, via multiple channels. As shown in this article, the reforms with direct short-term costs are systemic pension reforms. In other cases, the net effect is difficult to pin down (for example, labour and product market reforms), as it also depends on how reforms are bundled in practice. Moreover, there are many examples where the short-term effects of structural reforms are actually positive. Therefore, it is important that the assumptions underlying the decision to apply such a clause are spelled out in a clear and transparent way.

While a quantification of the costs of reforms is necessary for their incorporation in the SGP, this generally has to rely on judgemental assumptions. Model simulations of the effects of reforms are typically surrounded by a large degree of uncertainty. The lack of a shared methodology at the EU level to assess the effects of structural reforms speaks in favour of a cautious application of the SGP provisions on structural reforms.

Alternative ways to support the adoption and implementation of structural reforms in the euro area should be sought. The Five Presidents' Report 12 published in June 2015 is a useful reference point in this respect. The Report 13 identifies steps towards a genuine Economic Union and emphasises, among 14 other things, the need to achieve sustainable convergence in the euro area, 15 which requires a renewed impetus to foster structural reforms in Member States. The report encourages further steps towards better coordination and surveillance of 16 policies that are relevant for competitiveness. It recommends the creation by each 16 euro area member country of an independent national body – or "competitiveness 17 authority" – which would be in charge of tracking performance and policies that 16 influence a country's competitiveness. The report foresees scope for strengthening 16 the Macroeconomic Imbalance Procedure not only as a tool to detect imbalances,

<sup>42</sup> See "Completing Europe's Economic and Monetary Union", available at http://ec.europa.eu/priorities/economic-monetary-union/docs/5-presidents-report\_en.pdf

but also to encourage structural reform implementation via the European Semester. The importance of an institution-based approach for the governance of structural reforms in the euro area has also been reiterated by the ECB's President in his call for "a move from rules towards institutions". A European institution could help in two respects: first, by making it easier to agree on the aims of structural reforms by aligning to best practice; and, second, by making it easier to implement them, using European law to bypass vested interests.

See also Banerji, A., Barkbu, B., John J., Kinda, T., Saksonovs, S., Schoelermann, H. and Wu, T., "Building a Better Union: Incentivising Structural Reforms in the Euro Area", *Working Paper Series*, No 15/201, IMF, September 2015.

See the speech by the President of the ECB at the SZ Finance Day, Frankfurt am Main, 16 March 2015, https://www.ecb.europa.eu/press/key/date/2015/html/sp150316.en.html