# WEB APPENDIX: Construction of the 2009-2013 Fiscal Adjustments

For each country we first provide a table with a brief summary of the consolidation measures undertaken in 2009-2013 and then a year-by-year description of the plans.

Austria

Summary Table

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | $$τ\_{t}^{u}$$ | $$τ\_{t,0}^{a}$$ | $$τ\_{t,1}^{a}$$ | $$τ\_{t,2}^{a}$$ | $$τ\_{t,3}^{a}$$ | $$g\_{t}^{u}$$ | $$g\_{t,0}^{a}$$ | $$g\_{t,1}^{a}$$ | $$g\_{t,2}^{a}$$ | $$g\_{t,3}^{a}$$ | TB | EB |
| 2011 | 0.4 | 0.0 | 0.2 | 0.1 | 0.1 | 0.3 | 0.0 | 0.2 | 0.1 | 0.1 | 1 | 0 |
| 2012 | 0.4 | 0.2 | 0.4 | 0.0 | 0.0 | 0.2 | 0.2 | 0.5 | 0.6 | 0.5 | 0 | 1 |
| 2013 | 0.0 | 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | 0.5 | 0.6 | 0.5 | 0.4 | 0 | 1 |

The Austrian federal government introduced in 2009 a package of discretionary stimulus measures to counterbalance the weak economic prospects. These measures contributed to a worsening of the budget deficit that increased from 0.9% of GDP in 2008 to 4.6% in 2010.

In December 2009 Austria entered the Excessive Deficit Procedure and a four-year consolidation plan was designed in the autumn of 2010. Most of the measures were to be implemented in 2011. Spending cuts amounted to 0.3% of GDP and consisted in savings from pensions, reduction in transfers, subsidies and social spending, but were partially offset by the extension of some special priority funds (in particular for education and R&D). The plan also envisaged some measures on the revenue side worth 0.4% of GDP including a special stability levy on banks and an increase in environmental and tobacco taxes. The announced impact of the plan in 2012 was about 0.2% on spending and 0.2% on the revenue side. It was about 0.05% and 0.1% respectively in both 2013 and 2014.

A second round of consolidation was announced in early 2012 with a greater emphasis placed in reducing spending. The plan included structural reforms in the field of pensions (an increase in the retirement age, stricter eligibility criteria for disability pensions), health (introduction of an expenditure cap), subsidies and administration (pay freeze and better management). Moreover, it foresaw changes in the taxation of high-income individuals and business groups and measures against tax avoidance, such as a special withholding tax on capital gains from assets held in Switzerland and the closure of VAT loopholes. The impact of the spending measures was expected to be increasing over time – only 0.17% in 2012, but 0.4% in 2013, 0.5% in 2014 and 2015 and 0.4% in 2016. Revenue measures totaled 0.4% in 2012 and 0.3% in 2013 but a small tax cut (due to the expiration of the withholding tax) was announced for 2014.

Detailed Description

Austria 2011[[1]](#footnote-1)

### Note on 2009 and 2010. No consolidation in 2009 and 2010, “In light of the weak economic environment in 2009, the Federal Government aims at securing  economic  growth  and  employment.  The  good  budgetary  starting  position  of the  year  2008  allowed for large volume economic and employment stimulus packages as well as a tax reform, leading to a financial relief for all wage and personal income tax payers and families. These  measures have aimed at stimulating purchasing power and aggregate demand, especially in the  years  2009  and  2010,  and  continue to  contribute to the  European  Economic Recovery  Plan .” (Austrian Stability Programme  for the period 2009 to 2013, p. 13)

“The BVA for 2011 is part of a comprehensive multi-annual consolidation plan which was designed in autumn 2010.” (Austrian Stability Programme for the period 2010-2014, p. 15). The plan foresees spending savings of € 1.4 billion[[2]](#footnote-2)We excluded savings on interests and “Measures on the revenue side”, OECD (2011) did since they seem redundant with respect to the other tax measures listed in the specific table at p. 17. and increased revenues for about € 1.2 billion in 2011 (Austrian Stability Programme for the period 2010 to 2014, pp. 16-17). Measures were expected to achieve saving of € 2.5 billion and higher revenues of about € 2.2 by 2014. The plan also included the extension of some special priority funds (universities, schools, R&D, thermal insulation and structural health funds) for € 0.5 billion in 2011 and a total € 0.7 by 2014. Subtracting the impact of this measures, that can be considered motivated by long run considerations, **in 2011 fiscal consolidation amounted to € 2.071 billion (0.69 percent of GDP), consisting of spending cuts for € 0.907 billion (0.3%) and revenue increase of € 1.164 billion (0.39%)**.

Austria 2012

“The Federal Government is committed to follow the budgetary policy recommendations in the context of the Excessive Deficit Procedure, the reformed Stability and Growth Pact (SGP) and the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (TSCG). With a view to reducing the budget deficit and the public debt ratio, ensuring room for man oeuvre for Austria and its public finances in the future, improving the quality of budget structures and achieving the targets set at the European level, the Federal Government has approved a comprehensive consolidation package, including reforms in the field of pensions, health, subsidies and administration, as well as socially balanced measures on the revenue side and the closure of tax loopholes. Some measures have already come into force on 1 April 2012, and the National Parliament has already approved a large part of the stability package” (Austrian Stability Programme Update for the period 2011 to 2016). The package comprised a series of measure both on the expenditure (Pension and unemployment insurance system, subsidies, public administration, health care) and on the revenue (introduction of a “solidarity fee” paid by high income individuals, change to business group taxation, imposition of a tax on financial transactions starting from 2014 and some changes in private savings taxation and VAT) side. The foreseen budgetary impact of expenditure measures was € 0.5 billion[[3]](#footnote-3)We excluded savings on interest. in 2012, € 6,203 billion by 2016, and higher revenues of around € 1 billion were expected in 2012, € 2,168 by 2016. In addition the plan approved in autumn 2010 (see entry for 2011) generated savings of € 0.5 billion and revenues of € 0.577. **Hence, in 2012 fiscal consolidation totaled € 2.708 billion (0.89 percent of GDP), € 1.033 billion (0.34%) spending cuts and € 1.675 billion (0.55%) tax hikes.**

Austria 2013

“Austria is pursuing the strategy of growth-friendly consolidation as already introduced in the 2012 National Reform Programme with a balanced mix of measures on the revenue side as well as the spending side” (National Reform programme, Austria, 2013, p. 2). There weren't new measures: “The measures foreseen in the Austrian Stability Package for the time frame 2012-2016 are a combination of mostly savings, measures related to revenues, proactive measures and contributions by states and municipalities. Details can be found in last year’s Austrian Stability Programme” (Austrian Stability Programme for 2012 to 2017, p. 18). **Fiscal consolidation amounted to € 2.615 billion (0.85 percent of GDP), € 1.49 billion (0.48%) spending cuts and €1.125 (0.37%) tax hikes,** and was entirely due to measures announced in 2012 and in autumn 2010.

Belgium

Summary Table

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | $$τ\_{t}^{u}$$ | $$τ\_{t,0}^{a}$$ | $$τ\_{t,1}^{a}$$ | $$τ\_{t,2}^{a}$$ | $$τ\_{t,3}^{a}$$ | $$g\_{t}^{u}$$ | $$g\_{t,0}^{a}$$ | $$g\_{t,1}^{a}$$ | $$g\_{t,2}^{a}$$ | $$g\_{t,3}^{a}$$ | TB | EB |
| 2010 | 0.4 | 0.0 | 0.3 | 0.0 | 0 | 0.6 | 0.0 | 0.1 | 0.0 | 0 | 0 | 1 |
| 2011 | 0.2 | 0.3 | 0.0 | 0.0 | 0 | 0.1 | 0.1 | 0.0 | 0.0 | 0 | 1 | 0 |
| 2012 | 1.3 | 0.0 | 0.2 | 0.2 | 0 | 1.2 | 0.0 | 0.4 | 0.6 | 0 | 0 | 1 |
| 2013 | 0.6 | 0.2 | 0.2 | 0.0 | 0 | 0.5 | 0.4 | 0.6 | 0.0 | 0 | 0 | 1 |

After a period of fiscal stimulus (and substantial capital injections to save the main players in the financial sector), in 2010 the Belgian government returned to the consolidation path that was in place before the crisis (the Belgian public debt had fallen from close to 140% of GDP in 1990 to just above 80% in 2006). In December 2009 Belgium was subject for the first time to the Excessive Deficit Procedure and the European Council recommended taking actions to restore fiscal balance by 2012. The Belgian fiscal strategy consisted in short and frequent plans: between 2010 and 2013 a new plan was adopted each year.

The fiscal package implemented in 2010 was mostly on the revenue side, including hikes in corporations and environment related taxes, a special contribution on the nuclear energy and financial sectors and increased efforts to fight tax evasion. These measures generated an impact of 0.4% of GDP in 2010 and 0.3% was announced for 2011. Spending cuts at the federal government level consisted in a reduction of health care and social security expenditure and cuts to personnel and other primary expenses. These measures, along with some additional spending cuts introduced by regional governments, amounted to 0.6% in 2010 and 0.1% in 2011.

A new set of unexpected measures was introduced in 2011 totaling 0.2% of GDP on the revenue side (abolition of banking secrecy, regularization of evaded taxes) and 0.1% on the spending side (health care and anti-social security fraud).

The 2012 package implemented by a new coalition government marked discontinuity and principally consisted in reductions in primary and social security expenditures. Cuts of 1.2 were implemented immediately and additional 0.4% and 0.6% were announced for 2013 and 2014. On the revenue side, environmental taxes were raised and some changes were made in corporate taxation. The impact of these measures was 1.3% in 2012, but only 0.2% in 2013 and 2014. An additional consolidation was introduced in 2013 with a roughly equal impact on the spending and on the revenue side (0.6% and 0.5% respectively).

Detailed description

Belgium 2010[[4]](#footnote-4)

### Note on 2009: “According to the provisional figures, the balance for the public administrations should post a deficit of 5.9% of GDP in 2009, the highest deficit since 1993 at the time of the crisis of the European Monetary System. For the first time since the inception of the European economic and monetary Union, therefore, Belgium has exceeded the threshold of 3% of GDP authorized by the Stability and Growth Pact. However, as the Ecofin Council pointed out in its recommendations to Belgium, this situation is the result of “special” circumstances. In particular, the financial crisis had a dramatic effect on economic activity, thus weighing heavily on Belgium’s public finances, by way of the cyclical component on the one hand and by way of the structural component associated notably with the stimulus plan on the other, as recommended by the European Commission in October 2008” (Belgian Stability Programme, 2009-2012). No measures of consolidation were taken.

“On 2 December 2009, for the first time since the start of Economic and Monetary Union, Belgium was subjected to an excessive deficit procedure, in common with 22 other Member States at present. In that context, the European Council of 2 December 2009 recommended that the Belgian government should put an end to the excessive deficit procedure in 2012 at the latest by making a structural effort averaging 0.75 % of GDP per annum. The European Council also advocated the earliest possible implementation of the measures laid down in the 2010/2011 multi-annual budget. In January 2010, Belgium submitted a stability programme under which the excessive deficit procedure would end in 2012 and public finances would be restored to balance in 2015” (Belgian Stability Programme 2011-2014, p.9). Measures undertaken to face the excessive growth of deficit are outlined in the Belgian Stability Programme 2009-2012. At the federal government level, savings of almost € 1 billion were planned for 2010 and € 0.287 for 2011 (Belgian Stability Programme 2009-2012, Table 17, p. 37), mainly consisting in reduction of health care and social security expenditure and cuts to personnel and other primary expenses. On the revenue side, corporations and environment related taxes were increased and a special contribution was demanded to the nuclear energy and financial sector. These measures along with an increased effort to combat tax evasion, were expected to lead € 1.395 billion in 2010 and additional € 1.027 in 2011[[5]](#footnote-5).The federal government also committed to propose by mid-year additional measures of consolidation, such as the reform of pension system for civil servants. However, since the programme does not provide more details, it is impossible to asses the budgetary impact of these initiatives. At the same time a number of anti-crisis measures introduced in 2009 were extended and new expansionary initiatives were put in place (p. 37). However we don't take these into account since they were motivated by cyclical rather than long term justifications. Regions as well contributed to the deficit reduction effort and in particular Flanders put in place an expenditure restraint totaling € 1.258 billion in 2010[[6]](#footnote-6)The document also reports measures undertaken by other regions. However we don’t take them into account because they seems non budgetary or not motivated by deficit reduction. (p. 44). **Hence in 2010 fiscal consolidation totaled € 3.652 billion (1.03 percent of GDP), including spending cuts for € 2.257 billion (0.63%) and revenue increase of € 1.395 billion (0.39%).**

Belgium 2011

“At federal level, despite its caretaker status[[7]](#footnote-7)From the June 2010 general election, a very fragmented parliamentary situation emerged, making really hard to find an agreement for the government formation. A proper government was named only in December 2011., the government decided to take the necessary measures to comply with the European requirements by placing the emphasis partly on expenditure control and partly on optimizing the collection of public revenues and stepping up the control of social security fraud and tax evasion.” (Belgian Stability Programme 2011-2014, p. 24). The federal government approved for 2011 a supplementary effort on the expenditure side of € 0.5 billion (mainly health care and anti-social security fraud measures) and on the revenue side of around € 0.7 billion (abolition of banking secrecy, regularization of evaded taxes, court settlements etc.)[[8]](#footnote-8)A number of measures were also undertaken by regional governments. However we don't take them into account because they seem related to the economic cycle (see Belgian Stability Programme 2011-2014, pp. 28, 30 and 33).. Thanks to these measures, along with to the ones already introduced in 2010, **fiscal consolidation totaled € 2.513 billion (0.33 percent of GDP), € 0.793 billion (0.22%) from expenditure restraint and € 1.72 billion (0.48%) from tax hikes**.

Belgium 2012

“Belgium is committed to limiting the general government deficit to 2.8% of GDP in 2012. [...] In December 2011 the federal government drew up the initial budget for 2012 in a multiannual perspective covering the period 2012-2014. The guiding principle behind this initial budget is the April 2011 stability programme for 2011-2014. The federal government was careful to adhere to the path which that programme proposes. [...] The measures taken under the initial budget can be broken down into those relating to expenditure, revenue and other factors. Altogether, these measures enable Entity I to achieve the wished deficit, such as proposed by the High Council of Finance” (Belgian Stability Programme 2012-2015, pp. 21-22). Measures contained in the 2012 budget are summarized in Table 10 (p. 22) and listed in pp. 83-84. Considering all the revenue increasing and expenditure reducing measures and adding some relevant initiatives listed under others, on the spending side the budget envisaged a consolidation of € 4.387 billion in 2012, € 1.664 billion in 2013 and € 2.058 in 2014 and on the revenue side € 4.852 billion in 2012, € 0.760 billion in 2013 and € 0.884 billion in 2014[[9]](#footnote-9)The Flemish community also introduced some new initiatives to reduce deficit but we don't consider them since they were off-set by higher spending to stimulate economy (p. 39). In the Brussels-Capital Region an expenditure increase was projected to stimulate job-creation, but this seems to be motivated by cyclical considerations (p. 42).. **Hence in 2012 fiscal consolidation totaled € 9.239 billion (2.46 percent of GDP), consisting of spending cuts for € 4.387 billion (1.17%) and tax hikes of € 4.852 billion (1.29%).**

Belgium 2013

“During the November 2011 negotiations concerning the coalition agreement, a multi-annual budget plan for 2012-2014 was drawn up. On the basis of the growth forecasts at that time, this plan assumed that the fiscal deficit would be cut to 2.8% of GDP in 2012, with a structural balance being achieved in 2015. [...] To that end, a package of measures was approved at the level of federal government and social security [...]. The key elements of this multi-annual plan were presented in the stability programme submitted last year. The measures described below, taken in connection with the initial budget and the 2013 budget review, are additional to the effects of the multi-annual plan” (Belgian Stability Programme 2013-2016, p. 34). The 2013 initial budget included initiatives for 2013 on the spending (€ 1.410 billion) and on the revenue side (€ 1.1) plus some miscellaneous measures raising roughly €0.8 billion[[10]](#footnote-10) We excluded revenues coming from the sale of government assets (e.g., auction of 800 MHz).additional revenues. Other initiatives were undertaken during the revision of the budget, in March 2013, leading to additional spending cuts of € 0.523 billion (personnel and social security) and higher revenues for € 0.364 billion (tobacco duty, registration fees)[[11]](#footnote-11)The Belgian Stability Programme also reports that regional governments undertook some measures during the year, but we don't take them into account because they were motivated by the worsening of economic conditions (as in the case of Walloon Region and the French Community) or were offset but new initiatives (as in the case of Flemish Community).. Thus, alsotaking into account the impact of the 2012 multi-year plan, **in 2013 fiscal consolidation totaled € 6.601 billion (1.73 percent of GDP), including € 3.597 billion (0.95%) spending cuts and € 3.004 billion (0.79%) revenue increase.**

Denmark

Summary Table

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | $$τ\_{t}^{u}$$ | $$τ\_{t,0}^{a}$$ | $$τ\_{t,1}^{a}$$ | $$τ\_{t,2}^{a}$$ | $$τ\_{t`,3}^{a}$$ | $$g\_{t}^{u}$$ | $$g\_{t,0}^{a}$$ | $$g\_{t,1}^{a}$$ | $$g\_{t,2}^{a}$$ | $$g\_{t,3}^{a}$$ | TB | EB |
| 2010 | 0 | 0 | 0.4 | 0.1 | 0.5 | 0 | 0 | 0.6 | 0.6 | 0.6 | 0 | 1 |
| 2011 | 0 | 0.4 | 0.1 | 0.5 | 0 | 0 | 0.6 | 0.6 | 0.6 | 0 | 0 | 1 |
| 2012 | 0.3 | 0.1 | 0.6 | 0 | 0 | 0 | 0.6 | 0.6 | 0 | 0 | 0 | 1 |
| 2013 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0.6 | 0 | 0 | 0 | 0 | 1 |

Denmark put in place countercyclical fiscal policies in 2009 and 2010. In particular, a labor-tax reform (“Spring Package 2.0”) was announced in 2009 and consisted of an immediate reduction of taxes on labor income financed with an increase in other duties (environmentally related, unhealthy food, individual business sectors) that only became effective starting in 2011. Denmark entered the crisis having sound public finances with a debt-to-GDP ratio below 50% and a general government deficit lower than 3% in 2010. However, large automatic stabilizers and discretionary measures caused a significant increase in public spending and made the deficit likely to deteriorate.

Denmark was thus subject to the Excessive deficit procedure and consolidation measures were introduced... In May 2010 the government adopted a package that was expected to lead to a budgetary improvement of 2.1% of GDP by 2013. Targeting public expenditure was the main objective and was pursued by imposing a real-term freeze in public consumption growth, better control of budgetary execution at the local level and a reduction in the duration of unemployment benefits. The plan also included some tax measures. The announced impacts of the plan were, on the spending side, 0.6 for 2011, 2012 and 2013; on the revenue side measures for 0.3 were announced for 2011 and 0.1 for 2012 and 2013. Some of the financing elements of the Spring 2.0 package came into operation in 2011 (0.1%) and 2013 (0.4%).

An additional but small increase in taxes and excise duties was introduced in the 2012 Budget Bill (0.2% of GDP in 2012 and 0.1% announced for 2013).

Detailed Description

Denmark 2011[[12]](#footnote-12)

### Note on 2009 and 2010. “Denmark appears to be among the OECD countries that have eased fiscal policy the most in 2009 and 2010 in order to support growth and employment. The fiscal stimulus over the two years has a budget impact of around 60 billion DKK in 2010” (Denmark's Convergence Programme 2009, p. 15). No measures of fiscal consolidation were adopted in these years.

After fiscal stimuli in 2009 and 2010, the government adopted a new consolidation package in May 2010 to be implemented from 2011 onward. “The CPs medium-term budgetary strategy aims at bringing the general government deficit below the 3% reference value by 2013, in line with the deadline set by the Council, and achieving the revised Medium Term Objective (MTO) of a structural budget deficit not bigger than 0.5% of GDP in 2015 and at least a structurally balanced budget by 2020.” (Assessment of the 2011 national reform programme and convergence programme for Denmark, p. 7).The package includes “a real-term freeze in public consumption, better control of budgetary execution at the local level, a reduction in the unemployment benefits period and tax measures” (p.8). The total expected impact of the consolidation amounts to 2.3% of GDP by 2013 and the distribution of the impacts over the years is as follows: in 2011 0.6 % on the spending side and 0.3 % on the revenue side; in 2012 0.6% from expenditure reduction and 0.1% from revenue increase; in 2013 a decrease in spending of 0.6% and an increase in revenues of 0.1% (Table “Main Budgetary measures, p. 9). In addition, The financing measures of the spring 2009 tax reform (Spring Package 2.0*[[13]](#footnote-13)*The Spring Package 2.0 is a tax reform announced in March 2009 whose primary focus was “to increase labor supply and thereby strengthen longer-term growth prospects particularly through a lowering of marginal income taxes” (Denmark's Convergence Programme 2009, p. 56). It consisted in a reduction of taxes on labor income financed through other revenues enhancing initiatives (higher environmental taxes, higher taxes on unhealthy food, lower deductions and removing special arrangements for individual business sectors). The tax cuts were quickly implemented, “to support activity and employment in the short term” (p. 56), while the financing measure were implemented gradually in the following years.) came into operation, generating and additional improvement of 0.1% of GDP in 2011 and 0.4% in 2013 on the revenue side. **Thus, in 2011 fiscal consolidation totaled 1 percent of GDP, of which 0.6 came from spending restraint and 0.4 from tax increase.**

Denmark 2012

In addition, to the measures adopted in May 2010 (see entry for 2011), new tax elements were introduced in the 2012 Budget Bill (Assessment of the 2012 national reform programme and convergence programmer for Denmark, p. 11) that were expected to generate a budgetary improvement of 0.2% of GDP in 2012 and 0.1% of GDP in 2013[[14]](#footnote-14).As Denmark's Convergence Programme 2012 (p. 12) reports, a special expansionary plan (Kickstart plan) was also implemented with the Fiscal Bill 2012.It consisted of energy and transports investments, that are said to be neutral for public finances (p. 7), housing subsidies and public investments. Since the latter mostly have a one-off nature, we believe that they are linked to short rather than long run objectives and hence, as potentially endogenous, we don't take them into account. Hence, **in 2012 fiscal consolidation** **amounted to 0.9 percent of GDP, 0.6 on the spending side and 0.3 on the revenue side**.

Denmark 2013

“The consolidation of the public finances from 2010 to 2013 is mainly due to the phasing in of the financial elements from the tax reform in Spring Package 2.0 (February 2009) as well as the initiatives in The Fiscal Consolidation Agreement (May 2010) and Agreements of the Approved budget bill for 2012. [...] The approved budget bill for 2013 continues the line of responsible fiscal policy. The agreement is considered to be neutral for the public finances in 2013” (The national reform programme, Denmark, 2013, p. 13). Fiscal consolidation in the year consisted only in measures introduced in May 2010 and in 2012 and it totaled **1.2 percent of GDP (0.6 tax and 0.6 spending).**

France

Summary Table

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | $$τ\_{t}^{u}$$ | $$τ\_{t,0}^{a}$$ | $$τ\_{t,1}^{a}$$ | $$τ\_{t,2}^{a}$$ | $$τ\_{t,3}^{a}$$ | $$g\_{t}^{u}$$ | $$g\_{t,0}^{a}$$ | $$g\_{t,1}^{a}$$ | $$g\_{t,2}^{a}$$ | $$g\_{t,3}^{a}$$ | TB | EB |
| 2011 | 1.16 | 0 | 0.66 | 0 | -1.1 | 1.32 | 0 | 0.44 | 0.41 | 0.05 | 0 | 1 |
| 2012 | 0.39 | 0.66 | 0.25 | 0.45 | 0 | 0.63 | 0.44 | 0.59 | 0.3 | 0 | 0 | 1 |
| 2013 | 1.4 | 0.25 | 0.45 | 0 | 0 | 0.6 | 0.59 | 0.7 | 0 | 0 | 1 | 0 |

In France the forecasted deficit for 2009 was 4%. The intention to start a multi-year plan of fiscal consolidation appears clear in the budget reports of the government. In December 2010 the Initial Budget Act and the Social Security Budget Act were approved and generated revenues for 0.6% of GDP mainly from measures financing social security debt, with a few minor changes to VAT on “triple pay”. Additional revenue increases were announced for 2012 with an impact of 0.6%, while in 2013 the impact is negligible and a cut in taxes of 1.1% was announced for 2014. These announcements were also the result of new measures announced on the 24th of August and 7th November 2011. Additional proceeds of 0.52% of GDP came from a package of measures approved before the 24th of August.

The two Acts of late 2010 were complemented by the Pension Reform of 2010, programmed to increase the retirement age and make the pension system sustainable over the long-run. The latter one generated savings from 2011 to 2013. Additional expenditure savings came from reductions in National Healthcare expenditure, wage bill savings and cuts in state operating costs for a total amount of 0.6% of GDP and an extra 0.75% came from the withdrawal of previously planned stimulus measures. Further measures for 0.4% were announced for 2012 and 2013, while 0.1% worth of savings was announced for 2014. The consolidation in 2011 turned out to be spending-based.

In 2012 unexpected tax measures for 0.4% of GDP were implemented, accompanied by announcements of 0.3% for 2013 and 0.5% for 2014. On the spending side, the government implemented the measures announced in November 2011 and additional cuts approved in the Budget Bill and in the Supplementary Budget Act promulgated in March for a total of 0.6%. The announcements for 2013 and 2014 were updated with a further cut of 0.2% in both years introduced on November 9th. The consolidation of 2012 was again spending-based.

In 2013 there were new unannounced tax increases in personal income taxes, wealth tax, social levies on capital income and capital gains, and increases in indirect taxes. Moreover, spending cuts for 0.6% were implemented and regarded the compensation of employees, running costs in central government and social transfers to households. Part of the 0.6% of savings was raised thanks to the introduction of some constraints such as a freeze to real and nominal spending growth that was worth € 1 billion of savings a year from 2013 on. Further spending curtailments coming from the MAP (*Modernisation de l’Action Publique*) spending review and cuts in transfers to local authorities added 0.4% of savings to the measures already announced for 2014. Given the total amount of new tax measures decided in 2013, the style of the consolidation in France reversed to tax-based.

Detailed Description

France 2011[[15]](#footnote-15)

“In this context, the Government has resolved to pursue its fiscal consolidation policy in order to reduce the deficit to 3% of GDP by 2013, regardless of the economic situation. To this end, the Government intends to stimulate the economy’s potential growth by expanding the structural reforms undertaken since 2007, particularly in the areas of education, innovation, research and development, and competition. The Government’s strategy in this regard is detailed in the National Reform Programme. The Government has also intensified its efforts to control public spending over the long term, and these efforts began to show results in 2010. Given the already high level of the tax burden in France, the Government is determined to focus its efforts on reducing spending.” (France Stability Programme 2011-2014, April 2011, p. 4). The savings measures that were taken to ensure the reduction of public deficit in 2011 were introduced in the Initial Budget Act (LFI) and the Social Security Budget Act (LFSS) in December 2010. The total amount of measures in the two Acts is € 11.9 billion (0.59% of GDP) and is fully based on tax hikes. The LFI and LFSS also announce measures for 2012 for a total of € 2.4 billion (0.12% of GDP), fully based on tax hikes. Moreover, in November 2010 a Pension Reform is approved. The latter has a forecasted impact of € 16 billion up to 2016 (Stability Programme 2012-2016, April 2012, p. 31)[[16]](#footnote-16). The impact for 2011 is € 1.5 billion (0.075% of GDP). There are additional spending cuts concerning wage bills, state's operating costs and savings under the National Health Expenditure Target that were announced on the 24th of August and account for total savings of € 9.7 billion (0.49% of GDP). Moreover, stimulus measures amounting to € 15 billion (0.75% of GDP) were withdrawn (OECD Restoring Public Finances, 2011). Finally, additional revenues measures for € 1 billion (0.05% of GDP) were introduced on the 24th of August and a package of measures was announced before the 24th of August with an impact of € 10.4 billion (0.52% of GDP) in 2011 and € 2 billion (0.1% of GDP) in 2012. Therefore, **total fiscal consolidation amounts to 2.475% of GDP (0.59+0.075+0.49+0.05+0.52+0.75), with tax hikes of 1.16% (0.59+0.05+0.52) and spending cuts of 1.315% (0.49+0.075+0.75).**

France 2012

“The Government upheld its unwavering commitment to reduce general government deficit, despite the worsening of the economic situation that started in the third quarter of 2011. On 24 August 2011, the Government decided to back up the revision of its growth forecast with an effort to trim the deficit by €11 billion in 2011 and 2012, and, on 7 November 2011, it decided to cut another €17.4 billion between 2012 and 2016” (Stability Programme 2012-2016, p. 4). The government continues on the deficit consolidation path started in 2011. Given the bad economic conditions, the adjustment appears purely motivated by the need to improve the fiscal stance. “After the deficit came out better than expected at 5.2% of GDP in 2011, the programme plans to bring it down to 3% of GDP in 2013, which is the deadline set by the Council for correcting the excessive deficit, and to continue consolidation thereafter, with a balanced budget to be achieved by 2016” (European Commission Recommendation for a Council Recommendation on France 2012 National Reform Programme and delivering a Council Opinion on France Stability Programme for 2012-2016, May 2012, p. 3). Consolidation was a consequence of measures introduced in 2011 (in and before August, and hence considered announced for 2012, and in November, unexpected). In addition, spending cuts were introduced in the Budget Bill and in the Supplementary Budget Act promulgated in March. **Total fiscal consolidation amounted to 2.12% of GDP, with spending cuts for 1.07% of GDP and tax hikes for 1.05% of GDP.**

France 2013

“The main goal of the 2013 stability programme is to achieve the medium-term objective (MTO), i.e. a balanced budget in structural terms, as in last year’s programme” (Assessment of the 2013 national reform programme and stability programme for France, p. 10). The Government's objective is to reduce the debt-to-GDP ratio and achieve a structural balance in public accounts in the medium term (2016). To this end, particular attention is paid to a structural consolidation, through measures that preserve growth. The measures introduced in the year follow the consolidation started in 2011. The total impact on spending is € 11.1 billion[[17]](#footnote-17) and tax hikes are € 5.2 billion. Moreover, we have to take into account additional measures that are introduced in 2013 and are presented in the Assessment of the 2013 national reform programme and stability programme for France (p. 14). The impact of these measures on spending in 2013 is a reduction of 0.6% of GDP, while tax hikes are 1.4% of GDP[[18]](#footnote-18). Announces for 2014 prescribe a tax reduction for 0.2% of GDP and spending reductions amounting to 0.4% of GDP. Finally, the criteria introduced in 2011 prescribing spending ceilings with a twofold growth rule (“zero nominal growth” and “zero real growth”) cut spending for € 1 billion (0.05% of GDP) per year in the period 2013-2016. **Therefore, total announced fiscal consolidation amounts to 2.84% (0.54+0.25+0.6+1.4+0.05) of GDP, with spending cuts for 1.19% of GDP and tax hikes for 1.65% of GDP.**

Germany

Summary Table

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | $$τ\_{t}^{u}$$ | $$τ\_{t,0}^{a}$$ | $$τ\_{t,1}^{a}$$ | $$τ\_{t,2}^{a}$$ | $$τ\_{t,3}^{a}$$ | $$g\_{t}^{u}$$ | $$g\_{t,0}^{a}$$ | $$g\_{t,1}^{a}$$ | $$g\_{t,2}^{a}$$ | $$g\_{t,3}^{a}$$ | TB | EB |
| 2010 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | -0.12 | 0 | 0 | 0 | 0 |
| 2011 | 0.3 | 0.0 | -0.1 | 0 | 0 | 0.27 | -0.12 | 0.29 | 0 | 0 | 0 | 1 |
| 2012 | -0.1 | -0.1 | -0.2 | 0 | 0 | 0.57 | 0.29 | 0.09 | 0 | 0 | 0 | 1 |
| 2013 | 0.0 | -0.2 | 0.0 | 0 | 0 | 0 | 0.09 | 0 | 0 | 0 | 0 | 1 |

In Germany the fiscal consolidation started in 2011 when the fiscal stance deteriorated due to the expansionary measures implemented after the crisis. Stimulus packages and bank support measures had led to a 4% budget deficit in 2010 starting from a substantial balance in the pre-crisis period. In addition, the debt to GDP ratio had increased by 20% between 2007 and 2010. In response, the government in 2009 introduced a constitutional amendment (*Schuldenbremse*) that would impose a commitment to balanced budgets year by year by 2020.  In light of the amendment, the government announced its intention to reduce the central government deficit to 0.35% of GDP by 2016. In order to meet the goal, a four-year consolidation plan was announced in 2011, estimated to have a cumulative impact of € 80 billion, two thirds of which were measures designed to curtail spending. However, we cannot consider this plan to be announced in 2011 in its full extent because details about single measures and true commitments were only delivered with a single year horizon. Moreover, summing up all the measures implemented so far, we notice that the total fiscal consolidation effectively occurred was much lower than the € 80 billion initially announced.

The government in 2010 introduced some strategic investments for long-run growth (*e.g.* investments on education). The latter were equally split over the years 2010-13 and led to an announced expansion of 0.1% of GDP in 2010. We label the 2010 as neither tax nor spending-based since there is no actual consolidation, but only an announced expansion. In 2010 the executive also announced a tax reform aimed at constructing a growth-friendly tax structure, but no estimates of the impact of these measures on the budget was produced.

In 2011 the fiscal consolidation started introducing spending reduction measures falling mainly on the health and energy sectors, changes in the pension formula and discretionary measures at both central and local government levels. These measures had an unexpected impact of 0.3% of GDP in 2011 and an additional announced impact of 0.3% for 2012. On the revenues side, the main interventions were an increase in the contribution rate to the statutory health insurance and an increase in unemployment insurance contributions for a total impact of 0.3% in the year. Other tax measures were announced for 2012 with a total negative impact of 0.1 mainly due to a reduction in the contribution rate to the public pension and a reduction of the rate of insolvency benefit contributions. The 2011 consolidation turned out to be spending-based.

In 2012 new spending and tax measures were introduced. Unexpected cuts in spending for 0.6% occurred and regarded interventions in the pension formula and the phasing out of investment that had been introduced as part of the stimulus package. The same measures are expected to generate an additional consolidation of 0.1% of GDP in 2013. Taxes were further cut by means of changes in dividend taxation and a new reduction in the contribution rate to the public pension with a total impact of 0.1%. Additional tax cuts of 0.2% were announced for 2013. Both the years 2012 and 2013 are classified as spending-based.

Detailed Description

Germany 2011[[19]](#footnote-19)

“On 2 December 2009, in line with Article 126 of the TFEU, ECOFIN determined that Germany was running an excessive deficit and issued recommendations regarding the reduction of this deficit. The recommendations set 2011 as the year in which Germany was to begin consolidation, called for an annual average reduction in the structural deficit of at least 0.5% of GDP, and required the deficit to be brought below the 3% of GDP reference value by 2013” (German Stability Programme 2011 Update, p. 6). “Against this background and on account of the requirements arising from the excessive deficit procedure and the European Semester, the core economic and fiscal policy tasks are currently to exit expansive fiscal policy measures and to maintain a course of consolidation that is sustainable and supports growth” (p. 11). The guidelines of the fiscal consolidation are: “to limit government consumption, reduce subsidies, increase incentives and anchor the priority for education and research in budget planning” (p. 13). Germany public debt has increased by 20% since 2007 and has reached the 83% of GDP in 2010. Moreover, a new public balance amendment (Schuldenbremse) requires fiscal measures to bring a reduction of the central government deficit to 0.35% of GDP by 2016. Indeed, the new fiscal rule restricts the cyclically adjusted budget deficit of the federal government to a maximum of 0.35% of GDP and requires balanced cyclically adjusted budgets for the Länder. The total fiscal consolidation announced in 2011 prescribes € 80 billion (3.2% of GDP) of savings until 2014 (Assessment of the 2011 national reform programme and stability programme for Germany, p. 9). European Commission claims not to have information about the complete spending path in annual terms and reports only some details about measures for 2011. IFO Schnelldienst 20/2011 (p. 29) contains a detailed list of measures introduced in 2011 (including the ones mentioned by the European Commission); hence we take this as a source for our calculations. The estimated budgetary impact of spending measures was € 7.1 billion in 2011 and € 7.6 billion in 2012 while new revenue measures were expected to raise € 7.3 billion in 2011 but € - 1.7 billion in 2012. In addition, the German government planned to increase expenditure for education and research of € 12 billion between 2010 and 2013 (German Stability Programme, January 2010 Update, p. 9). Since we don't have information about the annual distribution of the new expenditures, we assume that these were split equally over the four years and we register a budgetary impact of € -3 billion in 2011. Thus **in 2011 fiscal consolidation totaled € 12.4 billion or 0.43 percent of GDP, including € 4.1 billion (0.15%) from spending cuts and € 7.3 billion (0.28%) from tax hikes.**

Germany 2012

“In view of the easing of the budget burden in other ways, the Federal Government has consciously taken the decision to lower its sights in regard to the budget consolidation package and not to offset it by implementing new measures.” (German Stability Programme, 2012 Update, p. 17). IFO Schnelldienst 20/2012 (p. 37) list a series of tax cuts and modifications (in particular pension contributions) and some spending-reducing measures, generating a net consolidation in 2012 but a small expansion in 2013. Their expected budgetary impacts were € -2 billion in 2012 and € -5.2 billion in 2013 on the revenue side and € 15.2 billion and € 2.4 billion in 2013 on the expenditure side. Taking into account also the impact of 2011 measures, **in 2012 fiscal consolidation totaled € 19.1 billion or 0.72 percent of GDP, consisting in spending cuts of € 22.8 billion (0.86%) partly offset by a net tax cut of € -3.7 billion (-0.14%)[[20]](#footnote-20).**

Ireland

Summary Table

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | $$τ\_{t}^{u}$$ | $$τ\_{t,0}^{a}$$ | $$τ\_{t,1}^{a}$$ | $$τ\_{t,2}^{a}$$ | $$τ\_{t,3}^{a}$$ | $$g\_{t}^{u}$$ | $$g\_{t,0}^{a}$$ | $$g\_{t,1}^{a}$$ | $$g\_{t,2}^{a}$$ | $$g\_{t,3}^{a}$$ | TB | EB |
| 2009 | 2.4 | 0 | 0 | 0 | 0 | 2.4 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2010 | 3.4 | 0 | 0 | 0 | 0 | 1.3 | 0 | 0 | 0 | 0 | 1 | 0 |
| 2011 | 0.9 | 0 | 0 | 0 | 0 | 2.5 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2012 | 0.6 | 0 | 0 | 0 | 0 | 1.3 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2013 | 0.9 | 0 | 0 | 0 | 0 | 1.2 | 0 | 0 | 0 | 0 | 0 | 1 |

Among the countries hit by the sovereign debt crisis, Ireland was the first to experience a dramatic financial shock since its banks had financed a property bubble that put them in dire straits. By the second quarter of 2009 Irish GNP had fallen by 13.6% with respect to its peak (the most severe contraction in Europe). At the burst of the property bubble, the government announced the intention to recapitalize the banking system, and in November 2010 Ireland asked for the help of the EU and the IMF. Alongside the bailout, the government started a process of fiscal consolidation motivated by the serious deterioration of the fiscal stance: the public deficit had gone from balance in 2007 to a deficit of 14% of GNP in 2009 (spiking to 31% in 2010 because of the bailout of banks) and so did public debt, doubling between 2007 and 2008. Fiscal consolidation started in 2009 and continued until 2013. Year after year shifts in fiscal policy were always unannounced in advance. The consolidation was as intense as in Portugal but longer, lasting five years. Between 2010 and 2013 the measures adopted amounted, on average, by 4 percentage point of GDP per year for four consecutive years.

In 2009 the government implemented a spending-based fiscal adjustment with measures amounting to 5% of GDP in that year. But current and capital expenditure were cut, while revenue hikes were on income taxes, changes to social security (PRSI) and health. In 2010 the consolidation was again fully unexpected (namely it was not announced in advance) and was tax-based (along the previous similar lines): total spending cuts were 1.3% of GDP and tax increases 3.4%.

In 2011 revisions in Social Welfare and further capital spending cuts were introduced, with an impact of 2.5% of GDP. On the revenues side 0.9% of GDP was raised through changes in Household Charges, in the Capital Gains Tax, in the Capital Acquisitions Tax, in the tax on the interest rate on bank deposits) and in the Corporation Tax. The composition of the fiscal consolidation was reversed once again and became spending-based.

The consolidations in 2012 and 2013 were also unanticipated and implied spending savings for 1.3% and 1.2% respectively. Revenues were also increased in the two years by 0.6% and 0.9% respectively, with measures on personal and indirect taxes.

Detailed Description

Ireland 2010[[21]](#footnote-21)

“Budget 2010 sets out the budgetary measures being taken to stabilize the deficit at the 2009 level in 2010 and the medium-term consolidation strategy for its progressive reduction in subsequent years” (Ireland Stability Programme Update, December 2009, p. 6). “In framing Budget 2010, the Government focused on curbing spending as expenditure needs to adjust to the revenue base which has been reduced as a result of the overall contraction of the economy and the loss of certain income streams. In addition, in formulating policy the Government took on board evidence from international organizations, such as the EU Commission, the OECD and the IMF, as well as the relevant economic literature which indicates that consolidation driven by cuts in expenditure is more successful in reducing deficits than consolidation based on tax increases. Past Irish experience also supports this view and suggests that confidence is more quickly restored when adjustment is achieved by cutting expenditure rather than by tax increases” (Ireland Stability Programme Update, December 2009, p. 15). “The strategy behind Ireland’s medium-term economic and fiscal plan is based around three inter-related issues: (i) restoring economic competitiveness, the basis of future economic growth, by taking responsible action on fiscal and incomes policies; (ii) inspiring confidence, both internationally and domestically, that the deterioration in the public finances has been arrested; (iii) restoring Government expenditures and revenues to more sustainable levels, thus ensuring that debt does not rise to unsustainable levels” (p.15). **The 2009 and 2010 Budget delivered an overall package of billion 7.406 billion euros (4.68% of GDP), of which 5.389 billion expenditure savings[[22]](#footnote-22) (3.4% of GDP) and 2.017 billion taxation measures (1.28% of GDP) (Ireland Stability Programme Update, December 2009, p. 36).**

Ireland 2011

“The overriding aim of the Government’s medium-term economic and budgetary strategy is to return the economy to sustainable employment growth. A key condition for doing so is to restore order to the public finances and ensure the sustainability of the Government’s debt position” (Ireland Stability Programme Update, April 2011, p. 5). Budget 2011 (December 2010) delivered an overall package of about 6 billion euros including: € 1.4 billion in tax/PRSI increases; € 2.1 billion current expenditure savings with € 0.875 billion from Social Welfare; € 1.9 billion savings in capital spending; € 0.660 billion in other measures, e.g. increased dividends and state assets sales (Ireland Stability Programme Update, April 2011, p. 48). Thus, **total fiscal consolidation amounts to € 5.4 billion[[23]](#footnote-23) (3.32% of GDP) with spending cuts of € 4 billion (2.46% of GDP) and tax increase of € 1.4 billion (0.86% of GDP).**

Ireland 2012

“The Irish Government remains firmly committed to restoring sustainability of the public finances through the implementation of further budgetary consolidation and growth-enhancing policy measures aimed at reducing the GGB below the -3% of GDP threshold by end 2015” (Ireland Stability Programme Update, April 2012, p. 19). Fiscal consolidation amounted to 3.2 billion euros (1.95% of GDP), of which 2.15 billion of expenditure cuts (1.31% of GDP) and 1.015 billion of tax hikes (0.62% of GDP) (Economic and Fiscal Outlook 2012, p. 13[[24]](#footnote-24).

Ireland 2013

“In relation to the public finances, the policy objective remains the correction of the excessive general government deficit by 2015, as recommended by the ECOFIN Council in late-2010. All of the interim annual deficit ceilings set by the Council have been met, and the Government remains committed to bringing the deficit below 3 per cent of GDP within the stated time horizon” (Ireland Stability Programme Update, April 2013, p. 5). **Fiscal consolidation amounted to 3.4 billion euros[[25]](#footnote-25) (2.06% of GDP), of which 1.9 of expenditure cuts (1.15% of GDP), 1.4 of tax hikes (0.85% of GDP) (p. 6).**

Italy

Summary Table

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | $$τ\_{t}^{u}$$ | $$τ\_{t,0}^{a}$$ | $$τ\_{t,1}^{a}$$ | $$τ\_{t,2}^{a}$$ | $$τ\_{t,3}^{a}$$ | $$g\_{t}^{u}$$ | $$g\_{t,0}^{a}$$ | $$g\_{t,1}^{a}$$ | $$g\_{t,2}^{a}$$ | $$g\_{t,3}^{a}$$ | TB | EB |
| 2010 | 0.4 | 0 | -0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 2011 | 0.7 | -0.3 | 1.3 | 0.9 | 0.2 | 1.0 | 0 | 0.6 | 0.7 | 0.1 | 1 | 0 |
| 2012 | 1.2 | 1.3 | 0.8 | 0.1 | 0 | 0.3 | 0.6 | 1.1 | 0.5 | 0 | 1 | 0 |
| 2013 | 0.3 | 0.8 | 0.1 | 0 | 0 | 0 | 1.1 | 0.5 | 0 | 0 | 0 | 1 |

The current very high level of the Italian public debt has its roots in the fiscal policies of the 70s and in the country’s slowness in responding to the increase in world real interest rates which occurred in the 80s. During the 90s and the 2000s, many governments implemented fiscal consolidation policies but the debt level remained high: it was 106 percent of GDP before the economic crisis hit in 2008. The chronic lack of growth and productivity during the 2000s raised concerns about the long term sustainability of the public debt – a concern exacerbated by the subprime and the euro zone crisis.

Italy started to introduce measures aimed at improving the budget in 2010, mainly with a one-off income tax increase amounting to 0.3 percent of GDP.

The Budget Law of 2011 approved at the end of 2010 introduced a more ambitious fiscal adjustment path, two-thirds of which consisted of cuts in public wages, Ministries’ and local governments’ spending. Later in 2011 (approved in July and August[[26]](#footnote-26), respectively) the Berlusconi government added mainly revenue-side measures with increases in deposit stamp duties, gaming taxes and in the VAT rate. The total fiscal amount of these three measures reached 1.47 percent of GDP, of which 0.44 (0.74 unexpected minus 0.30 expired from the previous year) in tax-increases, and 1.03 percent in expenditure cuts. Further consolidations were planned for the following three years. Notice that, although the impact in 2011 fell mainly on the expenditure side, the measures announced for the following years mainly involved tax increases. That is why we classify 2011 as a tax-based plan.

In November 2011, the Berlusconi government was replaced by the “technocratic” government led by Mario Monti. The new executive added many additional measures for 2012 and 2013, almost exclusively on the tax side, especially on composed of property and value added taxes. Spending measures mainly involved reductions in central government transfers to Local Government Bodies[[27]](#footnote-27) and a pension reform providing substantial savings in the long-term but virtually nothing immediately. The impact of the tax increases introduced by the new government, together with the ones previously announced by the Berlusconi Government, amounted to 2.5 percent of GDP, while the expenditure cuts equaled 0.9 percent of GDP.

In 2013 the continuation of the previously announced expenditure savings (mainly including de-indexing of all those pensions whose amount exceeded three times the minimum) started to have their effects, changing the definition of the plan from TB to EB. On the tax-side, the announced measures with impact in 2013 were decided by the Berlusconi government in 2011 and mainly involved reductions of tax reliefs (DL 138/2011), gaming revenues and increases in stamp duties (DL 98/2011). The unexpected tax measures are instead due to a raise in excise taxes ad advance payment of income taxes from July 2013, and to an increase in VAT rate from October 2013.

Detailed Description

Italy 2010**[[28]](#footnote-28)**

Fiscal consolidation amounted to 0.42 percent of GDP, fully tax-based. As stated in the Italy Stability Programme, January 2010 (p. 32), measures improving the primary balance (i.e. lower expenditures and higher revenues) intended *“to prevent a worsening of the deficit- and debt-to-GDP ratios”.* However, part of the fiscal measures “*focused on reallocating resources to measures that would have the strongest positive impact on the economy in the short term, so as to counter the most painful social and economic consequences of the crisis, while waiting for evidence of a solid economic recovery”*. Thus, we conclude that the specific measures envisaged to fend off the impact of the crisis and to sustain growth are endogenous and we exclude them from our estimates. Another reason why this year should be included in the analysis is that Italy was under Excessive Deficit Procedure since December 2009, hence any fiscal policy decision was under a strict obligation to bring down the deficit at 3% by 2012 (Council Decision of 19 January 2010 on the existence of an excessive deficit in Italy). Tax hikes amounted to 0.42% of GDP, while there were no net expenditure reductions.[[29]](#footnote-29) The 2010 Budget Law included one-off revenues for around 4 billion euros (0.26% of GDP) from the increased IRPEF balance and the recovery of illegal State subsidies (Italy Stability Programme, January 2010, p. 38). Anticipated consolidation measures for 2011 and 2012 are negligible as a percentage of GDP.

Italy 2011

**Fiscal consolidation amounted to 1.47 percent of GDP, of which 0.44 in tax-increases and 1.03 in expenditure cuts.** As stated in Italy Stability Programme 2011: *“The consensus reached is that the principal objective of economic policies - a fair and sustainable growth - is not attainable, except with the essential requirement, and within the context, of financial stability and solidity”.* And again: *“The measures with the 2011-2013 budget package are acknowledged for the purpose of ensuring the planned decrease in the deficit with the timetable to which the Government has committed”* (Italy Stability Programme, May 2011, p. 32). Fiscal consolidation measures motivated by deficit reduction amounted to 1.56% of GDP, with tax policy measures of 0.54% and spending cuts of 1.02% (p.71-72). Expansionary measures accounted for 0.8% of GDP, with tax reductions of 0.29% and spending increases of 0.51% but we exclude them from our estimates due to their countercyclical nature.[[30]](#footnote-30) In addition to the 2011 Budget Law, the Decree Law 98/2011 (July 2011) and the Decree Law 138/2011 (August 2011) had a fiscal consolidation impact in the second half of 2011of 2.8 billion, of which 2.6 billion (0.16% of GDP) of revenue increase and 0.2 billion of spending cuts (0.01 % of GDP) (see tables VI.4, VI.5 and VI.6 of Italy’s Stability Programme, April 2012). Hence, the total impact of unanticipated measures in 2011 was of 0.7 percent of GDP (0.54+0.16) in higher revenues and of 1.03 percent of GDP (1.02+0.01) in lower spending. The revenue impact must be discounted for the expiration of one-off taxes introduced in 2010 of 0.26 percent of GDP. The 2010 stability and budget laws are also calculated to have a substantial effect in 2012 (0.26 percent of GDP) equivalent to 5.2 billion of euros (see Table 10).

Italy 2012

**Fiscal consolidation amounted to 3.2 percent of GDP, with 2.5 percent in tax increases and 0.9 percent in expenditure cuts.** The plan for consolidation was *“based on two elements: fiscal consolidation and promotion of growth. And an agenda of reforms based on three underlying principles: rigor, growth and equity”* (Italy Stability Programme, April 2012, p. V). The timeline of the fiscal consolidation was as described in Table 10



The cumulative impact of the 2011 Budget packages totaled 48.9 billion euros, i.e. 3.1% of GDP. Tax hikes amounted to 49.5 billion (3.14% of GDP) and spending cuts to 24.5 billion (1.55% of GDP). Growth-enhancing measures entailed tax cuts motivated by reducing labor costs, improving youth and women employment and stimulating investment of private capital, for a total of 9.2 billion (0.58% of GDP). Additionally, incremental expenditure aimed at enhancing public infrastructure and the use of resources under the Fund for Structural Economic-Policy Actions amounted to 15.8 billion (1% of GDP). Therefore, the 48.9 billion fiscal consolidation entailed an overall decrease in spending of 8.7 billion (24.5-15.8), i.e. 0.55% of GDP, and an overall increase in revenues of 40.3 billion (49.5-9.2), i.e. 2.55% of GDP. Additionally, the Decree Laws 98/2011 and 201/2011 included one-off measures for around 3.1 billion euros (0.2% of GDP), of which 3.3 billion higher revenues from increased VAT rates[[31]](#footnote-31) and 0.2 billion lower revenues from reduced charges for cottage-industry businesses (Italy Stability Program, January 2012, p. 61-63). Anticipated measures for 2013 include increased revenues from gaming, the municipal tax on waste and service (TARES) and the realignment of value of equity holding (substitute tax) for a total of 5.9 billion (0.37% of GDP), and spending cuts from the domestic stability pact, the streamlining of healthcare expenditure and measures covering the public-sector employment for 5.8 billion (0.36% of GDP). Anticipated measures for 2014 consist in higher revenue from gaming, the revision of depreciation rates, the TARES and equity taxes, for 24.2 billion (1.46% of GDP). Lower spending from several public expenditure cuts amount to 12.5 billion (0.79% of GDP). In July 2012, a new Decree Law (95/2012) was introduced, mainly to find resources necessary to avoid an increase in VAT rates. This turns in our model to an unexpected shock of € 4 billion in spending cuts[[32]](#footnote-32) in 2012, and € 3 billion both in 2013 and 2014 (see Tavola VI.4 of *Documento di Economia e Finanza 2013*).

For the purposes of the analysis, we distinguish between unanticipated and anticipated components of the many different bills setting the plan and derive the total:



Italy 2013

**Fiscal consolidation amounted to 2.2 percent of GDP, with 1.1 percent in tax increases and 1.1 percent in expenditure cuts**.The fiscal plan for 2013 aimed at maintaining the stability of public balances, easing off fiscal pressure and providing for a structural correction of public spending trends. The 2013 budget entailed a weak expansion of 2.3 billion (0.1% of GDP) mostly due to lower revenues (see Tavola VI.5 p.71 of *Documento di Economia e Finanza* *2013*). However, the effects of this budget are computed in the official documentation as if the delayed increase in VAT rate (to July 2013) was a decrease in tax, and we cannot do the same because we did not include these measures as an announcement in previous years (see footnote). Hence, we compute the total amount of this budget by dropping the “sterilization of the VAT increase”. This turns the budget to be a consolidation based on higher taxes by 2.5 billion and 400 millions of spending increases. The increase in VAT rate was further delayed from July 2013 to October 2013 by DL n.76 of 2013. To cover the €1 billion expected revenues from VAT of one quarter, the government implemented higher excise taxes and an increase in advance income tax payments[[33]](#footnote-33). In October 2013 a new decree to delay the VAT increase until 2014 was in preparation when the government fell and the increase from 21 to 22 percent of the VAT rate was indeed implemented. The annual amount of this measure was computed to be of € 4 billion. Given that we are interested only in the impact in 2013, we introduce this unexpected introduction as an additional € 1 billion tax shock. Hence, we consider this budget to give a 0.3% unexpected tax shock (and a negligible spending expansion). Taking into account measures anticipated in 2012, the fiscal package leads to a consolidation of 2.1% of GDP. Specifically, tax hikes amount to 1.1% of GDP (0.8+0.3), while spending increases to 1.1% of GDP.

Spain

Summary Table

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | $$τ\_{t}^{u}$$ | $$τ\_{t,0}^{a}$$ | $$τ\_{t,1}^{a}$$ | $$τ\_{t,2}^{a}$$ | $$τ\_{t,3}^{a}$$ | $$g\_{t}^{u}$$ | $$g\_{t,0}^{a}$$ | $$g\_{t,1}^{a}$$ | $$g\_{t,2}^{a}$$ | $$g\_{t,3}^{a}$$ | TB | EB |
| 2009 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 2010 | 1.1 | 0 | 0 | 0 | 0 | 1.8 | 0 | 0.5 | 0 | 0 | 0 | 1 |
| 2011 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0.5 | 0.9 | 0.9 | 0.5 | 0 | 1 |
| 2012 | 1.8 | 0 | 0.9 | 0 | 0 | 1.1 | 0.9 | 1.9 | 0.5 | 0 | 0 | 1 |
| 2013 | 2.1 | 0.9 | 0.7 | 0.3 | 0 | 1.5 | 1.9 | 1.4 | 1 | 0 | 0 | 1 |

In Spain the policies needed to fight high unemployment and support the banking system after the financial crisis led to a significant increase in the level of the debt that reached 84% of GDP in 2012 from 36.3% of 2007. Notwithstanding the poor growth performance starting from 2008, as early as 2009 the government embarked on policies aimed at reducing the deficit. The consolidation was even more intense than in in Portugal and in Ireland: during 2012 and 2013 the measures amounted to almost 5 per cent per year each year. Between 2010 and 2013 the budget was cut, on average, by 4% of GDP per year for four consecutive years

The first measures were implemented in July 2009 for a total of 0.3% of GDP from an increase in excise taxes. This is the only tax-based episode which occurred in Spain over our sample. From 2010 on all fiscal plans were spending-based.

In 2010 the consolidation started during the previous year continued thanks to the effects of both the Budget of the year and an Immediate Action Plan. The latter cut spending by 0.5% of GDP in 2010 and announced further 0.5% cuts in 2011. In addition the Budget prescribed spending cuts on current expenditure, infrastructures and public sector wages for 1.3% that led to a total unanticipated spending reduction of 1.8%. Revenues were increased with the elimination of tax credits on personal income taxation and significant increases in VAT and excises for a total of 1.4% of GDP.

In 2011 the government approved an Expenditure Review Plan for the years 2011-13. The impact on spending measures was 2% of GDP of cuts, comprehensive of some other savings derived from a commitment by the Autonomous Communities and Local Government. The Expenditure Review Plan prescribed the freezing of public sector salaries, changes of the replacement rate, cuts to social transfers and social benefits, reduction of subsidies to private investment for infrastructures and cuts in central government investment. The effects of the Expenditure Review Plan announced for subsequent years are 0.9% in 2012, 0.9% in 2013 and 0.5% for 2014.

In June 2012 the yield on 10-year Spanish government bonds reached 7%. In the same month the Euro group granted the country a financial support package of up to € 100 billion, aimed at recapitalizing the banking sector. Conditional on the bailout of 2012, Spain had to implement additional corrections in 2012 and 2013 that were almost equally distributed between revenues increases and spending cuts. In 2012 the Budget introduced new measures on personal income and corporate taxation that were worth 1.8% of GDP, with announcements worth 0.9% for 2013. On the spending side, unexpected policies were introduced amounting to 1.1% of GDP with major cuts in transfers and some cuts to government department expenditure. The departments that experienced the biggest cuts were healthcare and education. The Budget also changed the announcements for 2013 by adding 1.4% of spending savings.

The Budget 2013 followed the consolidation path started in the previous years and introduced some unexpected policies on both taxes and spending. Tax hikes were centered on the Personal Income Tax, non-resident taxes, Social Security contributions and VAT, for a total of 1.5% of GDP. The same measures were expected to generate additional revenue worth 0.7% of GDP in 2014 and 0.3% in 2015. On the expenditure side the unexpected measures amounted to 2.1% of GDP and were based on cuts to social spending and employment policies. The cuts to public wages that were announced in the Expenditure Review Plan were in part reversed in the 2013 Budget with a spending increase of 0.2% of GDP. The spending measures introduced in 2013 were expected to yield savings worth 1.9% in 2014 and 1% in 2015.

Detailed Description

Spain 2010[[34]](#footnote-34)

“In any event, the challenge facing the Spanish economy lies in implementing an ambitious exit strategy from the crisis, which includes two main lines of action [strengthening of the financial system and structural reforms] in addition to budgetary consolidation. […] The government's fiscal exit strategy combines firm curtailment of expenditure with a moderate increase in revenues” (Stability Programme Update Spain 2009-2013, February 2010, p. 3).

The Spanish Government's budgetary consolidation strategy is defined in two instruments: firstly, the Central Government Budget for 2010, approved in December 2009; secondly, the initiatives approved by the Cabinet on 29 January 2010, including two plans (Immediate Action Plan 2010 and Austerity Plan 2011-2013), and two Framework Agreements on the Sustainability of Public Finances with the Autonomous Communities and the Local Governments. Additionally, the Sustainable Economy draft Bill includes a number of fiscal measures with a budgetary impact (p. 23).

* Central Government Budget for 2010[[35]](#footnote-35): measures on the revenue side amount to 1.4% of GDP (of which 0.3% implemented in July 2009). Expenditure cuts amount instead to 0.3% of GDP; the latter figure results from a 0.8% reduction in current expenditure and a 0.5% increase in spending due to a new Central Government Fund for Jobs and Local Sustainability, which is not taken into account for the purposes of the study since it seems to be an endogenous stimulus. Therefore, fiscal consolidation totaled 2.1% of GDP, 1.4% increased revenues and 0.8% lower spending.
* Immediate Action Plan 2010[[36]](#footnote-36): additional 0.5% of GDP spending cuts[[37]](#footnote-37).
* Austerity Plan 2011-2013 and Framework Agreements[[38]](#footnote-38): For the outer years, “the main proposals included in this package intend to (i) practically freeze the public sector hiring process and sharply contain wage increases (1.9% of GDP), (ii) reduce permanently intermediate consumption, transfers and other expenses by 1% GDP, (iii) decrease gross fixed capital formation by 0.9% of GDP, (iv) cut subsidies by 0.5% of GDP. The Austerity Plan 2011-2013 and the Framework Agreements still need to be approved and specified in greater detail during the coming year (Macro Fiscal Assessment, European Commission Directorate General Economic and Financial Affairs, March 2010, p. 6)
* Sustainable Economy draft Bill[[39]](#footnote-39): the Sustainable Economy Law will be approved in March 2011.

Additionally, in May 2010, the Royal Decree-Law 8/2010 was passed, which included a series of extraordinary measures to cut public spending: 0.5% of GDP in 2010 and 1.5% of GDP in 2011 (Stability Programme Spain 2011-2014, April 2011, p. 16)[[40]](#footnote-40). **Consolidation for 2010 amounted to 2.9% of GDP, of which 1.1% tax hikes and 1.8% lower expenditure.**

Spain 2011

“The budget for 2011 maintains the line of fiscal consolidation that began with the budget for 2010 and is consistent with the various measures taken during the past year” (Stability Programme Spain 2011-2014, April 2011, p. 17). “The 2011-2014 path of fiscal consolidation contained in this Stability Programme has a key policy anchor in the Expenditure Review Plan 2011- 2013, approved by the Council of Ministers on May 20th, 2010” (p. 21). The consolidation is composed by the effects of the Expenditure Review Plan 2011-2013 and the result of a commitment by the Autonomous Communities and Local Government that was worth € 1.2 billion (0.11% of GDP) in 2011 (Stability Programme Spain 2011-2014, April 2011, p. 21). The Expenditure Review Plan was announced in May 20th 2010 and composed by measures concerning i) public administration employees, ii) intermediate consumption and social transfers, iii) social benefits, iv) subsidies and v) investments (p. 23-24). The details about measures are reported in Table 3.



Fiscal consolidation for 2011 amounts to 2.035% of GDP. Including anticipated measures for 2011, **total fiscal consolidation amounts to 2.535% of GDP and is fully based on spending cuts.**

Spain 2012

“Since 2009 Spain has been in the framework of the Excessive Deficit Procedure […] Moreover, the deviation in budgetary targets in which Public Administrations incurred in 2011, led to additional financing needs of 2.5 p.p., which is higher than quoted in the Stability Programme for 2011-2014. It requires an additional adjustment in 2012 and 2013, which will accentuate the contractionary orientation of fiscal policy at a moment when the Spanish economy already shows a clearly negative cyclical gap” (Stability Programme Update Kingdom of Spain 2012-2015, April 2012, p. 18). “The Government has designed an austere budget for 2012, adequate to the Spanish public finances situation, and rigorous, as it is based on a realistic macroeconomic scenario. The target of this budget is to reduce deficit from 8.5% in 2011 to 5.3% in 2012, starting the consolidation path that will allow achieving the 3% of GDP deficit goal in 2013” (p. 30). The impact of unexpected measures for 2012 amounts to € 30.264 billion (2.89% of GDP), due to a € 19.120 billion (1.83% of GDP) increase in revenues and a € 11.144 billion (1.07% of GDP) cut of expenditure (p. 46). Total fiscal consolidation considering the announced measures coming from 2011 sum up to 3.795% of GDP, with tax hikes of 1.07% of GDP and spending cuts of 1.975% of GDP. Moreover, there are announces for 2013 amounting to €9 billion (0.86% of GDP) increase in revenues and a €10.604 billion (1.01% of GDP) reduction of spending.

Spain 2013

“The State Budget for 2013 is part of the 2013-2014 Budget Plan approved by the Government and submitted to the European Commission on August 3, 2012. The Budget Plan 2013-2014 sets out the broad outline of government fiscal policy aimed at fulfilling the budgetary consolidation path approved by the ECOFIN Council on July 10, 2012, in which, given the complex economic environment and a high budget deficit in 2011, Spain was granted an additional year, until 2014, to bring the deficit below 3%, also modifying the deficit targets of the intervening years. This concession did not mean a relaxation at all, but on the contrary a tightening of fiscal consolidation efforts, as reflected in the evolution of the structural deficit estimated for the projection period.”[[41]](#footnote-41) The new measures announced in 2013 sum up to 3.6% of GDP with 1.5% of tax hikes and 2.1% of spending cuts (p. 40). **Fiscal consolidation for 2013 amounts to 6.375% of GDP (3.6+0.86+1.01+0.905), due to a 2.96% (2.1+0.86) increase in revenues and a 3.415% (1.5+1.01+0.905) cut of expenditure (p. 40).** Moreover, additional deficit reductions of 2.075% (1.6+0.475) - 0.7% revenues and 1.375% spending - and 1.3% (0.3% revenues and 1% spending) of GDP are announced for 2014 and 2015.

United Kingdom

Summary Table

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | $$τ\_{t}^{u}$$ | $$τ\_{t,0}^{a}$$ | $$τ\_{t,1}^{a}$$ | $$τ\_{t,2}^{a}$$ | $$τ\_{t,3}^{a}$$ | $$g\_{t}^{u}$$ | $$g\_{t,0}^{a}$$ | $$g\_{t,1}^{a}$$ | $$g\_{t,2}^{a}$$ | $$g\_{t,3}^{a}$$ | TB | EB |
| 2010 | 0.1 | 0.0 | 0.7 | 0.4 | 0.3 | 0.3 | 0.0 | 0.3 | 0.4 | 0.4 | 0 | 1 |
| 2011 | 0.0 | 0.7 | 0.4 | 0.3 | 0.1 | 0.0 | 0.3 | 0.6 | 0.6 | 0.4 | 0 | 1 |
| 2012 | -0.1 | 0.4 | 0.4 | 0.3 | 0.0 | 0.0 | 0.6 | 0.6 | 0.5 | 0.1 | 0 | 1 |
| 2013 | -0.1 | 0.4 | 0.1 | 0.0 | 0.1 | 0.1 | 0.6 | 0.6 | 0.2 | 0.1 | 0 | 1 |

The projected budget deficit for the United Kingdom reached 11.4% of GDP in 2009 after recovery packages were implemented.

Fiscal consolidation started in 2010 with the 2010 Budget titled “Securing the recovery”, which was introduced in March. The March Budget announced further measures for the next three years, but no measures for the current year. In May 2010 the newly elected government by David Cameron entered in office and approved in June a new Budget with measures for the year amounting to 0.1% in tax hikes (mainly VAT taxes with the increase of the rate to 20%) and spending reductions of 0.3% of GDP with curtailments to both current and capital spending.

The 2010 Budget also included announcements on the revenues side for future years. A 0.7% increase was announced for 2011 due to the introduction of a levy on banks and some changes in personal income tax credits; 0.4% of revenues increases were announced for 2012 and 0.3% for 2013 with additional effects from the change in the bank levy and measures on capital allowances. Spending cuts were also announced on current and capital spending with impacts of 0.3% in 2011 and 0.4% in both 2012 and 2013. The fiscal consolidation in 2010 was spending-based.

At the end of October 2010 an Expenditure Review Plan was approved with spending cuts of 0.06% in the fiscal year 2011-12. Expenditure cuts fell mainly on transfers. A few months later, the March 2011 Budget prescribed tax hikes for 0.04% of GDP and spending increases for 0.04% having no effect on government net borrowing for the fiscal year 2011-12. The total calendar year allocation of unexpected policies in 2011 was a 0.03% of tax hikes and a 0.01% of spending cuts. For what concerns the announcements for the years to come, the government revised to a minor extent the revenue measures designed for 2012 and 2013, while the 0.1% announcement for 2014 was already part of 2011 announcements. On the spending side, the Expenditure Review added some additional spending cuts for 2012, 2013 and 2014. They came mainly from changes in contributory employment and support allowance, cuts to households’ benefits and reductions in civil service pensions. The overall plan was again spending-based.

The unexpected measures implemented in 2012 came from the autumn 2011 Statement and the March 2012 Budget. On the revenues side, stamp duties were raised as well as some personal taxes, but increased tax reliefs and corporate tax cuts led to an overall decrease in taxes. The total impact of measures in the year was negative (i.e. there was an unexpected expansion) with tax cuts of 0.1% and small spending cuts of 0.01%. However, the expansion was more than compensated by the implementation of the previous years’ announcements. Some increases in revenues announced for 2014 were introduced, with an estimated impact of 0.3%.  They fell in particular on income taxes, capital and age related allowances. Spending announcements implied only minor revisions with almost no impact. Overall the plan remained spending-based.

Compared to the measures adopted in some euro area countries (Spain, Ireland and Portugal in particular) those adopted by the Cameron government were relatively mild, amounting to about 1% of GDP per year from 2010 to 2013.

The March 2013 Budget announced some spending cuts with a calendar year impact of 0.1%. On the tax side there was a small reduction in revenue worth of 0.1% due to the cancellation of some duties. 2013 is still a consolidation year thanks to the announcements coming from previous Budgets. Further tax cuts were announced for 2014 and the estimated impact for the year changed from 0.3% to 0.1%. Spending cuts for 2014 and 2015 were accompanied by additional announcements that led to estimated impacts of 0.6% in 2014 and 0.2% in 2015. The composition of the consolidation plan was reversed and became tax-based.

Detailed Description

United Kingdom 2010[[42]](#footnote-42)

A first budget was set out in March 2010 by the Brown Ministry. In May 2010, David Cameron formed a new government, which implemented additional budget measures in June 2010. The objective of fiscal policy was announced already in the Convergence Programme for the United Kingdom (January 2010, p. 4): “Setting a credible consolidation path to ensure sustainable public finances is a key element of the Government’s macroeconomic strategy, and is essential for economic stability and the long-term health of the economy. Chapter 4 sets out the Government’s plans for fiscal consolidation. As confidence in recovery grows and financial sector conditions normalize, the economy’s reliance on fiscal support will diminish. This will allow fiscal support to be withdrawn, gradually at first, so as not to harm recovery”. The motivation of the 2010 budget package can be summarized with the statement “The Government is acting to ensure sound public finances to provide a stable platform for growth and maintain macroeconomic stability” (Budget 2010, Securing the recovery, March 2010, p. 1). The new Budget set out in June 2010 confirms: “the Government will carry out Britain’s unavoidable deficit reduction plan in a way that strengthens and unites the country” (Budget 2010, June 2010, p. 1). Total discretionary consolidation for the fiscal year 2010-2011 amounted to £ 8 billion pounds, of which £ 5.2 billion of spending cuts and £ 2.8 billion of increases in taxes (Budget 2010, June 2010, p. 15). **The amount of fiscal consolidation pertaining to 2010 is £ 6 billion pounds (0.4% of GDP), of which £ 3.9 billion (0.26% of GDP) of spending cuts and £ 2.1 (0.14% of GDP) of tax increases. The remainder pertains to 2011[[43]](#footnote-43).**

United Kingdom 2011

“In the June Budget 2010, the Government took action to re-build the British economy based on its values of responsibility, freedom and fairness. Through the Budget and the Spending Review, the Government set out an accelerated plan to reduce the deficit. This Budget confirms that the Government is continuing this course, and now accelerates the process of reforming the British economy, to achieve a new model of sustainable and balanced growth. This Budget sets out the action the Government will take in three areas: a strong and stable economy, growth and fairness” (Budget 2011, March 2011, p. 1). Discretionary policy announced in the Budget 2011 (p. 43) for the period 2011-2012 consisted in a fiscal expansion of £10 million pounds, of which a £ 625 million increase in taxes and a £ 635 million increase in spending. Measures announced in the Spending Review 2010 (October 2010)[[44]](#footnote-44) consisted in £ 895 million spending cuts. Measures announced before or at the June Budget 2010 consisted of 12.6 billion tax hikes and 4.43 billion spending cuts (Budget 2010, p. 15). Overall, fiscal policy for 2011-2012 amounted to 17.9 billion pounds, of which 12.6 billion tax hikes and 5.3 billion spending cuts. Therefore, considering the appropriate calendar year allocation, **total fiscal consolidation for 2011 amounted to 15.4 billion pounds (0.92% of GDP), of which tax hikes for 10.6 billion (0.715%) and spending cuts for 4.8 billion (0.325% of GDP).**

United Kingdom 2012

The Budget 2012 (March 2012, p. 1) states: “the Government has taken decisive action to protect the economy and has set out a comprehensive strategy to achieve strong, sustainable and balanced growth, based on [among others] fiscal consolidation to return the public finances to a sustainable position and meet the Government’s fiscal mandate”. The plan announced in the Budget 2012 (pp. 7 and 51) consisted in an initial expansion on the revenue and on the spending side accompanied by announcements of fiscal restraint in the subsequent years (see next entries). In fiscal 2012-13 measures amounted to -1.93 billion pounds, of which tax cuts for 1.84 billion and spending increases for 90 million. In addition, measures having an effect in f.y. 2012-2013 were announced in previous budget and budget-related documents, and are summarized below:

* Autumn Statement 2011 (November 2011): tax reductions for £ 270 million and spending cuts for £ 260 million[[45]](#footnote-45)
* Budget 2011 (March 2011): tax reductions for £ 540 million and spending cuts for £ 0.285 million (anticipated)
* Spending Review 2010 (October 2010): spending cuts for £ 2.815 billion (anticipated)
* Budget 2010 (June 2010): tax hikes for £ 695 million and spending cuts for £ 7.415 billion (anticipated)
* Before June 2010: tax hikes for £ 2.355 billion (anticipated)

Taking into account the calendar year allocation of 2011 measures, **fiscal consolidation for the 2012 calendar year amounts to £ 12.8 billion £ 3.6 billion (0.249%) tax hikes and £ 9.2 billion (0.61%) spending cuts.**

United Kingdom 2013

“Budget 2013 announces further detail on the Government’s deficit reduction plans” (Budget 2013, March 2013, p. 1). Fiscal consolidation announced in the Budget 2013 (pp. 6 and 65) amounts to 1.3 billion pounds, of which tax cuts for £ 0.29 billion and spending cuts for 1.6 billion. Measures having an effect in 2013-2014 were announced in previous budget and budget-related documents, and are summarized below:

* Autumn Statement 2012 (December 2012): tax reductions for 1.3 billion and spending cuts for 0.5 billions
* Budget 2012 (March 2012): tax hike for £ 1.05 billion and spending increases of £ 0.07 billion
* Autumn Statement 2011 (November 2011): tax increases for £ 0.28 billion
* Budget 2011 (March 2011): tax hikes for £ 0.21 billion and spending cuts for £ 0.08 billion
* Spending Review 2010 (October 2010): tax hikes £ 0.49 billion and spending cuts of £ 4.435 billion
* Budget 2010 (June 2010): tax increases of £ 1.565 billion and spending reductions for £ 4.71 billion
* Measures before Budget 2010: tax increases for 3.6 billions

Allocating the impacts in calendar year, **the overall 2013 fiscal package lead to a fiscal expansion of 1.43 billion (0.09% of GDP), of which tax hikes for 4.3 billion (0.29% of GDP) and spending cuts for 10.8 billion (0.73% of GDP).**

 United States

Summary Table

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | $$τ\_{t}^{u}$$ | $$τ\_{t,0}^{a}$$ | $$τ\_{t,1}^{a}$$ | $$τ\_{t,2}^{a}$$ | $$τ\_{t,3}^{a}$$ | $$g\_{t}^{u}$$ | $$g\_{t,0}^{a}$$ | $$g\_{t,1}^{a}$$ | $$g\_{t,2}^{a}$$ | $$g\_{t,3}^{a}$$ | TB | EB |
| 2011 | 0 | 0 | 0 | 0 | 0 | 0.04 | 0 | 0.14 | 0.12 | 0.1 | 0 | 1 |
| 2012 | 0 | 0 | 0 | 0 | 0 | 0 | 0.14 | 0.12 | 0.1 | 0.08 | 0 | 1 |
| 2013 | 0.16 | 0 | 0.12 | 0 | 0 | 0.25 | 0.12 | 0.1 | 0.08 | 0.05 | 0 | 1 |

 In 2011, the US fiscal policy was subject to an abrupt change and shifted from providing huge emergency fiscal stimuli to the attempt of reducing the fast accumulating public debt. In 2010, the country was running a federal public debt of almost 70% of GDP, with a fiscal deficit of over 10% of GDP. The weakening of public finances was not only due to the fiscal stimulus implemented right after the sub-prime crisis, but also to previous policies such as the Bush tax cuts and increased appropriations for defense, homeland security and Medicare. In 2012, the Economic Report of the President wrote that, *“recognizing the economic risks associated with sustained large budget deficits, the Obama Administration has made deficit reduction a priority”*. Indeed, in 2011, fears of exploding public deficit also triggered the downgrade of the US public Debt by S&P for the first time in history. Hence, in both 2011 and 2013, the congress pushed and obtained deficit consolidation measures as a condition to confirm the raise in the debt-ceilings. In 2011 the Administration and Congress agreed on a $ 1 trillion (over ten years) deficit reduction package in the Budget Control Act of 2011, introducing statutory caps on most discretionary spending from FY2012 through FY2021. Expenditure restraints started to have an impact from FY2012, hence from October 2011 on. According to our calendar year allocation the total amount of spending cuts amounted in $ 5.5 billion in 2011, equivalent to 0.04 percent of GDP. The same act was planned to achieve around 0.1 percent of GDP in additional savings for each of the following years, only involving spending measures (see lines 2011 and 2012 in the table for the US Fiscal Plan above).

On January 2, 2013 a long debate about the so called “fiscal cliff” came to an end. The fiscal cliff was a combination of expiring tax cuts and across-the-board government spending cuts scheduled to become effective on Dec. 31, 2012. However, on January 2013 the American Taxpayer Relief Act 2012 was passed, avoiding some of the automatic sunset provisions scheduled to take effect in January. Hence, the actual impact of the fiscal consolidation was $ 28 billion in 2013 and 20 billion in 2014, equivalent to 0.16 and 0.12 percent of GDP respectively, mainly including tax increases in income and capital gains and dividend tax rates for certain high-income taxpayers. We do not code the automatic expiration of the Bush Tax cuts as an announced shock, since its actual implementation was a very uncertain event.

As for the “Sequester” automatic spending cuts, after delaying the decision until March 2013 the reductions in outlays equivalent to 0.25 percent of GDP were indeed implemented. Since the exact amount of the effect in 2013 was highly uncertain (it was not even computed in the CBO cost estimate of the Budget Control Act 2011) as well as its actual enactment, until March 2013, we code this shock as unanticipated. We sum to these cuts the anticipated cuts in discretionary and mandatory spending announced in the Budget Control Act 2011 of 0.12% of GDP.

Detailed Description

United States 2011[[46]](#footnote-46)

In 2011, the US fiscal policy was subject to an abrupt change and shifted from providing huge emergency fiscal stimuli to the attempt of reducing the fast accumulating public debt. In 2010, the country was running a federal public debt of almost 70% of GDP, with a fiscal deficit of over 10% of GDP. This was felt as a worrying condition by many commentators and congressmen. The weakening of public finances was not only due to the fiscal stimulus implemented by the government during the economic crisis, but also to previous policies. Tax cuts under the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003 decreased government revenues below the levels prevailing in the 90s. At the same time, public spending rose after 2001 reflecting increased appropriations for defense and homeland security and the introduction of the Medicare D prescription drug programme for the elderly (OECD Economic Survey 2012 p.20). Finally, the abandonment of the pay-as-you-go (PAYGO) budgeting rule did not help in strengthening the fiscal position. As a result, before the cycle hit, the United States were already running a 2.5% of GDP deficit. After the crisis the government responded with extraordinary fiscal interventions while the weakening of taxable income, the large revenue losses from asset markets and increase in unemployment compensation contributed in aggravating the deterioration in public finances. After the worse years of the crisis, according to the Economic Report of the President of February 2012 (p.30), in 2011 the Administration and Congress, recognizing the economic risks associated with increased budget deficits, agreed on a $1 trillion deficit reduction package in the Budget Control Act of 2011. The act established caps on discretionary spending through 2021, allowed additional spending from “program integrity” and subsidies for students. It also created a Congressional Joint Select Committee on Deficit Reduction to propose further deficit reductions of 1.5 trillion over 10 years. In case the Committee did not indicate a comprehensive plan for further spending cuts, the act provided for automatic across-the-board automatic spending cuts by at least 1.2 trillion over a 10-year period (CBO Analysis of Budget Control Act, Aug 1 2011). Expenditure restraints started to have an impact from FY2012, hence from October 2011. According to our calendar year allocation **the total amount of spending cuts was $ 5.5 billion in 2011 equivalent to 0.04% of GDP (see Table).**



United States 2012

In 2012, the Economic Report of the President wrote that “recognizing the economic risks associated with sustained large budget deficits, the Obama Administration has made deficit reduction a priority”. In 2012 the Budget Control Act enacted on August 2, 2011 started to have its full effect, with **spending cuts consisting in 21.25 $ billions, equivalent to a fiscal consolidation of 0.14 percent of GDP (see Table).**

United States 2013

On January 2, 2013 a long debate about the so called “fiscal cliff” came to an end. The fiscal cliff was a combination of expiring tax cuts and across-the-board government spending cuts scheduled to become effective Dec. 31, 2012. On the revenue side, the Bush tax cuts of 2001 and 2003 (which had been extended for two years by the 2010 Tax Relief Act[[47]](#footnote-47), were to expire on December 31, 2012. Under the baseline scenario in which all these tax cuts expired, the CBO calculated an expected increase in revenues of 500$ billion (equal to a shock of 2.7% of GDP) in 2013. According to the CBO Update to the Budget and Economic Outlook for 2012 to 2022, the adjustment shock was so impressive that “whether the lawmakers allow scheduled policy changes to take effect or alter them will play a crucial role in determining the path of the federal budget over the next decade and the outlook of the economy”. On the spending side, The goal outlined in the Budget Control Act of 2011 was to cut at least $1.5 trillion over the coming 10 years, (avoiding much larger "sequestration" across-the-board cuts which would be equal to the debt ceiling increase of $1.2 trillion incurred by Congress through a failure to produce a deficit reduction bill), therefore bypassing Congressional debate and resulting in a passed bill by December 23, 2011. On November 21, the committee concluded its work, issuing a statement that began with the following: "After months of hard work and intense deliberations, we have come to the conclusion today that it will not be possible to make any bipartisan agreement available to the public before the committee’s deadline". The committee was formally terminated on January 31, 2012. As a consequence, the “budget sequestration” was scheduled to take effect from January 2013. However, on January 2013 the American Taxpayer Relief Act 2012 was passed, avoiding some of the automatic sunset provisions scheduled to take effect in January. Hence, the actual impact of the revenue fiscal consolidation was 28 billion in 2013[[48]](#footnote-48) and 20 billion in 2014, equivalent to 0.16 and 0.12 percent of GDP respectively.

As for the automatic spending cuts to United States federal government spending in particular categories of outlays that were initially set to begin on January 1, 2013 (an austerity fiscal policy contained in the Budget Control Act of 2011 - BCA), were postponed by two months by the American Taxpayer Relief Act of 2012 until March 1. Due to the absence of an agreement by the Congress on this matter, after March the automatic spending cuts went into effect. The reductions in outlays were of $42.7 billion during fiscal year 2013, equivalent to 0.25 percent of GDP (The Budget and Economic Outlook: Fiscal Years 2013 to 2023 p.14, http://www.cbo.gov/publication/43907). Since the exact amount of the effect in 2013 was highly uncertain (it is not even computed in the CBO cost estimate of the Budget Control Act in Table 3) and even its actual enactment was not sure until March 2013, we code this shock as unanticipated. To these cuts we must sum up the anticipated cuts in discretionary and mandatory spending carefully outlined in the Budget Control Act 2011 of 0.12 percent of GDP[[49]](#footnote-49). Thus, **in 2013 fiscal consolidation totaled $ 88.7 billion (0.53% of GDP) consisting of $ 60.7 billion (0.37%) spending cuts and $ 28 billion (0.16) tax hikes.**

1. Note on 2009 and 2010. No consolidation in 2009 and 2010, “In light of the weak economic environment in 2009, the Federal Government aims at securing  economic  growth  and  employment.  The good budgetary starting position of the year 2008 allowed for large volume economic and employment stimulus packages as well as a tax reform, leading to a financial relief for all wage and personal income tax payers and families. These  measures have aimed at stimulating purchasing power and aggregate demand, especially in the  years  2009  and  2010,  and  continue to  contribute to the  European  Economic Recovery  Plan .” (Austrian Stability Programme  for the period 2009 to 2013, p. 13) [↑](#footnote-ref-1)
2. We excluded savings on interests and “Measures on the revenue side”; OECD (2011) did since they seem redundant with respect to the other tax measures listed in the specific table at p. 17. [↑](#footnote-ref-2)
3. We excluded savings on interests. [↑](#footnote-ref-3)
4. Note on 2009: “According to the provisional figures, the balance for the public administrations should post a deficit of 5.9% of GDP in 2009, the highest deficit since 1993 at the time of the crisis of the European Monetary System. For the first time since the inception of the European economic and monetary Union, therefore, Belgium has exceeded the threshold of 3% of GDP authorized by the Stability and Growth Pact. However, as the Ecofin Council pointed out in its recommendations to Belgium, this situation is the result of “special” circumstances. In particular, the financial crisis had a dramatic effect on economic activity, thus weighing heavily on Belgium’s public finances, by way of the cyclical component on the one hand and by way of the structural component associated notably with the stimulus plan on the other, as recommended by the European Commission in October 2008” (Belgian Stability Programme, 2009-2012). No measures of consolidation were taken. [↑](#footnote-ref-4)
5. The federal government also committed to propose by mid-year additional measures of consolidation, such as the reform of pension system for civil servants. However, since the programme does not provide more details, it is impossible to assess the budgetary impact of these initiatives. At the same time a number of anti-crisis measures introduced in 2009 were extended and new expansionary initiatives were put in place (p. 37). However we don't take these into account since they were motivated by cyclical rather than long term justifications. [↑](#footnote-ref-5)
6. The document also reports measures undertaken by other regions. However we don’t take them into account because they seems non budgetary or not motivated by deficit reduction. [↑](#footnote-ref-6)
7. From the June 2010 general election, a very fragmented parliamentary situation emerged, making really hard to find an agreement for the government formation. A proper government was named only in December 2011. [↑](#footnote-ref-7)
8. A number of measures were also undertaken by regional governments. However we don't take them into account because they seem related to the economic cycle (see Belgian Stability Programme 2011-2014, pp. 28, 30 and 33). [↑](#footnote-ref-8)
9. The Flemish community also introduced some new initiatives to reduce deficit but we don't consider them since they were off-set by higher spending to stimulate economy (p. 39). In the Brussels-Capital Region an expenditure increase was projected to stimulate job-creation, but this seems to be motivated by cyclical considerations (p. 42). [↑](#footnote-ref-9)
10. We excluded revenues coming from the sale of government assets (e.g., auction of 800 MHz). [↑](#footnote-ref-10)
11. The Belgian Stability Programme also reports that regional governments undertook some measures during the year, but we don't take them into account because they were motivated by the worsening of economic conditions (as in the case of Walloon Region and the French Community) or were offset but new initiatives (as in the case of Flemish Community). [↑](#footnote-ref-11)
12. Note on 2009 and 2010. “Denmark appears to be among the OECD countries that have eased fiscal policy the most in 2009 and 2010 in order to support growth and employment. The fiscal stimulus over the two years has a budget impact of around 60 billion DKK in 2010” (Denmark's Convergence Programme 2009, p. 15). No measures of fiscal consolidation were adopted in these years. [↑](#footnote-ref-12)
13. The *Spring Package 2.0* is a tax reform announced in March 2009 whose primary focus was “to increase labor supply and thereby strengthen longer-term growth prospects particularly through a lowering of marginal income taxes” (Denmark's Convergence Programme 2009, p. 56). It consisted in a reduction of taxes on labor income financed through other revenues enhancing initiatives (higher environmental taxes, higher taxes on unhealthy food, lower deductions and removing special arrangements for individual business sectors). The tax cuts were quickly implemented, “to support activity and employment in the short term” (p. 56), while the financing measures were implemented gradually in the following years. [↑](#footnote-ref-13)
14. As Denmark's Convergence Programme 2012 (p. 12) reports, a special expansionary plan (*Kickstart plan*) was also implemented with the Fiscal Bill 2012.It consisted of energy and transports investments, that are said to be neutral for public finances (p. 7), housing subsidies and public investments. Since the latter mostly have a one-off nature, we believe that they are linked to short rather than long run objectives and hence, as potentially endogenous, we don't take them into account. [↑](#footnote-ref-14)
15. Notes about 2009-2010. 2009 is characterized by an expansion of the budget deficit in order to reduce the negative effects of the financial crisis. “For 2009, the deficit forecast was revised upward from 2.7 to 3.9 points of GDP: -0.8 point of GDP due to the recovery plan and -0.4 point of GDP owing to adjustment of macroeconomic forecasts with nearly zero elasticity of the State's net tax revenue to activity (0.3)” (France Stability Programme 2009-2012, December 2008, p. 10). In 2010 the government announces the intention to reduce budget deficit starting from the following year. “Beyond 2010, the French government will considerably strengthen its efforts to consolidate public finances […] The Government's strategy involves pursuing structural reforms that encourage growth and – rather than raising taxes – reducing public spending” (France Stability Programme 2010-2013, January 2010, p. 2). “In the 2010-2013 Stability Programme submitted in January 2010, France described its strategy for reducing the deficit to 6.0% of GDP in 2011, 4.6% in 2012, and under 3% of GDP by 2013, by carrying out a structural adjustment of more than 4 points of GDP over the 2010–2013 period. On 13 July 2010, the ECOFIN Council stated that France had complied with this recommendation and that no additional measures were needed at this stage within the framework of the excessive deficit procedure” (p. 35). [↑](#footnote-ref-15)
16. Notice that for what concerns the Pension Reform and spending reductions contained in the consolidation plan 2011-2016, we used for year 2011 the realized impacts provided in Box 1 (Stability Programme 2012-2016, p. 11) since they are the most reliable source we found. Contrarily on what we try to do in every episode, we could not use the projected amounts. [↑](#footnote-ref-16)
17. € 3.7 billion were announced in November 2011 and are thus considered as announced for only one year ahead. [↑](#footnote-ref-17)
18. The measures were announced in the second budget law for 2012 and the one for 2013 (Programme de stabilité de la France 2013-2017, p. 37. [↑](#footnote-ref-18)
19. We excluded 2009 since it seems to be a fiscal expansion motivated by the will to boost long-run growth. “It was with this in mind that the federal government on 5 November 2008 adopted a set of targeted measures - in addition to the plans detailed under 2.2 below - which not only can be implemented at short notice and have a prompt effect, but which also make economic sense over the long-term. One central focus of the “Securing employment by enhancing growth” programme is to restock and supplement the lending programme of the KfW banking group. To this end, the government has created an additional financing instrument worth up to €15 bn. to boost the lending programmes of the private banking sector, limited until the end of 2009. A second focus of the package of measures is on transport infrastructure: investments which are urgently needed in the transportation sector are being fast-tracked. In addition, an “Innovation and investment programme in transport” worth €1 bn. in each of the years 2009 and 2010 is being put in place” (German Stability Programme, December 2008 update, p. 6). Year 2010 is an expansion, as well: “According to the programme, the nominal general government deficit will increase from 3.2% of GDP in 2009 to 51⁄2% in 2010 […] The further widening of the deficit in 2010 is mainly fueled by fiscal stimulus measures and the impact of automatic stabilizers. General government revenue is projected to shrink by almost 2% of GDP on the back of household relief measures […] as well as weaker domestic demand. The projected increase in general government expenditure by around 1⁄2% of GDP can be mainly attributed to the worsening situation on the labor market and continued investment in public infrastructure undertaken as a part of the fiscal stimulus” (European Commission Recommendation for a Council Opinion on the Updated Stability Programme of Germany 2009-2013, March 2010, p. 7). “In 2010, major measures in the general government budget include the response to the economic crisis as adopted in the two last stimulus packages: (1) the package of 27 January 2009 (Konjunkturpaket II) and (2) the Act to Accelerate Economic Growth (Wachstumsbeschleunigungsgesetz) of 22 December 2009. The programme specifies in more details the measures related to the economic recovery packages, estimating the overall relief for the citizens and companies due to the tax measures agreed during the previous and the current legislature as of 2010 at over €24 bn (around 1% of GDP)” (Germany: Macro Fiscal Assessment, March 2010, p. 11). [↑](#footnote-ref-19)
20. Note on 2013: there was no net fiscal consolidation in this year and the German government introduced some expansionary measures, as reported in the EC assessment of the 2013 national reform programme and of the stability programme for Germany, p. 10. [↑](#footnote-ref-20)
21. For year 2009 see Devries et al. (2011). [↑](#footnote-ref-21)
22. Expenditure measures include 94 million euros allocated to the Family Income Supplement and the Increase for a Qualified Child (see [http://www.budget.gov.ie/Budgets/2010/Summary.aspx#SectionII](http://www.budget.gov.ie/Budgets/2010/Summary.aspx%22%20%5Cl%20%22SectionII)). Apart from these expenditure increases, all other measures on the expenditure side entail cuts. [↑](#footnote-ref-22)
23. We excluded the measures such as higher dividends and state asset sales since we consider them extraordinary measures that should not be taken into account consistently with Devries et al. (2011). [↑](#footnote-ref-23)
24. http://budget.gov.ie/Budgets/2012/Documents/Economic%20and%20Fiscal%20Outlook.pdf ). [↑](#footnote-ref-24)
25. We excluded dividends for the reasons specified in footnote 23. [↑](#footnote-ref-25)
26. Another Law (183/2011) was implemented in October 2011 but it had no net effects in the 2011 budget and negligible impact for the following budget years. [↑](#footnote-ref-26)
27. We classify these as spending cuts even though some local governments may compensate them issuing `more debt in the short run and then with tax hikes but it is very difficult to link directly such policies at the local level with the budget cuts from the central government. [↑](#footnote-ref-27)
28. 2009 is not included in the analysis because contained “measures fending off the impact of the intense financial and real crisis” (Italy Stability Programme, February 2009, p. 1). [↑](#footnote-ref-28)
29. For details about the composition of the adjustment, see page 35 and 38 of Italian Stability Programme (January 2010). Note that the tax hike and the expenditure cuts result from the difference in shock between 2009 and 2010 in the Decree law 78/2009 and taking into account of the compositional change introduced later in DL 191/2009 (See page 35 and 38). None of the fiscal expansionary measures were taken into account because considered endogenous. [↑](#footnote-ref-29)
30. There is no explicit motivation for the expansionary measures in the package. However, most of them appear to be motivated by countercyclical objectives, e.g. concessional tax regimes and income tax advance payments IRE (2.3 billion lower revenues), employment fund (CIG, 0.6 billion) and social policy fund (0.2 billion). [↑](#footnote-ref-30)
31. The DL 201/2011 provided, as of October 2012, an increase of two percentage points to the existing VAT rates of 10 percent and 21 per cent, and another increase of one-half percentage point as of 2014. However, Table VI.7 p.63 of Italy Stability Programme 2012 does not report these announced increases in taxes for 2013 and 2014. The reasons why these measures were not included directly in the Table VI.7 is that these increases were supposed to be implemented only if the government did not find alternative spending cuts to avoid this increase (see *Indagine conoscitiva sul decreto legge recante disposizioni urgenti per la crescita, l’equità e il consolidamento dei conti pubblici* by Visco and footnote 5 at [http://documenti.camera.it/leg16/dossier/Testi/d016.htm#\_ftn5](http://documenti.camera.it/leg16/dossier/Testi/d016.htm%22%20%5Cl%20%22_ftn5) ). Hence, we do not include these VAT rate increases as announcements for the following years because their introduction was very uncertain, not even the budget documents provided precise estimates of the expected returns and they were indeed avoided for the most part. [↑](#footnote-ref-31)
32. We do not introduce the “higher revenues” due to the delayed implementation of increase in VAT because previous budget of the governments did not included them as announced shoc and hence it would be a mistake to count them as lower revenue if before it was not introduced as announced higher revenue. [↑](#footnote-ref-32)
33. <http://www.ilsole24ore.com/art/notizie/2013-06-26/tassa-sigarette-elettroniche-acconti-121721.shtml?uuid=AbWWac8H&fromSearch> [↑](#footnote-ref-33)
34. Note on 2009. As stated in the Stability Programme Update Spain 2008-2011 (January 2009, p. 8), due to economic circumstance, the general economic policy objective was to “mitigate the effects of the crisis and stimulate the economy, particularly through fiscal policy, while preserving the sustainability of public finances and improving their quality”. The approved budget package included temporary and permanent measures increasing fiscal stimulus to approximately 25.7 billion euro, i.e. 2.3% of GDP (p. 9). The unique measure linked to deficit reduction was an increase in taxes of 0.3% of GDP implemented in July 2009 (see entry for 2010). [↑](#footnote-ref-34)
35. Presupuestos Generales del Estado para 2010. [↑](#footnote-ref-35)
36. Plan de Acción Inmediata 2010. [↑](#footnote-ref-36)
37. It will imply a reduction in the allocation to the Contingency Fund and a drop in public sector hiring in 2010 to 10% of the replacement rate and a halt in the recruitment of new temporary personnel. In addition, spending allocations to real investments, capital and current transfers and operating expenses will also be frozen (Spain: Macro Fiscal Assessment, European Commission Directorate General Economic And Financial Affairs, March 2010, p.16). [↑](#footnote-ref-37)
38. Plan de Austeridad 2011-2013 and Propuesta de un acuerdo marco para las Comunidades Autónomas y Corporaciones Locales. [↑](#footnote-ref-38)
39. Anteproyecto de Ley de Economía Sostenible. [↑](#footnote-ref-39)
40. The Decree is passed so as to further reduce deficit targets established into the Stability Programme for 2010 and the subsequent years. [↑](#footnote-ref-40)
41. The origninal document was: “Los Presupuestos Generales del Estado para 2013 se enmarcan en el Plan Presupuestario 2013-2014 aprobado por el Gobierno y remitido a la Comisión Europea el 3 de agosto de 2012. El Plan Presupuestario 2013-2014 recoge las grandes líneas de política fiscal del Gobierno orientadas al cumplimiento de la senda de consolidación presupuestaria aprobada en el Consejo ECOFIN del 10 de julio de 2012, en el que, en un entorno económico complejo y un elevado déficit público en 2011, se concedió a España un año adicional, hasta 2014, para situar el déficit por debajo del 3%, modificando asimismo los objetivos de déficit de los años intermedios. Dicha concesión no significaba en absoluto una relajación sino, por el contrario, un endurecimiento de los esfuerzos de consolidación fiscal, como se desprendía de la evolución del déficit estructural que se estimaba para el periodo de proyección” (Actualización Del Programa De Estabilidad Reino De España 2013-2016, p. 24). [↑](#footnote-ref-41)
42. We excluded the year 2009 because it seems to be endogenous for the following reasons. “In current economic circumstances, it is more important than usual for fiscal policy to play a role in supporting economic activity” (Convergence Programme for the United Kingdom, December 2008, p. 21). Fiscal policy is considered as complementary to monetary policy in limiting “the extent and duration of the downturn” (p. 21). “Fiscal policy will need to play a more significant role in the year ahead in helping to support demand within the economy […] The right approach is to allow public debt to rise to absorb the shock and allow fiscal policy to support the economy, until adjustment has been completed and debt is set on a declining path as a proportion of GDP” (p. 29). “Building on the strategy set out at the 2008 Pre-Budget Report, the Budget announces targeted discretionary support for the economy through these difficult times, while continuing sustained fiscal consolidation from 2010-11 when the economy is expected to be recovering and able to support a reduction in borrowing” (Budget 2009, April 2009, p. 1). [↑](#footnote-ref-42)
43. The decomposition of the June 2010 Budget can be found at p. 40 of the Budget 2010 (June). [↑](#footnote-ref-43)
44. Notice they are considered unexpected since they have been announced in October 2010. [↑](#footnote-ref-44)
45. We consider this impact negligible. [↑](#footnote-ref-45)
46. 2011We do not include 2009 and 2010 because they are years of fiscal stimulus. According to the 2010 Budget, “as the economy recovers from the financial crisis and recession, treasury has continued its efforts to restore growth and create jobs through implementation of the Housing and Economic Recovery Act of 2008 (HERA), the Emergency Economic Stabilization Act of 2008 (eesa), and the American Recovery and Reinvestment Act of 2009 (recovery act)”. The latter act represented the largest countercyclical fiscal action in American history, providing tax cuts and increases in government spending equivalent to roughly 2 percent of GDP in 2009 and 2 percent of GDP in 2010 (Economic report of the president, February 2010, pp. 51-52).

 We should mention that by March 2010, the core of the Healthcare act was also implemented, together with the education reconciliation act (Economic Report of the president, Feb 2011, p.76). Most of the impact of the fiscal act was included in the healthcare act. Among other things, it established a mandate for most residents of the US to obtain health insurance, set up insurance exchange markets, expanded eligibility for Medicaid, reduced the growth for Medicare's payments, imposed tax on insurance plans with relatively high premiums and made various other changes to the federal tax code. Although this act is considered by the administration as a strong instrument to achieve deficit reduction (see the Economic Report of the President, February 2010, p.150, or Obama Adress to Congress on September 9, 2009) we do not consider it in our analysis for many reasons. First of all, we are interested in fiscal changes primarily driven by a deficit-reduction motivation, while we believe the healthcare reform and its amendments are partly related to inequality and ideological reasons. Second, although the reform is predicted to achieve substantial deficit reduction in the long term (141$ billion by 2019 and 1$ trillion in the next decade), in the short time horizon considered in our the model (5 years) the reform does not achieve any substantial savings (CBO HR 4872, Reconciliation Act of 2010, Table 2 and OECD Economic Survey pp.29-30). [↑](#footnote-ref-46)
47. “Government policy has supported the recovery during 2009 and 2010, and the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act, the compromise tax framework signed into law by the President on December 17, 2010, will help the economy in 2011. The position of state and local governments, however, remains difficult. At the same time, long-run fiscal responsibility is crucial, and the Administration has taken a number of steps to reduce deficits in coming years”. Economic report of the President 2011, p.23). [↑](#footnote-ref-47)
48. Notice that by looking at the official CBO estimates of the Act, it could seem that this act was a fiscal stimulus given the fact that they compute the act to have a 1.7 trillion of deficit expansion by 2017 and a deficit increase of 329 billion in 2013. However, like all of CBO’s cost estimates, the estimate for this legislation shows the effects of the legislation relative to current law at the time they did the estimate. Indeed, relative to what would have occurred under the laws previously in effect in 2012 (providing for the expiration of the Bush tax cuts), this legislation would increase budget deficits in coming years. However, relative to what would have occurred if most tax and spending policies that were in effect in 2012 were continued, this legislation will reduce budget deficits in coming years. Since the model in this paper refers to a policy shock relative to the fiscal pressure of the previous year, we consider this act to be in fact a fiscal consolidation. In order to compute the effect of the new act compared to the policy in place during 2012, we take as a reference the estimate for the impact and compare it to the “alternative scenario” estimated in the “Update to the Budget and Economic Outlook: Fiscal Years 2012 to 2022” p. 22, which assumed that the Bush tax cuts, the Alternative Minimum Tax “patch”, the business tax extenders and other minor effects legislation were all permanent. We have found these calculations at http://www.whitehouse.gov/sites/default/files/omb/communications/misc/cboscore\_hr8\_20130101.pdf. [↑](#footnote-ref-48)
49. In December 2013, the Bipartisan Budget Act of 2013 changed the sequestration caps for FY2014 and FY2015. This deal would eliminate some of the spending cuts required by the sequester by $26.3 billion of the cuts scheduled to happen in January and $21.6 billion of the cuts scheduled to happen in 2015 (see Table 1 p.2 of the CBO Cost Estimate of the Bipartisan Budget Act). Federal spending would thus be larger in these two years, but would be less in subsequent years until 2023, due to other provisions such as imposing sequester cuts in 2022 and 2023. Given this recent development, the Bipartisan Budget Act of 2013 could be interpreted as a “change of the policy announcement” during the year of implementation, which in our model would be coded as a negative unexpected shock compensating the sequester announcement for 2014 and 2015. However, as stated above, the automatic spending cuts decided in the Budget Control Act are not coded as an anticipated shock in our model for many reasons. First of all, because the Budget Control Act did not even compute an hypothetical impact over the years in their cost estimate of the Act at the time of its enactment. Second, because the whole political process around the confirmation of these cuts was extremely uncertain. Third, because even in the CBO Budget and Economic Outlook 2013 the full impact of the sequester was not even computed in the baseline scenario but only as an “alternative” policy effect (See Table 1-7 p.33). [↑](#footnote-ref-49)