

2015 Budgetary Policy Report

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The members of the Board of the Parliamentary Budget Office are Giuseppe Pisauro (Chairman), Chiara Goretti and Alberto Zanardi. Director General: Daniele Cabras. Economic advisor: Luca Rizzuto. The technical staff comprises Emilia Marchionni, Maria Rosaria Marino, Maria Cristina Mercuri, Flavio Padrini and Corrado Pollastri. Editorial office: Simona Piccinini

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Ufficio parlamentare di bilancio Via del Seminario, 76 00186 Roma <u>segreteria@upbilancio.it</u>

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Foreword

This is the first "Budgetary Policy Report" of the Italian Parliamentary Budget Office (PBO), which was established in April 2014 in accordance with the provisions of the law on the implementation of the balanced budget principle and in implementation of the new European economic governance arrangements.

The PBO is responsible for assessing macroeconomic and fiscal forecasts and for verifying compliance with national and European fiscal rules. The office also contributes to ensuring the transparency of the public accounts at the service of Parliament and the general public. In the early months of its operations, the PBO worked to build its capacity to perform these duties as effectively as possible. The PBO has also reported to the appropriate parliamentary committees on its analysis of the fiscal policy documents and the Stability Bill, which is re-presented here with additions and further developments.

Last June, the European Council, in its Recommendation for Italy, asked the country to "guarantee the independence and full operationalisation of the fiscal council [the PBO] as soon as possible and no later than September 2014, in time for the assessment of the 2015 Draft Budgetary Plan". The completion of this Report – despite the challenges of an incomplete organisational structure – was also intended to underscore the desire and ability to comply with the recommendations directed at Italy. In its recent report on the macroeconomic imbalances of Italy, the European Commission acknowledged that "The Fiscal Council has recently become operational and is now building up the capacities required to fulfil its role in the budgetary process."

This report is organised into four chapters. The first is devoted to an analysis of the Government's macroeconomic forecasts underpinning the Update of the Economic and Financial Document (EDF), their validation for the 2014-15 period and a discussion of the risks inherent in the entire forecasting scenario. The second chapter focuses on the trend and policy scenarios for the public finances, as well as the structure and the financial impact of the measures envisaged in the 2015 Stability Bill. An assessment of compliance with domestic and European fiscal rules is conducted in the third chapter, along with a discussion of a number of issues concerning the application of those rules (estimating potential growth rates and the output gap, the size of fiscal multipliers, and the sustainability of the debt in periods of deflation). The final chapter focuses on the economic effects of a number of public finance measures of special importance because of their financial impact and their role in the Government's overall policy action (reduction of the tax wedge on labour, measures to sustain household consumption and measures affecting regional and other local government finances).

1. The macroeconomic environment and structural reforms

Introduction

The PBO has conducted its validation of the macroeconomic forecasts published in the Update of the 2014 EFD, which for the first time distinguish between a current-legislation (trend) scenario and a policy scenario (which reflects the impact of public finance measures to be adopted with the Stability Bill). Although European regulations only require validation of the 2014-15 policy forecasts, the PBO has reached an agreement with the Ministry for the Economy and Finance (MEF) to extend the validation exercise to comprise the trend forecasts on a current legislation basis for 2014-15.

On 29 September this year, the PBO sent the MEF its validation letter for the trend macroeconomic forecasts, which on 1 October were published in the Update, after the Office had previously notified the MEF of its assessment of an initial version of those forecasts. On 10 October, the PBO issued its validation of the policy macroeconomic forecasts published in the Update. The validation of the policy scenario was based on the proposed public finance measures reconstructed on the basis of our discussions with the MEF and considered by the latter to be "consistent" with those actually adopted (but which were not communicated to the PBO) in developing the policy scenario. The procedure for reconstructing the policy scenario is clearly fragmented and opaque, having been presented without making available the hypotheses adopted in its preparation. This is a key issue that merits further examination (see section 1.4). The PBO also assessed the realism and reliability of the macroeconomic scenarios presented in the Update for 2016-18.

The macroeconomic policy scenarios certified by the PBO were confirmed by the Government, following the Council of Ministers' approval of the Stability Bill (15 October), which was presented to the Chamber of Deputies on 23 October, and the amendments announced on 28 October, and were incorporated in the 2015 Draft Budgetary Plan (DBP) submitted to the European Commission.

1.1 The Government's macroeconomic forecasts and the validation process

Very briefly, the macroeconomic trend scenario set out in the Update of the EFD points to a contraction in GDP for the current year (-0.3%) and a modest recovery in 2015 (0.5%). This represents a drastic downward revision of the forecast set out in the EFD in April (0.8% growth for 2014 and 1.3% for 2015), which was justified in the Update by developments in international economic conditions (slower growth in world trade, changes in the behaviour of international competitors), by the impact of economic policy measures (Decree Law 66/2014) and by delays in implementing the reforms approved in 2012-13. The recovery forecast in the Update for 2015 is expected to be



driven by domestic demand under the impulse of a reversal of the trend in investment and an acceleration in household consumption, thanks in part to improved financial conditions associated with the actions of the European Central Bank (ECB). Prices are projected to rise slowly in the absence of external or internal inflationary pressures. The unemployment rate is expected to remain at a historically high level (12.6%). For subsequent years, the trend forecasts point to a further, albeit contained, acceleration of GDP (from 0.8% growth in 2016 to 1.2% in 2018), again sustained primarily by the components of domestic demand (investment and household consumption). Inflation is expected to rise, although only moderately, while unemployment is forecast to show faint signs of decline.

Compared with these current-legislation forecasts, the policy scenario displays only small changes for 2015: GDP is expected to rise by 0.1 percentage points compared with the baseline, driven by an increase in consumption and investment, with prices and unemployment essentially unchanged. In the subsequent years, despite a neutral fiscal policy stance in 2016 (compared with 2015) and a contractionary stance as from 2017, GDP growth would accelerate slightly compared with the trend outlook (0.2 points in 2016-18), buoyed above all by the recently announced structural reforms (the justice system, public administration, competitiveness and the labour market).

The PBO conducted the validation exercise using projections developed independently by a number of public and private forecasters (Istat, CER, Prometeia and REF.ricerche, hereinafter referred to as the PBO panel) using their own macroeconometric models.

Apart from the unavailability in the PBO's start-up phase of its own macroeconomic forecasting model – whose construction will require at least two years – this approach was prompted by the advisability, in view of the intrinsic uncertainty of macroeconomic forecasts, of using multiple forecasting models in combination, which generally produces more reliable and robust estimates than those based on a single model. In order to ensure the comparability of official forecasts and those developed by the PBO panel, the projections of the independent forecasters used values for the exogenous international variables (exchange rates, oil prices, growth in world trade) analogous to those used in the estimates prepared by the Government and the European Commission. For the public finances, the policy scenario was supplemented with the official estimate of the financial effects of the amended version of the Stability Bill of 28 October. Combining the estimates produced by the panel forecasters, the PBO constructed specific validation ranges for each variable in both the trend and policy scenarios to use in assessing the plausibility of the forecasts developed by the Government.

Figure 1.1 provides a breakdown of the results of the exercise for the policy scenario, as assessed in the light of the public finance scenario following the presentation of the Stability Bill and the amendments of 28 October. The official forecasts for the main macroeconomic variables for 2015 are compared with those produced by the PBO



panel. For GDP, the official forecast of growth of 0.6% lies well within the range of forecasts, which runs from 0.2 to 1.1%, and appears sufficiently prudent. Looking at the individual components of aggregate demand, the official forecasts remain well within the forecast range, generally below the median value and are therefore relatively prudent (in the case of imports, which have a negative impact on the formation of aggregate demand, the figure should be interpreted in the opposite direction). Nevertheless, the breadth of the range of forecasts should be noted, underscoring the uncertainty of the forecast for 2015, especially in the case of investment.



Figure 1.1 – Policy scenario (2015)

Government forecast 🥚 PBO panel forecast



As noted earlier, the PBO performed the validation exercise twice for the policy scenarios: the first time immediately after the presentation of the Update, the second after the presentation of the amended Stability Bill. We have only presented the findings of the second exercise here (for more information on the first assessment and that for the trend scenarios, please see the material on the hearings before the Budget Committees meeting in joint session, which is published on the PBO website). The assumptions adopted in the two assessments concerning the policy scenarios differ with regard to the breadth and composition of the budget measures. More specifically, the assumptions used to assess the macroeconomic scenario in the Update envisaged measures with a gross value of about €25 billion and a deficit of €11.5 billion. By contrast, the amended Stability Bill envisaged measures with a gross value of €32 billion and a deficit of €5.9 billion. In addition, the Update provided largely qualitative information on the specific measures that would be included in the Stability Bill. Despite these different assumptions concerning the public finances, the results of the second assessment prompted us to generally confirm the policy scenario of real GDP growth of 0.6% in 2015, as forecast in the Update of the EFD. As mentioned, the estimates in the Update reflect the assumption of a smaller set of budget measures and a deficit more than €5 billion larger than the scenario presented subsequently. This in itself would have a less expansionary impact on economic activity in 2015. A second factor, however, works in the opposite direction: the provisions that would permit workers to receive their accruing severance benefits in advance directly in their paychecks, a measure that was not envisaged in the Update. This should not have a significant impact on the public accounts, but could stimulate consumption. According to the three private-sector forecasters on the PBO panel, the positive impact on GDP in 2015 of such an increase in consumption would be between 0.07 and 0.15 percentage points. This effect would be enough to offset the negative impact of the change in the composition and scale of the budget measures on the overall forecast.

1.2 Risk factors

Beyond the foregoing considerations, there are a number of risk factors that could increase the fragility of the outlook for recovery set out in the Update. More recent forecasts appear to confirm the plausibility of official forecasts (Table 1.1). The risks are high, however, and primarily comprise:

- 1) the most recent short-term data suggest that the official forecast for 2014 is optimistic, with possible knock-on effects in 2015;
- 2) the growth of world trade, which is exposed to considerable uncertainty, as underscored by the recent downward revision of forecasts by the World Trade Organization. Geopolitical tensions in Ukraine and the Middle East represent additional threats to global economic recovery. The Ukraine crisis and tensions



with Russia have a relatively greater impact on the European economies. The crisis in the Middle East could impact oil prices, although the current trend is downwards, partly owing to weak global demand;

- 3) the acceleration of economic activity in the United States could lead to the normalisation of monetary policy in that country, prompting the Federal Reserve to increase interest rates earlier than predicted by the markets. This could impact lending conditions in the euro area, despite the adverse economic environment, and would probably increase financial tensions in the emerging economies;
- 4) expectations of a recovery in domestic demand could be slow to emerge. More specifically, the absence of clear signs of an improvement in the labour market could prompt households to maintain their precautionary saving. The recovery in investment by firms could be weaker than expected owing to credit conditions, the low rate of capacity utilisation and the uncertain outlook for economic activity;
- 5) the risk of deflation in the euro area, which could dampen expectations for recovery.

Examining the subsequent three-year period, from 2016 to 2018, the Government's forecasts for GDP generally appear more optimistic that those of the forecasters on the PBO panel (Figure 1.2). The structural reforms now under examination in Parliament, or which will be specified in the budget at the end of the year, decisively impact the growth projections used by the Government in its policy scenario for 2016-18. The Update devotes special attention to the macroeconomic effects of the structural measures, emphasising that they should have a positive impact on the sustainability of the public finances in the medium and long term, partly by increasing in potential growth rates. In the Government's policy scenario, the newly implemented structural reforms (the justice system, public administration, competitiveness and the labour market) are expected to increase GDP growth by 0.2 percentage points in 2016 and 0.4 points in 2017 and 2018. This means that 20% of forecast growth in 2016 would be attributable to the structural reforms, with that contribution rising to about 30% in 2017 and 2018.

The consideration of the macroeconomic impact of the structural reforms in the Government's policy scenario, and the scope attributed to them, require more specific assessment. First, a number of structural reforms are still under development, which makes it difficult to evaluate their impact on the economy. Second, at least in Italy, the actual implementation of structural reforms has always suffered from major delays, delays that have led to subsequent revisions of the original estimates of their short-term impact (see Appendix 1.1 for more on this issue). Most recently, for example, the Update revised the forecast effects of the reforms adopted in 2012-14 downwards, attributing the revision to implementation delays and the persistence of the adverse economic climate. Finally, it should be borne in mind that the use of dynamic stochastic



general equilibrium (DSGE) models – like those generally adopted to assess the longterm effects of structural reforms on the economy – to supplement short/medium-term forecasts can be risky, partly due to the different nature of the models involved (see Appendix 1.1 for more on this issue as well).

		GDP		Private	consum	ption	Total	investm	ent
	2014	2015	2016	2014	2015	2016	2014	2015	2016
OECD - 6 Nov 2014	-0.4	0.2	1.0						
European Commission - 4 Nov 2014	-0.4	0.6	1.1	0.2	0.4	0.0	-2.5	1.4	3.1
ISTAT - 3 Nov 2014	-0.3	0.5	1.0	0.3	0.6	0.8	-2.3	1.3	1.9
SVIMEZ - 28 Oct 2014	-0.4	0.8		0.1	0.3		-2.1	0.0	
Prometeia - 17 Oct 2014	-0.4	0.5	1.1	0.2	0.7	1.1	-2.2	-0.4	2.0
Confcommercio/Censis - 16 Oct 2014	-0.2	0.6		0.2	0.7				
IMF - 7 Oct 2014	-0.2	0.8		0.1	0.6		-1.4	1.5	
Update to EFD - 30 Sep 2014	-0.3	0.6	1.0	0.1	1.0	1.0	-2.1	1.5	2.1
Intesa San Paolo - 22 Sep 2014	-0.2	0.6		0.2	0.9		-1.8	0.7	
Barclays - 19 Sep 2014	-0.3	0.4							
Confindustria - 16 Sep 2014	-0.4	0.5		0.1	0.5		-2.3	0.8	

Table 1.1 – GDP growth forecasts (September-November 2014) (percentages)

Figure 1.2 – Policy scenario (2016-18)



Government forecast 🔶 Government forecast excluding impact of reforms 🌒 PBO panel



All of these factors underscore the complexity and considerable uncertainty of forecasting the growth effects of structural reforms. If the estimated impact of the announced structural reforms is excluded, the Government's forecasts would fall well within the range of forecasts produced by the panel. A prudent approach would therefore counsel excluding the effects of the structural reforms from macroeconomic forecasts.

1.3 Possible revisions of the process of validating macroeconomic forecasts

The Memorandum of understanding signed on 15 September 2014 between the MEF and the PBO regarding the transmission of information needed to certify macroeconomic forecasts and assess public finances is a key tool in performing the duties assigned by the Two-Pack to independent budget monitoring institutions. The detailed provisions of the agreement will be assessed over time, but in the view of the PBO it represents an appropriate starting point. Nevertheless, initial experience has revealed a number of issues that were in fact entirely predictable given the actual procedures used in forming the budget that have been consolidated over the past thirty years. They ensure that the inclusion of an independent assessment of the macroeconomic policy scenario is difficult to achieve given the timing of the various phases of the process. More specifically, information on the structure of the budget measures, of which the policy scenario is an essential element, is received too near the time of the final validation, creating challenges for discussion between those responsible for producing the policy framework and those called upon to validate it.

In point of fact, if we examine the formal architecture of the Italian budget planning system, the problem could have been eliminated long ago. The reform of 1988, which introduced the Economic and Financial Planning Document, had already included in its content "the policy guidelines for the measures, including sectoral measures (...) necessary to achieve the targets (...) with a general assessment of the economicfinancial impact of each type of measure with respect to the current-legislation baseline" (Law 362/1988, Art. 3). Today, the role of the EFPD as the central document of the budget planning process is performed by the Economic and Financial Document. At least on paper, the notion of budget planning has not been touched: the content of the EFD includes "the structure of the budget measures necessary to achieve the targets (...) as well as a general indication of the measures to be adopted in order to achieve those targets" (Law 196/2009, Art. 10). One possible solution would therefore be to move fully in the direction indicated by the legislative framework and assign the Update the task of setting out – in general outline but with precise quantitative information – the structure of the budget by sector of intervention. This is the approach taken in the majority of OECD countries, in which policy-setting first addresses the overall framework of the public finances and defines the main features of the budget decision, assessing new initiatives and trend developments in the accounts simultaneously. Only later does



attention turn to preparing the budget measures, which become a tool for implementing the decisions taken previously. The Stability Bill would therefore focus on the financial variables specified in the parliamentary resolution and should specify the details of the various programmes, making decisions on the internal priorities of the main expenditure accounts or on the allocation of resources among beneficiaries.

This would involve shifting the moment in which policy is decided within the Government, from the meeting of the Council of Ministers that approves the Stability Bill to the meeting that approves the Update, as well as providing for parliamentary approval of the main financial variables as part of the resolution to approve the Update of the EFD. As well as facilitating the performance of the PBO's functions – a decidedly lesser problem – this change would definitely improve the quality of legislation, thereby rendering subsequent implementing instruments more effective. It would also enable greater control over the redundancy of the content of the Stability Act.

This change in content should in any case be accompanied by a modification of the legislative calendar, as it would be necessary to approve the Stability Bill a couple of weeks before the date of the transmission of the Draft Budgetary Plan to the European Commission (15 October).

The fact that an institutional system established with the fiscal reform of twenty-five years ago, and preserved in subsequent reforms, has never been fully implemented raises some doubt as to whether it could be accomplished expeditiously now. In preparing the policy scenario, the MEF has only very limited information on the characteristics of the budget measures, on which full political agreement has not yet been reached by the entire Government. Such agreement is achieved after a number of weeks at the meeting of the Council of Ministers called to approve the Stability Bill, whose text is made available only a few days later (this year it was approved by the Council of Ministers on 15 October and presented to the Houses of Parliament on 23 October). One minimum subordinate solution would essentially consist in modifying the content of the budget documents and bringing forward the definition of the budget measures by a couple of weeks with respect to the transmission of the Draft Budgetary Plan to the European Commission. The Update, with the trend macroeconomic scenario and the fiscal policy targets, would continue to be approved first (currently by 20 September). The macroeconomic policy scenario would be determined in concomitance with the Stability Bill, at the start of October, for inclusion in the Draft Budgetary Plan. It could be objected that the fiscal policy targets are conditional on the new macroeconomic scenario and should not, strictly speaking, be established separately from it. However, this would represent a relatively small loss of consistency (one with precedents: the 2013 Update only contained a trend macroeconomic scenario alongside the fiscal policy targets) compared with the situation as it exists today.



Whatever solution is adopted, it should replace the current procedures, which are based on considering as implicit and definitive (at the time the Update is drafted) budget decisions that are still largely incomplete in reality.



Appendix 1.1

Estimating the impact of structural reforms on macroeconomic forecasts

In official public finance documents, especially since 2011, estimating the impact of the structural reforms has taken on an increasing role in the development of the forecasts, including short term projections, in the macroeconomic scenario that underlies fiscal policy planning. For example, the Update of the 2014 EFD estimates that about 80% of the year-on-year growth projected for 2015 is attributable to the effect of the reforms adopted in 2012-14.

The estimates are prepared by the Ministry for the Economy and Finance (MEF) using dynamic stochastic general equilibrium (DSGE) models. DSGE models, which were initially developed in the academic world, seek to analyse how the economy evolves over time, focusing on the origins and drivers of the business cycle.

A brief description of DSGE models

The specification of DSGE models is based on microeconomic foundations, in particular on the assumptions of market equilibrium and forward-looking economic agents with rational expectations who seek to maximize their objective functions.¹ However, DSGE models diverge from the neoclassical paradigm of perfect competition since they assume that markets are characterized by a range of rigidities (such as, for example, adjustment costs in investment decisions or labour markets) and imperfections (such as the possibility of quasi-monopolistic decisions on wages and prices by workers or firms).² The models also incorporate a number of rules for monetary policy (which is assumed to respond to deviations of inflation or GDP from their target values) and fiscal rules (with the introduction of an intertemporal budget constraint so as to ensure the sustainability of the public debt).

DSGE models also assume the presence of "structural shocks" (i.e. not foreseeable by economic agents) that impact the economy and generate cyclical fluctuations (for example, shocks in technology, consumer preferences, and monetary or fiscal policy). These unexpected shocks are what make the models stochastic. The model parameters could therefore be estimated, although very frequently they are "calibrated", i.e. set by the analyst on the basis of statistical information on the population and firms, or on the basis of existing microeconometric studies.

One strength of DSGE models, which helps explain their use in medium/long-term analysis, is their consistency and close links with an underlying theoretical structure. This should reduce the arbitrariness of the estimated macroeconomic relationships compared with more traditional models. In DSGE models, the empirical specification of macroeconomic relationships is carried out within a theoretical context that is made

² The assumptions of rigidities and imperfections in markets are often added ad hoc to improve the fit of the data to the models.



¹ More specifically, households choose their levels of consumption and labour (and, therefore, saving and leisure time) so as to maximize the expected value of their present and future utility functions, taking account of budget constraints. Firms decide how many workers they want to hire and how much capital to employ in order to maximize profit, taking account of technology constraints.

explicit by the forecaster. In addition, the parameters in these models are "structural", i.e. they are independent of monetary or fiscal policy choices.³

Naturally, the results we obtain depend essentially on the type of model selected, although there may be no general consensus on the choice to make. For example, despite a number of recent Keynesian developments, the theoretical specification of many DSGE models means that a significant portion of cyclical fluctuations is due to (exogenous) changes in productivity, linked in particular to technological progress, or in household preferences. These characteristics leave little room for fiscal policy intervention, and therefore limit the use of these models in fiscal planning. Another common hypothesis used in DSGE models, one whose realism remains controversial, is the assumption of the rational expectations of economic agents (which assumes that economic agents can access all information about the economic structure described by the model immediately and costlessly). Among other things, the rational expectations hypothesis means that many households would have "Ricardian" features, i.e. that they would respond to expansionary fiscal policies by symmetrically increasing their savings rate in fear of a future government adopting restrictive policies in order to maintain the sustainability of the public finances. This characteristic sharply limits (and in some cases entirely cancels out) the response of the economy to fiscal policy measures (the socalled fiscal multiplier).

Finally, the complexity of these models and the associated estimation methods restricts their size and the number of variables they can analyse. This can be a substantial limitation, especially for fiscal authorities who require an as-complete-as-possible macroeconomic framework to perform their planning activities.⁴

The problems DSGE models face in estimating the effects of structural reforms

The MEF uses two DSGE models: QUEST III of the European Commission with parameters calibrated for Italy and the IGEM model developed by MEF staff. These models have many of the characteristics discussed earlier.⁵ QUEST III distinguishes itself from existing DSGE models in the greater attention it devotes to the role of R&D in driving developments in macroeconomic variables. The model includes an R&D sector that employs highly qualified workers and contributes to increasing productivity. Other features of the model include the inclusion of regulatory and administrative costs, tax

⁵ For a description of the QUEST III model, please see Roeger W. Varga J. and in't Veld, "Structural reforms in the EU: a simulation-based analysis using the QUEST model with endogenous growth", European Economy - Economic Paper, no. 351, 2008. The IGEM is discussed in Annicchiarico B., Di Dio F, Felici F. and Monteforte L., "IGEM: a dynamic general equilibrium model for Italy", Italy's Department of the Treasury Working Paper no. 4, 2013.



³ When the coefficients of the model are estimated (rather than calibrated), the formal link with a theoretical model makes it necessary to use estimation methods that take account of the overall structure of the model and, therefore, of the relationships between the variables that appear in more than one equation (system estimation). This may prove technically and computationally challenging, but in principle it should improve the overall quality of the estimates and enhance their robustness in respect of structural changes in the economy compared with more traditional models.

⁴ For a review of the issues, please see, for example, Blanchard O.J., "The State of Macro", NBER Working Paper 14259, 2008. Despite the recent rapid dissemination of DSGE models in institutional circles, their use for forecasting purposes is quite limited and generally confined to a number of central banks. See, for example, Del Negro M. and Schorfheide F., "DSGE model-based forecasting", Federal Reserve Bank of New York Staff Reports, no. 554, 2012.

incentives for investment and R&D, taxes on consumption and factors of production, and unemployment benefits. By contrast, the IGEM primarily focuses on the dualism of the Italian labour market. The labour market is segmented into a "primary" sector with greater employment protections and better working conditions and a "secondary" sector with fewer protections. It also comprises three categories of worker: employees with permanent employment contracts, self-employed workers and atypical workers. In both models the parameters are calibrated rather than estimated.

Significant complications arise when DSGE models are used to assess the impact of structural reforms on macroeconomic variables, especially in short-term forecasting.⁶ In particular, this form of analysis requires the mapping of policy interventions, which are primarily of a qualitative nature, to quantitative changes in the associated reform indicators and the model parameters. For example, in order to be assessed in the models, the liberalization of product markets must be translated into reductions in the mark-up of prices over costs. This mapping is left to the discretion of the analyst. For example, the 2015 Draft Budgetary Plan specifies that the measures for the reform of the public administration, which are generally qualitative, are mapped in QUEST III with a reduction of 3% in administrative costs "consistent with the estimated impact on labour productivity". In the 2015 Draft Budgetary Plan, the effects of the Jobs Act are assessed in the IGEM model assuming a reduction of 4 percentage points over ten years in the share of temporary workers and a matching increase in the share of permanent workers.

Another significant difficulty is predicting the time necessary to implement the reforms themselves, especially as these interventions generally require not only the enactment of legislation but also the preparation of regulations and administrative measures. While this issue is less significant for estimating the impact of the reforms in the long run, the uncertainty over the timing of implementation has a major impact in short and medium-term forecasts.

Finally, although there is broad consensus on the positive impact of the structural reforms on long-term GDP, the short-term effects are much more uncertain and can depend on a series of specific circumstances or interactions with other variables that the models or the analyst may not be able to capture. For example, according to indicators published by the OECD, since 1998 the rigidity of the product market has diminished substantially in Italy, both in absolute terms and in comparison with other countries such as France or Germany (Figure 1.3). However, that progress does not appear to have been transformed into improvements in potential growth rates, either in absolute terms or relative to other countries.

In addition, in periods (such as the current one) in which nominal interest rates are close to zero and cannot be lowered further, the deflationary impact of the structural reforms could trigger an increase in real interest rates and thereby depress aggregate demand even further. In these cases, certain structural reforms could have a negative impact on

⁶ Some of these complications are discussed in the documentation published by the MEF to describe the models and their use in policy simulations. In particular, please see Annicchiarico B., Di Dio F. and Felici F., "Assessing the macroeconomic impact of structural reforms in Italy: the NRP approach", MEF- Dipartimento del Tesoro, 2014.



GDP in the short term rather than the positive impact that would result in "normal" times. 7



Figure 1.3 - Regulation of product markets and growth of potential output

Source: OECD.

The macroeconomic impact of reforms in the draft budgetary plans

Since 2011, the structure of the public finance documents provides for a specific section of the Economic and Finance Document to be devoted to the discussion of the Government's reform initiatives. This section, called the National Reform Programme (NRP), discusses in detail the measures that have been taken and those that are planned, also illustrating the macroeconomic impact attributed to those interventions in

⁷ For a brief survey of this issue, please see European Commission, "Structural reforms at the zero lower bound", Quarterly report of the euro area economy, Vol. 13, No. 3, 2014. According to the Commission, recent work on this issue overestimates the recessionary impact of structural reforms in the short term when nominal interest rates are close to zero.



the macroeconomic policy scenario. This impact solely regards measures to modify the regulation of specific sectors (the justice system, public administration, competitiveness, the labour market), whose effects have an impact on economic variables that represent the transmission channel for the macroeconomic effect (administrative costs, mark-ups, cost of factors of production, etc.). It does not consider the impact of fiscal measures, the effects of which are already considered in the macroeconomic forecasting model, which incorporates those variables.

In adding the impact of subsequent interventions to those expected from the reforms, the public finance documents issued since 2011 have also revised the effect of previous reforms. Table 1.2 offers a summary of the entire series of estimates and revisions (in italics) produced since 2011.⁸

Note that for the short-to-medium term (2015-20), the downward revisions of estimates made in 2011-14 are greater than the additional effect generated by the new reforms approved over that period: the estimated overall impact of the reforms in the two most recent public finance documents is smaller, especially for 2015, than the initial estimated impact produced by the reforms envisaged in the 2011 NRP. The effects initially attributed to each of the subsequent NRPs have systematically been revised downwards in subsequent documents. The size of the revisions (a cumulative -2.8 for 2015 and -5.4 for 2020) underscores the greater uncertainty of these estimates. This uncertainty is associated both with the difficulty of quantifying the variables that make up the transmission channels for organisational reforms and with the characteristics of the models used themselves.

Despite the significant downward revisions of the estimates, the effect attributed to the structural reforms is very large: for 2015, 80% of forecast year-on-year growth (0.5 points) is ascribed to the effect of the reforms undertaken in the 2012-14 period. Each public finance document has added the effects attributed to additional measures implementing previous reforms to the expected impact from the measures already implemented (revised downwards in the short term), attributing an additional boost to GDP growth in the medium and long term to the Government's policy-setting.

Moreover, the factors prompting the revisions have generally been of a temporary nature, associated with implementation delays or the persistence of the recession. Accordingly, no revisions have been made to the especially large long-term effects of the reforms. It should be noted that the need to repeatedly revise the impact estimates downwards, justified by worse-than-expected outcomes, could actually be attributable in part to the fact that the structural effectiveness of the reforms is less than expected. Without further evidence, it would seem prudent to allow the long-term estimates to at least partly reflect the short and medium-term revisions.

⁸ The figures in the 2011 EFD, regarding the NRP of the same year, are also reported in the 2012 EFD, which updated them. In the table, that data, expressed in percentage point divergences from the average rates of change, is stated in cumulative terms in order to ensure their comparability with the data in subsequent EFDs, which are stated in terms of average percentage divergences from the baseline simulation.



Concluding remarks

The extensive use of DSGE models by the MEF, not only for medium/long-term policy analysis but also to support short/medium-term macroeconomic forecasting is fairly unusual, at least within the ranks of fiscal policy authorities. More specifically, their use threatens to increase forecasting errors. From a methodological standpoint, the integration of analyses carried out using DSGE models in forecasts developed with other, more traditional macroeconometric or statistical models is less than convincing given the differing natures of the models and, above all, because their responses to exogenous shocks are quite different, sometimes even in the sign of the response.⁹ In addition, this integration introduces a number of sources of error in the forecasts, in particular the discretionality with which the structural reforms are mapped to changes in the parameters of the DSGE models and the uncertainty of the timing of the implementation of the reforms themselves.

This has obvious undesirable consequences for short/medium-term fiscal planning, especially when the effects of errors are unidirectional, i.e. when they tend to systematically render the macroeconomic scenario, and thus the budget balance numbers, more favourable. For example, as noted in the Update of the 2014 EFD (pages 10 and 18), the revision of the effects of the structural reforms is the main cause of the downward revision of growth forecasts from 2016 compared with those in the EFD published in April of the same year. Moreover, the same revision is also an important cause of the downward adjustments of GDP growth forecasts for 2014-15.

It would therefore be preferable for the MEF to use the DSGE models not to support short-term macroeconomic forecasts but only to assess the long-term macroeconomic impact of the reforms or to set out alternative medium-term scenarios to the baseline scenario developed using more traditional approaches. The main strength of the DSGE models, represented by their coherence with an underlying theoretical structure, involves respecting the constraints on parameters and the relationships among variables, making them better suited to medium and long-term analysis, where compliance with equilibrium relationships is usually assumed. The use of these models for medium/long-term assessments would therefore enable assessment of the benefits of the structural reforms in terms of greater income and more sustainable public finances without impacting (and possibly introducing errors in) fiscal policy for the short to medium term.

⁹ See Annicchiarico B., Di Dio F., Felici F. e Nucci F., "Macroeconomic modelling and the effects of policy reforms: an assessment for Italy using ITEM and QUEST", Italy's Department of the Treasury Working Paper no. 1, 2011.



Public finance	Structural reforms	2015	2020	Long run
document				
e II.13 nfrom 7)	2011 NRP reforms - initial estimate (innovation and human capital, product market and administrative efficiency, support for firms, labour and pensions)	1.5	2.7	n.a.
112 Tabl raw II.1	2011 NRP revision	-0.8	-0.9	n.a.
2(RP:) ta d	Revised 2011 NRP	0.7	1.8	n.a.
D (NI D da: Ta	2012 NRP: liberalisation and simplification (reduction of mark-up,	0.9	2.4	n.a.
ar EF	2012 FED: total 2011-12 reforms	1.6	4.2	n.a.
ä	2011 NRP: not brought forward	-		-
(NR (7)	2012 NPD: liberalization and simplification	0.0	2.4	1 9
le II.	2012 NRF: Interainsation and simplification	0.9	2.4	4.0
13 F Tab	2013 NRP: Jahour market reform	0.5	0.5	1.4
20.	EFD 2013: total 2012-13 reforms	1.6	3.9	6.9
t ble III.3.2 wn from 3.1)	Impact of 2012 NRP reforms (liberalisation and simplification) and 2013 NRP reforms (growth decrees and labour market): 2013 EFD estimates	1.6	3.9	6.9
014 Tat drav	Update a) revision for implementation delays	-0.3	-0.6	0
2 RP: ata	b) revision for recession	-0.6	-0.8	0
d ds	2012 and 2013 NRP reforms: updated 2014 EFD estimates	0.7	2.5	6.9
an	2013 reforms enacted after approval of 2013 EFD	0.1	0.2	0.2
	2014 EFD : total 2012-13 reforms.	0.8	2.7	7.1
014 18,	Total 2012-14 reforms. Estimates in Update to 2014 EFD	0.8	2.7	7.1
е р.	Trend revision of reform impact	-0.4	-1.3	
abl abl	Policy change	0	2	1.0
pdã □D(]	Total change in reform impact compared w/2014 EFD forecast	0	0.7	
<u> </u>	Updated estimates in Update to 2014 EFD	0.4	3.4	8.1
E	Breakdown of impact of structural reforms by area of intervention:			
stro	Public administration	0.1	1	2.3
ble :	Competitiveness	0.1	1.1	3.2
- ta	Labour market	0.1	0.9	1.6
get. 2 to	Justice system	0.1	0.4	1.0
udi II.4.	Total impact of structural reforms	0.4	3.4	8.1
15 5	of which: trend impact	0.4	1.4	7.3
20:	policy impact of measures enacted after approval of 2014 EFD	0.0	2.0	0.8

Table 1.2 –The macroeconomic impact of the reforms
(average percentage deviations from the baseline simulation)

Source: based on the public finance documents specified in the table.



2. The public finances

Introduction

The general government primary surplus for 2014 is expected to decline compared with 2013, both as a percentage of GDP and in absolute terms, going from \leq 32.2 billion in 2013 (2% of GDP) to \leq 27.5 billion in 2014 (1.7% of GDP).

Compared with the trend forecast, the budget reflects a deterioration in the deficit of around €6 billion in 2015, a marginal correction in 2016 and an improvement of about €7 billion in 2017. This still implies a return to the adjustment path towards the medium-term objective (MTO), which had been interrupted in 2014. The budget envisages structural deficits of 0.9% of GDP in 2014, 0.6% in 2015 and 0.4% in 2016. The fiscal stance should be essentially neutral in 2015 and contractionary in 2016.

The primary surplus will return to just under 2% of GDP in 2015 and in subsequent years should continue to rise to the 3.5% forecast for 2017, when it will amount to €61 billion in absolute terms, more than double the figure for 2014.

The increase in the primary surplus over the 2015-17 period should result from a decline in primary expenditure of 1.6 percentage points of GDP and an increase in revenue of 0.3 points. The decrease in expenditure is concentrated under current primary expenditure other than social security benefits in cash (essentially compensation of employees and intermediate consumption). After falling in absolute terms in the 2014-15 period, such spending should return to the 2014 level during the 2016-2017 period; as a proportion of GDP, it is forecast to contract by 1.5 percentage points between 2014 and 2017. On the revenue front, an increase in the tax burden (from 43.3% of GDP in 2014 to 43.6% in 2017) is the result of a decline of 0.7 points of GDP in social contributions, more than offset by a 1 point increase in the tax burden excluding social contributions. Of the latter increase, 80% is accounted for by indirect taxation, specifically the increase in VAT rates starting from 2016 and automatic increases in excise taxes (safeguard clauses), measures that were introduced with the Stability Bill.

The importance of the VAT increase and the safeguard clauses to the medium-term stability of the public accounts becomes clear when comparing the policy scenario forecasts to the trend scenario forecasts. The policy correction of almost €7 billion in net borrowing in 2017 is well below the additional revenue of just over €19 billion generated from VAT and excise taxes.

The debt-to-GDP ratio it expected to rise by a further 1.8 percentage points in 2015, before declining by 8.8 points over the next three years. This includes privatization proceeds amounting to 0.7 points of GDP per year starting from 2015. It is an ambitious target if viewed in light of the outcomes for 2014.



Finally, in order to provide a comprehensive assessment of developments in the public finances, the degree of uncertainty about the financial impact of the 2015 Stability Bill should to taken into consideration. In the PBO's view, this is particularly true for certain measures, specifically the increase in revenue from gambling, contribution relief for hiring permanent employees and the new favourable tax regime for the self-employed.

2.1 General Government Accounts in 2014

In the most recent official assessments,¹⁰ net borrowing for 2014 was estimated at 3.0% of GDP, compared with 2.8% for the previous year and the 2.6% indicated in the 2014 EFD. The deterioration compared with 2013 is attributable to a further worsening of economic conditions, partially offset by the reduction (0.1% of GDP) in interest expenditure. The primary surplus is expected to fall from 2.0% to 1.7% as a result of an increase in both current primary expenditure (from 42.7% to 42.9% of GDP) and in capital expenditure (from 3.6% to 3.7%). Revenue remains essentially stable (at 48.3%) since the decline in direct taxes, linked to an especially marked contraction in IRES (corporate income tax) and the tax on interest income on bank accounts, and the decline in capital taxes (essentially temporary) are offset by the increase in indirect taxes, especially VAT. The tax burden remains stable at 43.3%, the highest level reported since 1995, the first year for which data calculated in accordance with the new system of accounts (ESA 2010) are available. The increase in current primary expenditure is mainly due to the introduction of an €80 tax credit (the "bonus") for low-income employees. Current expenditure other than social security benefits in cash fell in nominal terms. The estimated growth in capital expenditure is due primarily to tax credits claimed by banks and other financial institutions with respect to bad debts (so-called "deferred tax assets", or DTA).¹¹

This year is the third year in a row in which expenditure has risen net of interest. This growth exceeds that reported over the previous two years (1.2%, compared with 1.0% in 2012 and 0.5% in 2013). These increases follow two years of decline as a result of budget measures enacted to eliminate the excessive deficit. The same budget measures sustained revenue during the 2010-2012 period, followed by essentially no change in 2013 and a slight rise in 2014 (Figure 2.1).

¹¹ Under ESA 2010, "payable" tax credits – i.e. those for which the taxpayer may request reimbursement if they exceed the tax liability – may no longer be recorded in government accounts as a reduction in tax revenue, but rather must be classified as expenditure in the year in which they accrue, with no impact on revenue, which are therefore grossed for the amount used as a deduction.



¹⁰ Nota tecnico-illustrativa al disegno di legge di stabilità 2015 (31 October 2014).



Figure 2.1 – Developments in revenue, primary expenditure and borrowing (1) (*cumulative growth; 2009 = 100*)

Source: based on ISTAT and MEF data, *Nota tecnico-illustrativa al disegno di legge di stabilità 2015*. (1) Net borrowing as a percentage of GDP; right-hand scale.

2.2 Policy scenario

In the two policy documents published in early and mid-October, the Update of the EFD and the 2015 Draft Budgetary Plan (DBP), the Government set out less ambitious targets than those contained in the April EFD. Net borrowing was expected to decline from 3.0% of GDP in 2014 to 0.2% in 2018; however, the EFD envisaged going from a deficit of 2.6% to a surplus of 0.3%. The projected increase in the primary surplus between 2014 and 2018 was put at 2.2 percentage points (to 3.9% of GDP), compared with an increase of 2.4 points (to 5.0%) forecast in the EFD.

The difference between the policy scenario figures and the current-legislation trend figures demonstrated that the net budgetary impact was expansionary by 0.7 percentage points of GDP in 2015. In nominal terms, net borrowing deteriorated by ≤ 11.5 billion, going from 2.2% of GDP in the trend scenario to 2.9% in the policy scenario. The structural balance was expected to improve by 0.1 percentage points. In nominal terms, the budget is expected to be neutral in 2016 and contractionary in 2017 and 2018, in an amount equal to 0.3 and 0.5 percentage points of GDP, respectively.

The expansionary budget measures of 2015 were justified by exceptional circumstances, namely a very wide output gap, a negative GDP growth rate in 2014 and the high likelihood that contractionary measures would have triggered a recession with the risk of deflation. Furthermore, the Government sought to intervene in the sectors most



important for economic growth, to sustain aggregate demand and to improve the country's ability to compete, while also addressing the taxation of households and firms.

According to the European Commission, which assessed the budgetary plans of the euro-area countries (as provided for by Regulation (EU) no. 473/2013), Italy has significantly deviated from the adjustment path towards the MTO. Accordingly, in a letter of 22 October, the Commission asked for guarantees that Italy will comply with the rules of the preventive arm of the Stability and Growth Pact (SGP).

In response to these observations, the Government, with the Second Update of the 2014 Economic and Financial Document of 28 October, revised the 2015 net borrowing target from 2.9% to 2.6% of GDP. Additional measures amounting to around \leq 4.5 billion were approved to achieve this, with a concomitant improvement in the structural balance compared with 2014, raising it to about 0.3 percentage points (rather than the previously mentioned 0.1 percentage point).¹²

2.2.1 2015-17 forecasts

As a result of the budget measures (see section 2.2.2), net borrowing is scheduled to fall from the 2.6% of GDP projected for 2015, to 1.8% in 2016 and 0.7% in 2017. The primary surplus is forecast to increase by a total of 1.6 percentage points of GDP, from 1.9% to 3.5% (Table 2.1)¹³.

Compared with the trend scenario, in 2015 the budget measures should produce a recovery in the growth of primary expenditure (0.7%, rather than remaining essentially unchanged), as a result of an acceleration in the current component (0.8%, compared with 0.4%) and a smaller contraction in capital expenditure (-0.9%, compared with - 4.2%).

Current primary expenditure is driven by developments in social security benefits in cash and the compensation of employees. The former is mainly affected by the €80 bonus for those in low-income tax brackets and the reform of the social safety net, while the latter has been impacted by the launch of education reform. Countering these factors are additional cost containment measures, mainly affecting intermediate consumption (-4.3%, compared with -0.3% in the current-legislation trend scenario).

The smaller reduction in capital expenditure is largely associated with the loosening of the targets under the Domestic Stability Pact (DSP) for local governments.

¹³ In the *Nota tecnico-illustrativa al disegno di legge di stabilità 2015*, the Government states that "the policy account of general government demonstrates the effects of the Stability Bill on the revenue and expenditure items that comprise it, net of any feedback impact on the macroeconomic scenario and the reduction in planned interest expense resulting, in 2016 and in 2017, from the improvement in the primary surplus as a result of the budget measures".



¹² The additional measures are set out in an amendment to the Stability Bill.

The deceleration in revenue (from growth of 1.3% under the trend scenario to 1.2%) reflects the decline in social contributions (-0.9%, compared with an increase of 1.2%) due to the full social security contribution relief for new employees and to lower payments to the national social security institute (INPS) as a result of the option for employees to receive their accruing severance benefits (TFR) directly in their paychecks. The growth rates for all the other components of revenue exceed those under the trend scenario.

The developments under the trend scenario for primary expenditure have been confirmed for the 2016-17 period, with net expenditure under the budget measures remaining broadly stable between 2015 and 2017. The situation is different for revenue, for which the gradual rise in the VAT rate starting from 2016 will produce a sharp increase in indirect taxation (6.2% and 5.1% in 2016 and in 2017, compared with 2.7% and 2.9% under the trend scenario). The fiscal effects and the employer charges generated by a number of measures (including the full social security contribution relief for new employees, the revision of IRAP (regional business tax) rates, and education reform) contribute to the rise. After a slight decline as a result of tax and social contribution relief granted in 2015, the tax burden rises by 0.4 percentage points, from 43.2% in 2015 to 43.6% in 2016 and 2017, reaching its highest level since 1995.



											PLANNIN	NG SCENAR	0	
			F	echnica	TREN	D SCENARIC o the 2015 S) Stability Bill		Teo	chnical onal m	Note to t easures i	he 2015 Sta n the Repo	bility Bill a rt to Parlia	nd ment
	millions o	of euros	rates	of chan	ge	%	of GDP		rates	of chan	ge	%	of GDP	
	2013	2014	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017
EXPENDITURE														
Compensation of employees	164,747	163,051	0.1	0.0	-0.1	9.9	9.7	9.5	0.7	1.0	-0.4	10.0	9.8	9.5
Intermediate consumption	130,626	128,421	-0.3	1.7	2.2	7.8	7.8	7.7	-4.3	1.7	1.6	7.5	7.4	7.3
Social security benefits in cash	319,690	332,140	0.6	2.4	2.3	20.3	20.4	20.3	3.3	1.7	2.5	20.8	20.6	20.5
Other current expenditure	76,306	74,871	1.3	0.1	0.0	4.6	4.5	4.4	-1.0	0.4	-0.6	4.5	4.4	4.2
Current expenditure net of interest	691, 369	698,483	0.4	1.5	1.5	42.7	42.4	41.9	0.8	1.4	1.4	42.8	42.3	41.5
Interest	78,201	76,670	-3.1	1.6	-1.7	4.5	4.5	4.3	-3.2	1.5	-1.7	4.5	4.5	4.2
CURRENT EXPENDITURE	769,570	775,153	0.0	1.5	1.2	47.2	46.9	46.2	0.4	1.4	1.1	47.3	46.7	45.8
CAPITAL EXPENDITURE	57,605	60,129	-4.2	4.1	-4.3	3.5	3.6	3.3	-0.9	6.6	-2.7	3.6	3.8	3.5
Expenditure net of interest	748,974	758,612	0.0	1.7	1.0	46.2	46.0	45.2	0.7	1.8	1.0	46.4	46.0	45.1
TOTAL EXPENDITURE	827,175	835,282	-0.3	1.7	0.8	50.7	50.5	49.5	0.3	1.8	0.8	50.9	50.5	49.3
REVENUE														
Direct taxes	241,497	238,241	2.2	3.1	1.6	14.8	15.0	14.8	2.9	4.0	1.7	14.9	15.1	14.9
Indirect taxes	239,681	247,997	0.5	2.7	2.9	15.2	15.2	15.3	0.8	6.2	5.1	15.2	15.7	16.0
Effective social contributions	215, 194	216,398	1.2	1.9	2.0	13.3	13.3	13.2	-0.9	0.5	2.1	13.0	12.8	12.6
Other current revenue	75,559	76,818	1.2	1.4	3.0	4.7	4.7	4.7	1.4	1.2	3.0	4.7	4.7	4.7
CURRENT REVENUE	771,931	779,454	1.3	2.5	2.3	48.0	48.2	48.0	1.0	3.5	3.1	47.8	48.2	48.2
CAPITAL REVENUE	9,286	6,616	6.3	13.4	-14.5	0.4	0.5	0.4	20.2	0.3	-14.5	0.5	0.5	0.4
TOTAL REVENUE	781,217	786,070	1.3	2.5	2.1	48.5	48.7	48.4	1.2	3.4	2.9	48.3	48.7	48.6
Tax burden						43.4	43.6	43.3				43.2	43.6	43.6
PRIMARY BALANCE	32,243	27,458				-2.3	-2.7	-3.1				-1.9	-2.7	-3.5
NET BORROWING	45,958	49,212				2.2	1.8	1.2				2.6	1.8	0.7
GDP (in millions of euros)	1,618,904	1,626,516			1,6	542,809 1,(577,680 1,72	3,116			1,6	46,550 1,6	90,027 1,	742,327

Table 2.1 – General government accounts for the years 2015-17: trend scenario and policy scenario

Source: based on data in *Nota tecnico-illustrativa al disegno di legge di stabili*tà 2015 and in *Relazione al Parlamento* of 28 October 2014.

2.2.2 The 2015 Stability Bill

The 2015 Stability Bill and the additional measures (hereinafter the "2015 budget measures") forecast a net deterioration in net borrowing of \in 5.9 billion in 2015 (0.4% of GDP), a slight improvement of \in 0.2 billion in 2016 and a more substantial improvement of \in 6.9 billion in 2017 (0.4% of GDP) (Table 2.2). The latter two figures, however, reflect the impact of triggering the safeguard clause,¹⁴ introduced with the 2014 Stability Act (reduced, taking account of the additional measures, by \in 3.7 billion each year, to \in 3.3 and \in 6.3 billion, respectively), and of the increase in intermediate and ordinary VAT rates (with an estimated impact on revenue of \in 12.8 and \in 19.2 billion).

The additional measures consist of: 1) the use of ≤ 3.3 billion already appropriated under the Stability Bill for the Fund for the Reduction of the Tax Burden; 2) a reduction of ≤ 0.5 billion in the resources for the co-financing of the European Structural Funds exempted, in the original test of the bill, from the spending targets of the regions under the DSP; 3) extending the VAT reverse-charge mechanism to major retailers, with an estimated impact of ≤ 0.7 billion. Since this latter measure depends on the EU Council granting a waiver, a special safeguard clause was included that provides for an increase in excise taxes to ensure that the higher expected revenue is collected. The ≤ 0.7 billion that will be generated starting from 2016 will be used to partially neutralise the safeguard clause introduced with the 2014 Stability Act (bringing it to ≤ 3.3 billion in 2016 and ≤ 6.3 billion starting from 2017, as noted above).

In 2015, \notin 26.6 billion in resources will be recovered with the budget measures, compared with \notin 32.5 billion in uses. During the 2016-17 period, uses remain essentially stable at around \notin 46 billion, while resources rise to \notin 46.2 billion and \notin 53.5 billion, respectively, due to the increase in VAT rates. As a result, while the net increase in expenditure is relatively stable over the three-year period (\notin 4.9 billion in 2015 and \notin 5.9 billion in both 2016 and 2017), net revenue, after a slight dip in 2015 (\notin 1 billion), will support the return to the adjustment path towards the MTO, rising by \notin 6.0 billion in 2016 and \notin 12.8 billion in 2017.

Examining the composition of expenditure, in 2016-17 the budget measures aim to increase capital expenditure at a faster pace. In the final year, the measures should produce an increase that is almost triple current expenditure (\leq 4.3 billion, compared with \leq 1.5 billion).

¹⁴ For more detailed information on the use of the safeguard clauses in recent years, please see Appendix 2.1.



Table 2.2 Effects of the 2015 Stability Bill and the additional measures on general government income account (1) (millions of euros)

	2015	2016	2017
RESOURCES	26,561	46,159	53,452
% of GDP	1.6	2.7	3.1
Higher revenue	10,481	26,957	33,636
Increase in VAT and excise tax rates (safeguard clause)	0	12,814	19,221
Measures to combat VAT evasion	3,336	3,544	3,544
Severance benefits in paychecks: taxation at marginal rate and			
lower payments into supplemental pension funds	2,409	2,936	2,969
Increase in withholding tax (from 4% to 8%) on building renovation			
and energy efficiency improvement costs	920	0	0
Provisions on gambling	900	900	900
Increase in tax rate on supplemental pension funds (from 11% to			
20%) and on severance benefit revaluation (from 11% to 17%)	450	480	480
Increase in taxable amount of non-commercial entities	430	256	256
Favourable tax regime for the self-employed	226	643	230 412
Revaluations of land and equity investments	200	100	100
Abolition of contribution payment roliof for amployors who benefit	200	100	100
from the full exemption from social security contributions for new			
amployees	155	103	850
Minor measures	715	522	563
	/15	333	505
Fiscal effects:	83	2,650	2,872
Total temporary exemption of contributions for new hires	0	1,194	1,122
Effects of tax wedge measures on IRES and IRAP (return to pre-DL 66/2014			
IRAP rates and juil deductibility of labour costs from IRAP tax base)	0	1,040	1,710
Severance benefits in paychecks: extension of benefits Ecohomus and renovations	U 83	54 362	40
Taxes and contributions charged to employers:	640	1.610	1,460
Fund for implementation of the Buona Scuola education plan	485	1,455	1,455
Peace-keeping missions	150	150	0
"Terra dei fuochi" financing (environmental clean-up)	5	5	5
Lower expenditure	-16,079	-19,201	-19,817
Lower current expenditure	-13,275	-16,823	-17,458
Contribution of local governments to the public finances	-8,550	-9,550	-10,550
Regions with cracial charter and autonomous provinces	-3,452	-3,452	-3,452
Municipalities - reduction in municipal solidarity fund	-548 -1 200	-548 -1 200	-548 -1 200
Provinces and metropolitan cities	-1,000	-2,000	-3,000
Local governments - Provision for doubtful receivables	-2,350	-2,350	-2,350
Reduction in tax wedge fund	-2,685	-4,680	-4,135
Reduction in spending by ministries (annexes A and B)	-1,077	-1,364	-1,425
Fund for reduction of the tax burden	-332	-19	-19
Fund for physically demanding professions	-150	-150	-150
Severance benefits in paychecks: lower severance benefits	-132	-609	-716
Reorganization of career paths (Security - Defence)	-119	0	0
Minor measures	-231	-452	-463
Lower capital expenditure	-2,804	-2,378	-2,359
Cohesion Action Plan - resource reallocation	-1,000	-1,000	-1,000
Reduction in spending by ministries (annexes A and B)	-870	-889	-941
Table E	-700	-365	-299
Minor measures	-235	-124	-119



Table 2.2 (cont.) – Effects of the 2015 Stability Bill and the additional measures on
general government income account (1)

(millions of euros)

	2015	2016	2017
USES	32,474	45,996	46,544
% of GDP	2.0	2.7	2.7
Higher expenditures	20,975	25,064	25,675
Higher current expenditures	16,247	19,193	18,967
Bonus of €80/month to low-income workers	9,503	9,503	9,503
Refinancing of social safety nets, work-related services and policies	1,500	1,500	1,500
Fund for implementation of the Buona Scuola education plan	1,000	3,000	3,000
Measures in favour of families	500	607	1,012
Funding for current policies:	2,850	2,850	2,000
Peace-keeping missions	850	850	0
Funds for the social card, social policies and policies for the non-self-sufficient	800	800	800
"5 per mille " allocation of tax money to charities	500	500	500
Funa for truckers	250	250	250
Fund for ordinary funding of universities (FFO)	200 150	200 150	200 150
Socially-beneficial works in Palermo and Naples	100	100	100
Immigration	200	200	200
Indemnities for persons harmed by blood transfusions	100	200	289
Fund for improving the efficiency of the legal system and courts	50	290	320
Minor measures	544	1,043	1,143
Higher capital expenditures	4,729	5,872	6,708
Reduction in Domestic Stability Pact targets for local governments	3,350	3,350	3,350
Tables B and E	725	1,885	2,600
Tax credit for R&D	256	429	520
Severance benefits in paychecks: initial allocation to INPS guarantee fund	100	0	0
Minor measures	298	208	239
Lower revenues	-11,499	-20,931	-20,869
Superseding safeguard clause	-3,000	-3,728	-3,728
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full			
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base)	-2,701	-5,600	-5,600
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS	-2,701	-5,600	-5,600
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefit fund	-2,701	-5,600	-5,600
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefit fund Severance benefits in paychecks: extension of tax relief (firms with fewer	-2,701 -2,327	-5,600 -3,328	-5,600 -3,361
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefit fund Severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employeec)	-2,701 -2,327	-5,600 -3,328	-5,600 -3,361 255
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefit fund Severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees)	-2,701 -2,327 -181	-5,600 -3,328 -248	-5,600 -3,361 -255
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefit fund Severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees	-2,701 -2,327 -181 -1,886	-5,600 -3,328 -248 -4,885	-5,600 -3,361 -255 -5,030
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefit fund Severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed	-2,701 -2,327 -181 -1,886 -1,061	-5,600 -3,328 -248 -4,885 -1,610	-5,600 -3,361 -255 -5,030 -1,303
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefit fund Severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP)	-2,701 -2,327 -181 -1,886 -1,061 0	-5,600 -3,328 -248 -4,885 -1,610 -148	-5,600 -3,361 -255 -5,030 -1,303 -134
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefit fund Severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP) Ecobonus and renovations	-2,701 -2,327 -181 -1,886 -1,061 0 -64	-5,600 -3,328 -248 -4,885 -1,610 -148 -680	-5,600 -3,361 -255 -5,030 -1,303 -134 -425
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefit fund Severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP) Ecobonus and renovations Minor measures	-2,701 -2,327 -181 -1,886 -1,061 0 -64 -1	-5,600 -3,328 -248 -4,885 -1,610 -148 -680 -43	-5,600 -3,361 -255 -5,030 -1,303 -134 -425 -37
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefit fund Severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP) Ecobonus and renovations Minor measures Tax effects:	-2,701 -2,327 -181 -1,886 -1,061 0 -64 -1 -76	-5,600 -3,328 -248 -4,885 -1,610 -148 -680 -43 -394	-5,600 -3,361 -255 -5,030 -1,303 -134 -425 -37 -724
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefit fund Severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP) Ecobonus and renovations Minor measures Tax effects: Severance benefits in paychecks: loss of taxation	-2,701 -2,327 -181 -1,886 -1,061 0 -64 -1 -76 -76	-5,600 -3,328 -248 -4,885 -1,610 -148 -680 -43 -43 -394 -281	-5,600 -3,361 -255 -5,030 -1,303 -134 -425 -37 -724 -400
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefit fund Severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP) Ecobonus and renovations Minor measures Tax effects: Severance benefits in paychecks: loss of taxation Elimination of employer contribution relief with full exemption from contributions for	-2,701 -2,327 -181 -1,886 -1,061 0 -64 -1 -76 -76	-5,600 -3,328 -248 -4,885 -1,610 -148 -680 -43 -43 -394 -281	-5,600 -3,361 -255 -5,030 -1,303 -134 -425 -37 -724 -400
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP) Ecobonus and renovations Minor measures Tax effects: Severance benefits in paychecks: loss of taxation Elimination of employer contribution relief with full exemption from contributions for new employees	-2,701 -2,327 -181 -1,886 -1,061 0 -64 -1 -76 -76 -76 0	-5,600 -3,328 -248 -4,885 -1,610 -148 -680 -43 -394 -281 -113	-5,600 -3,361 -255 -5,030 -1,303 -134 -425 -37 -724 -400 -169
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP) Ecobonus and renovations Minor measures Tax effects: Severance benefits in paychecks: loss of taxation Elimination of employer contribution relief with full exemption from contributions for new employees Ecobonus and renovations	-2,701 -2,327 -181 -1,886 -1,061 0 -64 -1 -76 -76 0 0	-5,600 -3,328 -248 -4,885 -1,610 -148 -680 -43 -394 -281 -113 0	-5,600 -3,361 -255 -5,030 -1,303 -134 -425 -37 -724 -400 -169 -155
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP) Ecobonus and renovations Minor measures Tax effects: Severance benefits in paychecks: loss of taxation Elimination of employer contribution relief with full exemption from contributions for new employees Ecobonus and renovations Taxes and contributions charged to employers:	-2,701 -2,327 -181 -1,886 -1,061 0 -64 -1 -76 -76 0 0 -202	-5,600 -3,328 -248 -4,885 -1,610 -148 -680 -43 -394 -281 -113 0 -267	-5,600 -3,361 -255 -5,030 -1,303 -134 -425 -37 -724 -400 -169 -155 -272
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP) Ecobonus and renovations Minor measures Tax effects: Severance benefits in paychecks: loss of taxation Elimination of employer contribution relief with full exemption from contributions for new employees Ecobonus and renovations Taxes and contributions charged to employers: NET REVENUE	-2,701 -2,327 -181 -1,886 -1,061 0 -64 -1 -76 -76 -76 0 0 -202 -1,018	-5,600 -3,328 -248 -4,885 -1,610 -148 -680 -43 -394 -281 -113 0 -267 6,026	-5,600 -3,361 -255 -5,030 -1,303 -134 -425 -37 -724 -400 -169 -155 -272 12,766
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP) Ecobonus and renovations Minor measures Tax effects: Severance benefits in paychecks: loss of taxation Elimination of employer contribution relief with full exemption from contributions for new employees Taxes and contributions charged to employers: NET REVENUE NET EXPENDITURE	-2,701 -2,327 -181 -1,886 -1,061 0 -64 -1 -76 -76 0 0 -202 -1,018 4,896	-5,600 -3,328 -248 -4,885 -1,610 -148 -680 -43 -394 -281 -113 0 -267 6,026 5,863	-5,600 -3,361 -255 -5,030 -1,303 -134 -425 -37 -724 -400 -169 -155 -272 12,766 5,858
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP) Ecobonus and renovations Minor measures Tax effects: Severance benefits in paychecks: loss of taxation Elimination of employer contribution relief with full exemption from contributions for new employees Ecobonus and renovations Taxes and contributions charged to employers: NET REVENUE NET EXPENDITURE current	-2,701 -2,327 -181 -1,886 -1,061 0 -64 -1 -76 -76 0 0 -202 -1,018 4,896 2,971	-5,600 -3,328 -248 -4,885 -1,610 -148 -680 -43 -394 -281 -113 0 -267 6,026 5,863 2,369	-5,600 -3,361 -255 -5,030 -1,303 -134 -425 -37 -724 -400 -169 -155 -272 12,766 5,858 <i>1,509</i>
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP) Ecobonus and renovations Minor measures Tax effects: Severance benefits in paychecks: loss of taxation Elimination of employer contribution relief with full exemption from contributions for new employees Ecobonus and renovations Taxes and contributions charged to employers: NET REVENUE NET EXPENDITURE current capital	-2,701 -2,327 -181 -1,886 -1,061 0 -64 -1 -76 -76 -76 0 0 -202 -1,018 4,896 2,971 1,924	-5,600 -3,328 -248 -4,885 -1,610 -148 -680 -43 -394 -281 -113 0 -267 6,026 5,863 2,369 3,494	-5,600 -3,361 -255 -5,030 -1,303 -134 -425 -37 -724 -400 -169 -155 -272 12,766 5,858 1,509 4,349
Tax wedge measures (return to pre-DL 66/2014 IRAP rates and full deductibility of labour costs from IRAP tax base) Severance benefits in paychecks: reduction in contributions to INPS severance benefits in paychecks: extension of tax relief (firms with fewer than 50 employees) Temporary full exemption from contributions for new employees Favourable tax regime for the self-employed Patent box (direct taxes and IRAP) Ecobonus and renovations Minor measures Tax effects: Severance benefits in paychecks: loss of taxation Elimination of employer contribution relief with full exemption from contributions for new employees Ecobonus and renovations Taxes and contributions charged to employers: NET REVENUE NET EXPENDITURE current capital NET BORROWING	-2,701 -2,327 -181 -1,886 -1,061 0 -64 -1 -76 -76 0 0 -202 -1,018 4,896 2,971 1,924 -5,913	-5,600 -3,328 -248 -4,885 -1,610 -148 -680 -43 -394 -281 -113 0 -267 6,026 5,863 2,369 3,494 163	-5,600 -3,361 -255 -5,030 -1,303 -134 -425 -37 -724 -400 -169 -155 -272 12,766 5,858 1,509 4,349 6,909

Source: based on data from the financial schedules attached to the 2015 Stability Bill.

(1) The table incorporates the additional measures indicated in the Report to Parliament of 28 October 2014 and does not take account of provisions set aside pursuant to Art. 2, paragraph 2, of the Rules of Procedure of the Chamber of Deputies.



The measures to reduce the tax wedge on labour and stimulate employment include: 1) provisions making the labour costs for permanent employees fully deductible from the IRAP tax base;¹⁵ 2) the full exemption from social security contributions made by private employers (with the exception of the agricultural sector) for new employees, for a period of up to thirty-six months (see section 4.1).

In order to support for household income: 1) the $\notin 80$ per month tax credit for employees with total income of up to $\notin 26,000$ per year, introduced with Decree Law 66/2014, was made permanent; 2) on an experimental basis from 1 March 2015 to 30 June 2018, private-sector employees will have the option of receiving the portion of severance benefits accruing in that year in their paychecks (see section 4.2.1). The amount paid in advance will be taxed at the normal marginal income tax (IRPEF) rate rather than at the average rate for the last five years; 3) the introduction of a $\notin 80$ per month payment, lasting three years, for each child born or adopted starting from 1 January 2015 through 31 December 2017, to parents with total incomes of up to $\notin 90,000$.

In order to foster economic recovery: 1) resources have been appropriated to finance the costs associated with the implementation of the labour market reform; 2) a favourable tax regime for people who engage in business, craft and professional activities was introduced, allowing them to calculate a taxable income by applying a standard profitability rate to revenue or fees net of mandatory contributions and paying, on this, paying a flat 15% tax in place of ordinary national, regional and municipal income tax and surtaxes and IRAP; other provisions provide for simplifying communication with the tax authorities and accounting requirements (among other things, exemption from registration obligations and accounting record requirements); 3) extending the deduction for expenses related to building renovations and for purchases of furniture and major appliances until 2015.

Resources have been appropriated to finance the implementation of a special plan for schools, calling for the creation of a fund to be used mainly for hiring teachers and financing improvements in work-study programmes.

The budget measures also contain resources for financing so-called unchangedlegislation expenditure, which for the first time have largely been made permanent (including, expenditure on peace-keeping missions, the social card, social policies and policies for the non-self-sufficient, "cinque per mille" (elective allocation of tax money to charities), truck drivers, private schools, universities).

 $^{^{15}\;}$ The 10% reduction in the IRAP rate provided for under Decree Law 66/2014 was repealed at the same time.



The main financial coverage measures consist of: 1) further reducing expenditure by ministries and local governments (see section 4.3); 2) raising revenue by combatting tax evasion; 3) gradually raising the VAT rates of 10% and 22% by two percentage points in 2016 and a further point in 2017; 4) introducing new provisions concerning the taxation of gambling networks run by persons operating without a state concession.

As regards the fight against tax evasion, additional tax revenue is expected to be generated through changes in the VAT reverse-charge mechanism, i.e. transferring the obligation of remitting the tax from the seller to the customer for transactions in the energy and gas sector, for cleaning services and, if accepted by the EU Council, with major retailers. A similar split-payment mechanism is envisaged for procurement by government departments. Finally, greater cooperation between tax authorities and taxpayers is expected to reduce tax evasion.

2.2.3 Uncertainty about the financial impact of the budget measures

A number of studies were conducted to assess whether the budget measures would be able to achieve the policy figures specified in the parliamentary resolutions. The assessment of the expected impact of the proposed measures is (together with the verification of the estimates of trend developments in the public accounts) one of the elements of monitoring compliance with domestic and European fiscal rules. As with optimistic macroeconomic forecasts, imprudent quantifications of the impact of the measures threatens the entire framework of the accounts, heightening the risks of budget management during the year and actually achieving the target balances.

The analysis focused on the effects in terms of net general government borrowing and identified certain risks, especially in the final years of the forecasting period and on the revenue side. The assessment is based on the information set out in the technical report and in the schedule summarizing the financial effects (Annex 3) of the Stability Bill, as well as independent calculations, where possible.

One example of the risks posed in ensuring that estimated revenue is actually collected is the case of gambling, the expected revenue from which, in highly simplified terms, is essentially generated by a withholding tax on the receipts of the network managed by operators without a state concession. This measure is partly intended to level the playing field between these operators and concession holders, whose activities are already involved in considerable litigation. Quantifying the increase in revenue produced by the measure presents numerous issues, with a high degree of uncertainty concerning the amount and timing of the revenue.¹⁶ Taking these factors into consideration, it

¹⁶ For a more detailed discussion, please see Dossier no. 233 of 2014 of the Servizio Bilancio dello Stato della Camera dei deputati, regarding the 2015 Stability Bill (AC 2679 - Bis).



would be preferable to delay recording the increase in revenue (equal to €900 million per year) until the outturn is available.

There are also significant uncertainty concerning the contribution relief measures for new hires made in 2015. As discussed in more detail in section 4.1.2, a key role in determining revenue could be played by both the substitution effect with the current stock of fixed-term contracts and a time-shifting effect, i.e. postponing the hiring of new employees from the previous year and bringing forward hires from the first few months of the subsequent year, the underestimation of which could amount to about €400 million in revenue in 2015 and more than €1 billion in 2016 and 2017.

A possible greater-than-expected loss of revenue could also occur in connection with the introduction of the favourable tax mechanism for the self-employed and sole proprietorships, including those already in business.¹⁷ Considering the advantages and the non-temporary nature of the facilitated regime, it is plausible that a larger number of people than projected in the technical report on the Stability Bill could take part;¹⁸ Given the simplifications introduced in communications with the tax authorities and the fact that participants would not be subject to statistical sectoral assessments and other forms of inductive determination of income, it will be easier for them to engage in tax evasion to remain under the thresholds to retain eligibility for the facilitated regime. In addition, these practices could be amplified by the incentive for these taxpayers to not request invoices from their suppliers since costs are not relevant in calculating income.

A simple analysis was then conducted of the expected effect of the changes in VAT rates starting from 2016 envisaged in the Stability Bill. The official assessments project revenue of €12.8 billion in 2016, €19.2 billion in 2017 and €21.3 billion in 2018, while the PBO estimates are slightly smaller.

The calculations were performed using 2013 national accounts data for the domestic final consumption expenditure of resident and non-resident households by purpose (Classification of Individual COnsumption by Purpose - COICOP), increased using the growth rates drawn from the macroeconomic scenario set out in the Update of the EFD. Assuming an unchanged composition of household consumption, the increase in revenue was calculated as the difference between the tax resulting from applying the VAT rates to the expenditure for each category of goods.

The increase in VAT is accompanied by the proviso that the rate changes could be smaller if measures are approved that ensure that the same amounts are generated through the collection of higher revenue or the achievement of savings by way of

¹⁸ As indicated in the *Audizione preliminario all'esame dei documenti di bilancio per il triennio 2015-17* of the Bank of Italy held on 3 November, almost one million taxpayers, around one-fourth of all individuals with VAT registration, could opt for the facilitated tax treatment.



¹⁷ For a comparison of the most recent relief mechanisms, see Appendix 2.2.

rationalisation and spending review measures. Furthermore, developments in the public accounts include higher revenue (of around €3.3 billion for 2016 and €6.3 billion starting from 2017) connected with the safeguard clause introduced by the 2014 Stability Act (only partially mitigated by the budget measures under review here), a provision that envisages changes in tax rates, reductions in the scale of existing relief and deductions, as well as spending cuts to be specified by January 2016.

Finally, a significant portion of revenue is attributable to the effects of other measures contained in the Stability Bill. For the "mechanical" part, i.e. that impacting tax bases, the assessment of the increase in revenue is reliable. For example, in the case of the *Buona Scuola* fund for the hiring of teachers, it is likely that some of the increase will be due to higher revenue from income tax, IRAP and social security contributions.

The situation changes in cases in which the higher revenue is to be produced by measures that assume changes in behaviour, the actual occurrence of which depends upon the design of the measures themselves and, more generally, on the characteristics of the sector involved and the environment in which they operate.

For example, quantifying the effects of favourable tax treatment for building renovations is affected by a degree uncertainty, in which the estimated increase in revenue assumes the absence of crowding out, i.e. that the additional renovation projects (that is, those that would not have been performed in the absence of the incentive) do not lead to a reduction in consumption or investment in other sectors, but are entirely additional and are presumably financed by drawing down household savings. It could be more prudent to assume that some of these additional works will replace other spending options (even if the possibility of receiving severance benefits in advance could ease the household budget constraint). Finally, we should consider the hypothesis (which is not contemplated in the technical report) that some of the renovation work would have been undertaken in subsequent years in any event: moving it forward will produce greater revenue during the year it is implemented, but could result in a corresponding decrease in subsequent years.

By contrast, the revenue expected to be generated from changes in VAT payment arrangements (the reverse-charge mechanism) and from measures for the advance payment of accrued severance benefits does not appear to be exposed to risk, even if it depends heavily on behavioural hypotheses.

The most important items on the expenditure containment side are the contribution of the autonomous territories and spending cuts at the ministries and other government entities. The financial scenario produced by these measures should be assessed, not only to verify the credibility of the resilience of the public finances, but also to evaluate the continuity of the functions performed and the volume of services delivered. Section 4.3 sets out a distributive analysis of the functions for municipalities and for



the regions, for which the Stability Bill envisages major changes in accounting and administrative arrangements that supersede the Domestic Stability Pact.

2.3 Structural objectives and the fiscal stance

The policy documents from last October indicated that achieving the MTO (for Italy, the objective is to achieve structural budget balance) would be postponed by one year, to 2017. The adjustment path was interrupted in 2014, with a return to the path in 2015. A structural deficit of 0.9% of GDP is forecast for 2014, one of 0.6% for 2015 and one of 0.4% for 2016 (Table 2.3 and Figure 2.2).

The Update of the 2014 EFD and the DBP of mid-October set out less ambitious structural net borrowing targets than those indicated in the April EFD, which projected a balanced budget for 2016. A structural balance of -0.9% of GDP is projected for 2014, -0.9% for 2015 and -0.4% in 2016.

At the end of the October, in response to the European Commission's request, as part of its assessment of the policy documents, for additional corrective measures, a Second Update of the EFD was presented to Parliament confirming the achievement of a balanced budget by 2017 and reducing structural net borrowing for 2015 by 0.3 percentage points, to 0.6% of GDP. The structural balance projected for 2016 was left unchanged.

In the updated DBP (including the additional measures requested by the European Commission), the overall reduction in structural net borrowing between 2014 and 2017 was not changed. The overall reduction remains at 0.9 percentage points of GDP, but is distributed more equally over the 2015-17 period, rather than being concentrated in the last two years.

In its most recent forecasts, the European Commission has a more pessimistic outlook for structural net borrowing over the 2015-16 period. This is primarily attributable to two factors. The first is that the Commission did not consider a number of corrective measures, such as expected revenue from measures involving the gambling sector and those associated with the safeguard clause introduced with the 2014 Stability Act. The second regards differences in the calculation of potential GDP and, therefore, the size of the correction for the cycle.


(percentage o	of GDP)					
	2013	2014	2015	2016	2017	2018
EFD	0.8	0.6	0.1	0.0	0.0	0.0
Update to EFD	0.7	0.9	0.9	0.4	0.0	0.0
Updated DBP (1)	0.7	0.9	0.6	0.4	0.0	0.0
European Commission (2)	0.8	0.9	0.8	1.0	0.0	0.0

Table 2.3–Developments in structural net borrowing (1)
(percentage of GDP)

(1) The DBP that incorporates the additional measures agreed with the European Commission. – (2) European Commission (2014), *Winter Forecast 2014*.



Figure 2.2 – Developments in structural net borrowing (1) (percentage of GDP)

(1) The DBP that incorporates the additional measures agreed with the European Commission. – (2) European Commission (2014), *Winter Forecast 2014*.

The developments in the structural primary surplus, i.e. structural net borrowing excluding interest expenditure, enable us to assess the government's actual efforts to consolidate the public finances. Analysis of the developments in the structural primary surplus and the output gap provides an indication of the stance of fiscal policy with respect to the position of the economy in a given phase of the business cycle (the fiscal stance).¹⁹ A more precise way of accomplishing this is to compare the change in the structural primary surplus with that in the output gap (Table 2.4).

¹⁹ An effective stabilization function requires a counter-cyclical fiscal policy: during the expansionary phase of the business cycle the public accounts should be consolidated and during the contractionary phase, policy should seek to stimulate the economy.



(percentage of GDP)								
	2011	2012	2013	2014	2015	2016	2017	2018
Output gap	-1.4	-3.0	-4.3	-4.3	-3.5	-2.6	-1.4	-0.4
Change in output gap		-1.7	-1.3	0.0	0.8	0.9	1.2	1.0
Structural primary surplus	1.2	3.7	4.2	3.8	3.9	4.2	4.2	4.1
Change in structural primary surplus		2.5	0.5	-0.4	0.1	0.3	0.0	-0.1
Output gap Change in output gap Structural primary surplus Change in structural primary surplus	-1.4 1.2	-3.0 -1.7 3.7 2.5	-4.3 -1.3 4.2 0.5	-4.3 0.0 3.8 -0.4	-3.5 0.8 3.9 0.1	-2.6 0.9 4.2 0.3	-1.4 1.2 4.2 0.0	-0.4 1.0 4.1 -0.1

Table 2.4Output gap and policy structural primary surplus (1)
(percentage of GDP)

Source: Update of the 2014 EFD, The cyclically adjusted public finance, Table III.3.

(1) The change in the structural primary surplus for 2012 and, as a result, the size of the surplus in 2011, was reconstructed on the basis of the change in structural net borrowing in 2012, reported in the Update of the EFD, and the change in interest expenditure reported for the same period (ISTAT, ESA 2010 data). The output gap for 2011 was provided by the MEF.

Figures 2.3 and 2.4 show the change in the structural primary surplus with the output gap and with its changes, respectively, for the 2012-2018 period. The upper left and lower right quadrants represent a pro-cyclical fiscal stance (i.e. government actions that follow the evolution of the business cycle: expansionary measures during growth phases and contractionary measures during recessionary phases). The upper right and lower left quadrants reflect counter-cyclical policies (i.e. measures that counter the evolution of the business cycle: expansionary measures that counter the evolution of the business cycles (i.e. measures that counter the evolution of the business cycle: expansionary measures during recessionary phases and contractionary measures during growth phases).

European rules require that Member States that have reached their MTO can allow automatic stabilizers to operate freely (i.e. to take a neutral fiscal stance, coinciding with the horizontal axis of Figures 2.3 and 2.4). Countries that have not yet achieved the MTO are instead required to make minimal annual adjustments to increase the structural primary surplus. They should therefore find themselves in the upper two quadrants of the figures, corresponding to contractionary fiscal policies, which will be pro-cyclical or counter-cyclical depending upon the phase of the business cycle.

During the economic and financial crisis of 2011, which was intensified by the effects of the increased risk associated with sovereign debt, a number of euro-area countries, including Italy (whose interest rate spread with respect to the German bund was the largest since entry into the euro area), that had not yet achieved their MTOs adopted contractionary policies during a period of severe economic slowdown, in accordance with European rules, in order to comply with the restrictions of the SGP and to ensure the medium and long-term sustainability of their public finances.

Figure 2.3, which compares the change in the structural primary surplus with the output gap, reveals the pro-cyclical nature (contractionary during recessionary phases) of Italian fiscal policy in 2012 and 2013. Note that in light of recent adjustments to the calculation of the output gap, the year 2013 would be categorized as being in a severe economic downturn defined by an output gap of more than -4%. Accordingly, the conditions for derogating from the European rules and suspending the adjustment path towards the MTO would have been met (a reduction of at least 0.5 percentage points in structural net borrowing).



In 2014, given that the output gap was greater than -4% (observed in real time), the derogation was actually granted and therefore the adjustment path was suspended. This is shown by the shift in the lower left quadrant of Figure 2.3. It follows that fiscal policy performed a moderately counter-cyclical function.



Figure 2.3 – Change in the structural primary surplus and the output gap (percentage of GDP)

In the Government's plans in the Update of the EFD (dotted line in Figure 2.3), fiscal policy was still slightly counter-cyclical in 2015, before turning contractionary and procyclical. This profile changes with the \notin 4.5 billion budget correction for 2015. A return to the adjustment path towards the MTO medium-term objective with an essentially neutral policy begins in 2015, given the small increase of one-tenth of a point in the primary surplus (solid line). In 2016, policy will be more contractionary and pro-cyclical, the result of the change in 2015 in the calculation of the structural balance. Finally, policy will be neutral in 2017 and in 2018 following achievement of the MTO.

Figure 2.4 shows the relationship between the change in the structural primary surplus and the change (rather than the size of) in the output gap. Such an approach allows us to highlight the dynamics of the business cycle. This representation also confirms the strongly pro-cyclical stance in the 2012-13 period. In 2014, with a stable output gap, consolidation of the public finances was suspended. Finally, fiscal policy, once again contractionary, is positioned in the counter-cyclical policy quadrant (solid line) for 2015 (and even more markedly in 2016), before returning to a neutral stance following achievement of the MTO.





Figure 2.4 – Changes in the structural primary surplus and in the output gap (percentage of GDP)

2.4 The public debt

In the Government's policy projections, the debt-to-GDP ratio should rise by an additional 1.8 percentage points, from 131.6% to 133.1% in 2015, before declining by 8.8 points over the next three years to 124.3% (Table 2.5). These developments reflect privatisation receipts in the amount of 0.7 percentage points of GDP per year starting from 2015.²⁰ In the light of the smaller receipts in 2014 (0.28% of GDP, compared with an initial forecast of 0.7%), the target for the disposal of property assets (amounting to \notin 12 billion per year) appears ambitious.

Excluding the effects of support to Member States in financial difficulty and Italy's contribution to the European Stability Mechanism (ESM), the public debt would be expected to decline starting from 2015 in an equivalent manner (8.7 percentage points of GDP) reaching 120.7% of GDP at the end of the forecasting period, displaying the smaller financial effort assumed in the forecasts.

The settlement of commercial payables is expected to continue to play a role in increasing debt through 2014. In subsequent years, the impact would reverse (totalling about 0.6 percentage points of GDP) in conjunction with the repayment of principal and interest by the entities that received funds to make those payments.

²⁰ The EFD projected a smaller increase in 2014, a reduction as from next year and a decline of 12.8 points of GDP through 2018. The difference for the current year is attributable to slower growth, the larger deficit and lower privatization proceeds.



In addition to the rise in the primary balance, the decline in the debt-to-GDP ratio reflects developments in interest expenditure compared with GDP and certain stock-flow adjustments.

As in 2013, the increase in the ratio for the 2014-2015 period to a large extent reflects the gap between the average debt service burden and the nominal rate of increase of GDP (the snowball effect) and, to a lesser extent, the impact of stock-flow adjustments, factors that were only partially offset by the size of the primary surplus.

During the subsequent three years, this trend should reverse: the rising primary surplus predominates over the other factors as a determinant of the reduction in the debt-to-GDP ratio. More specifically, the primary surplus is expected to increase by 2 percentage points of GDP, both in a trend scenario based upon current legislation and in the event that the budget measures in the 2015 Stability Bill are adopted, measures that become contractionary starting from 2017. The snowball effect declines to nil in 2018, essentially reflecting the forecast of a significant increase in GDP growth, partly connected with the implementation of the announced reforms, while the average debt service burden falls slightly. The effect of stock-flow adjustments becomes marginal starting from 2016 due to a variety of factors, including the assumption of property disposals amounting to 0.7 percentage points of GDP per year, the extension to 31 December 2017 of the suspension of the mixed Unified Public Treasury system provided for under the Stability Bill (-0.2% of GDP in 2016), the near total elimination of financial support for countries in the euro area through the European Financial Stability Facility (EFSF) as from 2015 (after the 0.4% and 0.2% of GDP posted in 2013 and 2014), and the elimination, again starting from 2015, of the contribution to the capital of the ESM.

	2013	2014	2015	2016	2017	2018
Debt-to-GDP ratio	127.9	131.6	133.1	131.6	128.4	124.3
Change in debt-to-GDP ratio	5.6	3.7	1.5	-1.6	-3.2	-4.1
Primary surplus	2.0	1.7	1.9	2.7	3.4	3.9
Snow ball effect (1), of which:	5.4	4.0	2.9	1.0	0.6	0.0
Average debt burden	3.9	3.6	3.4	3.4	3.3	3.3
GDP growth rate	-0.6	0.5	1.2	2.6	3.1	3.3
Stock-flow adjustment	2.2	1.4	0.6	0.1	-0.1	-0.2
Differences from cash and accruals accounting	0.6	1.5	0.8			
Net accumulation of financial assets	1.4	0.0	-0.3			
Valuation effects and statistical discrepancies	0.2	-0.2	0.0			

Table 2.5 Factors determining the change in the debt-to-GDP ratio (percentage of GDP and rates of change)

Source: based on ISTAT data (2014). The data for the public finances were drawn from the Update of the EFD, the Draft Budgetary Plan, the Technical Note to the 2015 Stability Bill 2015, the Report to Parliament at the end of the October and the notice to the European Commission of 21 October. Figures may not sum to 100 due to rounding.

(1) The snowball effect is calculated by multiplying the debt-to-GDP ratio for the previous year by the factor (r - g)/(1 + g), where r is the average debt service burden and g is the nominal GDP growth rate.



Appendix 2.1

Public finance balances and safeguard clauses

The goal of safeguarding the public finances or ensuring consolidation of the accounts has led in recent years to the repeated use of legislative approaches seeking to predict future changes in revenue and expenditure, also known as safeguard clauses. A variety of instruments fall under this title. In general, they delegate changes in rates and reductions in appropriations to administrative action. Given the variety of existing cases, a brief description of the various kinds available is useful. The expected effect of the main revenue mechanisms is set out in Table 2.6.

A first type of safeguard clause is represented by the procedure provided for by 1) the Government Accounting and Budgeting Act²¹ to ensure the effective funding of spending measures whose cost cannot be limited by an authorizing provision, since they refer to an estimated expenditure rather than a specified amount. In this case, the assessment of the cost is subject to a margin of error that does not allow policy-makers to rule out additional negative effects beyond those considered and funded at the time the measures are approved. These measures therefore incorporate an "effective and automatic" clause specifying the spending reduction or revenue raising measures to be adopted in response to deviations from projections. It must be possible to adopt the safeguard measures using administrative instruments that can be activated immediately, without recourse to further legislation. In general, the clauses envisage reductions in funding allocations for expenditure items within the same area of application as the intervention whose cost is to be limited. Alternatively, these clauses can provide for the recalculation - with an administrative instrument - of the benefits delivered, establishing that they can be curtailed as available resources are depleted.

This category includes across-the-board spending cuts in the case of failure to implement selective cost saving measures, responsibility for which is transferred to future administrative action. One example in the 2015 Stability Bill is Article 18, paragraphs 10 and 12, on the digitalization of administrative procedures in schools and the consequent realignment of administrative staff, aimed at achieving savings of €17 million in 2015 and €51 million starting from 2016. This projection is accompanied by a safeguard clause for cutting appropriations for discretionary spending on goods and services by the Ministry of Education, Universities and Research.

We have a special case when the uncertainty about the scale of the impact of the measures in not statistical in nature but rather depends on other factors, such as, for example, the compatibility of a measure with EU law or the economic classification of the operations. In this case, the effectiveness of the provision depends on a prior assessment of the financial and legal features of the operation in order to exclude the risk of any adverse impact on the accounts.



²¹ See Article 17, paragraphs 1 and 12, of Law 196/2009.

One example of this is the measure provided for under the 2015 Stability Bill 2015 concerning the VAT reverse-charge mechanism,²² namely the system that places the burden of remitting VAT on commercial transactions on the purchaser, rather than the seller. Since VAT is subject to Community regulation, it would be necessary to confirm that any such change in the payment scheme is legal and, should it be voided, to provide for alternative revenue-raising measures, which in this case is an increase in excise taxes on fuel (Table 2.6, point d)).

Another significant example is the recently approved measure²³ to restructure subsidised rates for the generation of solar power in order to ensure their sustainability. The provisions also envisage a procedure for assigning entitlement to receive the incentives to a financial institution (to be selected). The acquiring institution will make at least €30 billion available and take over the beneficiaries' rights to receive the incentives. Implementation is linked to a safeguard clause that makes implementation conditional on prior confirmation of the compatibility of the operation with Italy's European commitments. The risk associated with the operation regards the possibility that it is equivalent to a securitization of future tax revenue, even under the new ESA 2010 criteria,²⁴ with a consequent significant impact on the stock of debt.

Another special case regards clauses tied to measures included in provisions for improving the accounts whose quantification is uncertain. Since such clauses apply to provisions designed to improve public finance balances, they do not specifically fall within the defining framework of the Government Accounting Act, as regards funding procedures, but can in any case be treated similarly.

One clause actually implemented in similar cases is that for measures for regulating gambling devices and those concerning the increase in VAT revenue associated with the payment of general government commercial debts.²⁵ Since only a portion of the expected proceeds was collected, the safeguard clause providing for the option of increasing the IRES (corporate income tax) and IRAP payments on account for 2013 and 2014 was triggered.²⁶ In order to offset the reduction in the balance of those revenue as a result of the increase in these payments on account, an additional safeguard clause to raise the excise tax on fuels is expected to be triggered for 2015 and 2016²⁷ (Table 2.6, point a).

2) Other safeguard clauses are designed to ensure that public finance measures do not exceed their projected effect, thereby avoiding further burdening taxpayers.

One example of this category is the measures designed to limit the additional burden on taxpayers from newly established taxes that have replaced repealed taxes, or to ensure that local governments can effectively offset the difference

 $^{^{27}}$ To be implemented with an order of the Director of the Customs Agency, to be adopted by 31 December 2014.



²² See Article 44, paragraph 7, letter b), points 9 and 10 of the 2015 Stability Bill.

²³ See Article 26 of Decree Law 91/2014.

²⁴ Due to the inclusion under indirect taxes of the rate component earmarked to finance renewable energy incentives.

²⁵ See Article 13, paragraph 4, of Decree Law 102/2013.

²⁶ See the Ministerial Decree of 30 November 2013.

between revenue from tax items that replace transfer payments, or mechanisms to neutralise the increase in VAT receipts resulting from increases in the price of oil, through corresponding reductions in excise tax rates (see Article 1, paragraphs 290-293 of Law 244/2007).

3) A different category regards policy measures to achieve savings or greater revenue, to be implemented with subsequent operational measure, which will only be activated in the event of failure to implement other savings or revenue boosting measures (also requiring subsequent implementation measures). These measures are deemed preferable but it is uncertain whether they can feasibly be deployed in the expected time frame. Given that such measures are policy instruments and are not automatically implemented, the European Commission does not take them into account in assessing public finance measures.

One example of this are the provisions for reducing tax relief introduced with the 2014 Stability Act and amended with the 2015 Stability Bill,²⁸ which are to be determined in specific measures and take effect in the event of failure to approve legislative measures with the same financial impact through rationalisation and public spending review actions (Table 2.6, point b).

- 4) A residual category comprises the numerous safeguard clauses included in existing legislation that provide for automatic revenue increases and spending cuts in order to ensure achievement of public finance objectives in relation to specific needs, including:
 - ensuring compliance with budget constraints by local governments through the deterrent effect of automatic penalty mechanisms. These include mandatory increases in local income surtaxes if the regions fail to comply with plans for restoring balance to public healthcare budgets,²⁹ or cuts in transfers to local governments in the event they do not comply with DSP limits.³⁰
 - responding to unforeseen events, such as natural disasters. If the reserve fund is used for this purpose, the amounts used must be restored through cuts in discretionary spending and increases in the State and regional excise taxes on petrol.³¹

However, safeguard clauses do not include (although the expression is commonly applied) measures for generating savings or greater revenue with deferred effect that have been enacted and are fully operational without the need for subsequent implementing acts, but for which there is a policy commitment to identify alternative measures. These are therefore operational unless alternative measures deemed preferable and specified in policy are enacted. Measures of this kind, which seek to lock in the scope of the budget for future years, are not legally distinguishable from any

³¹ Up to €0.10 per liter, of which €0.05 imposed by the State and €0.05 by the region hit by the disaster (Article 5, paragraphs 5-quater and 5-quinquies of Law 225/1992).



²⁸ See Article1, paragraph 430, of Law 147/2013 and Article 18 of the 2015 Stability Bill.

²⁹ See Article1, paragraph 174, of Law 311/2004, paragraphs 1-bis and 1-ter of Article 1, of Decree Law 206/2006, paragraph 796 of Article 1, Law 296/2006, paragraphs 77 - 91 of Article 2, Law 191/2009 and paragraph 2-bis of Article 2 of Decree Law 125/2010.

³⁰ See Article31, paragraph 26, letter a) of Law 183/2011.

other provision with deferred effectiveness. For this reason, there is a consensus among forecasters that they should be considered in calculating the effects of public finance measures.

One example of this category is the increase in VAT rates and excise taxes on fuels provided for by Article 44 of the 2015 Stability Bill (Table 2.6, point c)).

		Moosuro	Net gen	eral gove	ernment l	oorrowing
		Medsure	2015	2016	2017	2018
Clause triggered as a result of conditions already met	a)	Decree Law 102/2013 - safeguard clause: increase fuel excise taxes to offset lower revenues from IRES-IRAP balance payments due to higher payments on account imposed in 2013-2014 (Art. 15, paragraph 4)	671	18		
Revenue increases to be implemented in event no alternative measures enacted	b)	Law 147/2013, amended by 2015 Stability Bill: changes in tax rates and reductions in relief and deductions (Art. 1, paragraph 430, of Law 147/2013 and Art. 18 of 2015 Stability Bill)		3,272	6,272	6,273
Rate increases		2015 Stability Bill:		12,814	19,221	21,965
specified,	c)	increase in 10% VAT rate (Art. 45, paragraph 3, lett. a)		4,638	6,957	6,957
effective date	C)	increase in 22% VAT rate (Art. 45, paragraph 3, lett. b)		8,176	12,264	14,308
and amount indicated		increase in fuel excise tax (Art. 45, paragraph 3, lett. c)				700
		Total increases projected in event no alternative measures found	671	16,104	25,493	28,238
Clause to be triggered in event of EU prohibition	d)	2015 Stability Bill: safeguard clause impacting fuel excise taxes, in event EU prohibits general split payment mechanism (Article 44, paragraph 7 lett. b), 9 and 10)	1,716	1,716	1,716	1,716

Table 2.6 Main safeguard clauses for revenue and similar items (millions of euros)

Source: financial schedules annexed to the individual measures.



Appendix 2.2

Comparison of the main features of the special regime for "minimum" taxpayers with those proposed in the 2015 Stability Bill.

and the self-employed who begin a new activity or who qualify for treatment as "minimum" taxpayers. The table is designed to show the substantive benefits of the The table summarises the main features of the special tax regime and the advantages currently enjoyed by natural persons (as individuals or organised as a business) regime proposed with Article 9 of the 2015 Stability Bill and why it could attract a larger number of taxpayers than indicated in the technical report on the measure.

ווברכווו ארברומו ובצוווובא	(Law 244/2007)	(Decree Law 98/2011)	(Decree Law 98/2011)	(Art. 9 of 2015 Stability Bill)
Taxpayers	Sole proprietorships and professionals	Young entrepreneurs (up to 35 years of age) and workers receiving unemployment payments; new initiatives by businesses or self-employed workers (in this case the age of the entrepreneur or professional is not relevant).	Taxpayers who meet the requirements for treatment as "minimum taxpayers" (A.t. 1, paragraphs 96 - 117 of Law 244/2007), but who do not meet the requirements for participating in the favourable tax regime for young entrepreneurs and workers placed on unemployment (in mobilità).	Sole proprietorships and professionals, including those already in operation. (The introduction of the new standard tax calculation regime means that existing "favourable tax" regimes (favourable tax regime, regime for new productive initiatives, simplified accounting regime) act initiatives, simplified accounting regime) act e eliminated. For this reason, taxpayers who are eligible to participate in the new regime who at 31 De cember 2014 are participating in the favourable tax regime for new productive initiatives may apply the new standard tax calculation regime envisaged for new business activities (taxable income reduced by one-third) for the remaining periods of the three-year regime term; those who at 31 December 2014 participate in the favourable tax regime for young entrepreneurs can continue to participate in that mechanism until the termination of the five-year term or until they read 33 years of age).
Eligibility requirements	In the preceding year: a) revenues or income not in excess of £30,000; b) no expenses for employees or associates (including project workers), nor the distribution of amounts in the form of earnings from participation to associates with contribution consisting solely of their work; c) no export sales. In the preceding three years, there must be no purchases of capital goods in excess of £15,000 (for those used only in part for business or self-employment activity, 50% of the amount paid is taken into consideration).	The taxpayer must qualify as "minimum" under paragraphs 96 taxpayer must start a new business, craft or profession and innorthave engaged in a business or been self-employed, the act previously conducted as an employee or as self-employed, unlet unemployment (in mobilita) for reasons beyond his control previously conducted by another person, the revenues received previously conducted by another person, the revenues received regime must not exceed €30,000. Taxpayers who began a new act requirements for the minimum taxpayer regime, may participate quirements for the minimum taxpayer regime, may previously the taxpayer regime, may be the regime must not exceed €30,000. Taxpayers who began a new act regime must not exceed €30,000. Taxpayers who began a new act regime must not exceed €30,000. Taxpayers who began a new act regime must not exceed €30,000. Taxpayers who began a new act regime must not exceed €30,000. Taxpayers who began a new act regime must not exceed €30,000. Taxpayers who began a new act regime must not exceed €30,000. Taxpayers who began a new act regime must not exceed €30,000. Taxpayers who began a new act regime must not exceed €30,000. Taxpayers who began a new act regime must not exceed €30,000. Taxpayers who began a new act regime must not exceed €30,000. Taxpayers who began a new act regime must not exceed €30,000. Taxpayers who began a new act regime must not exceed €30,000. Taxpayers who began a new act regime must not exceed €30,000. Taxpayer regime, may participate regi	and 99 of Art. 1 of Law 244/2007. In addition: a) the the three years prior to the start of the activity must tivity undertaken must not be a continuation of that s s the taxpayer has lost his job or has been place on J; b) if the taxpayer continues a business activity during the period prior to that of application of the tivity starting from 1 January 2008, when they met the ate in the favourable tax regime, but only until the they reach 35 years of age.	During the prior year: a) they received revenues or compensation not in excess of the specific thresholds indica ted for each business activity (revenues arising from adjustment to level determined in statistics-based tax assessments do not count;); b) have incurred expenses for employees or associates (induding project workers) not in excess of £5,000 per year; c) the total cost of capital goods, net of amortization and depreciation, at the end of the year must not exceed £20,000 (induding assets held under finance leases based upon the cost incurred by the lessor, leased assets at their nominal value, assets held in part for personal use at 50%).

Recent special regimes	Minimum taxpayers (Law 244/2007)	Favourable tax regime (Decree Law 98/2011)	Simplified accounting regime (Decree Law 98/2011)	New regime for minimum taxpayers (Art. 9 of 2015 Stability Bill)
Ineligible tax payers	Those who do not meet the requirements listed; those who participate in special VAT regimes; non-residents; those who either exclusively or primarily engage in the sale of real estate (buildings and land zoned for construction) and new vehicles; those who participate in partnerships, professional firms or limited-liability companies with a restricted ownership base that opted for the tax pass- through regime.	The reasons for ineligibility for the minimum taxp	ayer regime apply (Law 244/2007).	In addition to those who do not meet the listed requirements: a) those who already participate in special VAT regimes for standard income tax calculation regimes; b) non-residents, except for those residing in an EU Member States or a country that is party to the Agreement on the European Economic Area, whose income in Italy accounts for at least 75% of their total income; c) engage, exclusively or primarily, in the sale of real estate (buildings and land zoned for construction) and new whicles; d) simultaneously participate in partnerships, professional firms or limited-liability companies that have that opted for the tax pass-through regime.
Duration	At least three years and subsequently renewable year-to- year. The regime ceases to apply at the option of the taxyayer starting from the year subsequent to that in which at least one of the requirements is no longer met, or one of the reasons for ineligibility is determined to exist, or starting from the year in which revenues or compensation on taxable transactions conducted during the year, an on taxable transactions conducted during the year, a calculating them by extracting them from payments). Another possibility is if the taxpayer opts to apply the ordinary accounting regime. In that case, election of the option, valid for at least three years, must be notified with the first annual tax return to be submitted following the election of the option and, three year, as long as the normal regime is effectively applied.	The favourable regime applies for the tax periods in which the activity is begun and for the subsequent four years. Upon the termination of the fifth year, those who have not yet reached 35 years of age may extend the regime until the end of the year in which they reach such age. The regime ceases to have effect the year following that in the regime ceases to have effect the year for following that in which even one of the requirements is no longer met or no of the reaons for ineligibility is determined to exist, or following that in which even one of the requirements is no longer met or no of the reaons for ineligibility is determined to exist, or following the restor to apply the ordinary accounting regime. In the latter case, election of the option, valid for a these three years, must be notified with the first annual tax return to be submitted following the election of the option and, three years having passed, remains valid for each subsequent year, as long as the normal regime is effectively applied.	The regime is permanent, it ceases to have effect the year following that in which even one of the requirements is no longer met or one of the reasons for ineligibility is determined to exist, or ollowing election to apply the ordinary accounting regime. In the latter case, election of the option, and for at least three years, must be notified with the first annual tax return to be submitted following the election of the option and, three years having passed, remains valid for each subsequent year, as long as the normal regime is effectively applied.	The regime in permanent, except in the case in which the taxpayer who has chosen the standard tax calculation regime has not opted to apply the ordinary accounting regime. In that case, election of the option, valid for at least three years, must be notified with the first annual tax return to be submitted following the election of the option and, three year, having passed, remains valid for each subsequent year, as long as the normal regime is effectively applied.

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New regime for minimum taxpayers (Art. 9 of 2015 Stabili ty Bill)	y 2012 the for Livityin ugust. To be determined ember must in the the	Calculated using a standard flat-rate procedure, multiplying profitability ratios (specific to the activity) to y rules the amount of revenues or compensation, reduced by esses social security contributions paid. In the case of the start- uses. up of a new activity, the taxable amount is reduced by one-third for the first tax year and for the next two periods.
Simplified accounting regime (Decree Law 98/2011)	ess, craft or profession starting from 1.Januar s that they opted for the favourable tax regim nents (in mobilità). Those who began their act e, may submit the change of status form by Au o want to switch, starting from 1.January 2012 it to perform any specific action if, until 31.Dec e who participated in the ordinary tax regime ment, while faxpayers who have participated yed until 31.December 2011 need only submit form.	Income determined based upon the ordinar envisaged for the self-employed or busine (including application of accruals basis ru
Favourable tax regime (Decree Law 38/2011)	Participants are those taxpayers who began to operate a busin and who indicated in the notice of commencement of busines young entrepreneurs and workers receiving unemployment payn 2012 and opened a VAT position, without submitting any notic Those who began their activity after 31 December 2007 and wh favourable tax regime, for the prior period they are not requires 2011, they participated in the minimum taxpayer regime. Those submit form VO of the VAT return along with their income state tax regime for new business activities and for the self-emplo	Difference between revenues or compensation and expenses incurred, including capital gains and losses relating to the business or profession. Social security contributions can be deducted from income, including those paid for associates of family businesses who are tax dependents and those for associates who are not dependents, but for which the holder has not exercised the right to rebate. Set-off of losses reported in prior years is also allowed. Subsequent losses can be carried forward to reduce income received in the following tax periods, but not beyond the fifth year.
Minimum taxpayers (Law 244/2007)	Through conduct indicating intent to participate (for example, not charging VAT to their assignees or customers and not exercising the right to deduct the tax on purchases) or, for the activities, communication in the notice of commencement of business that the requirements for participation are expected to be met.	Difference between revenues or compensation and expenses incurred, including capital gains and losses relating to the business or profession. Social security contributions can be deducted from income, including those paid for associates of family businesses who are tax dependents and those for associates who are not dependents, but for which the holder has not exercised the right to rebate. Set-off of losses reported in prior years is also allowed. Subsequent losses can be carried forward to reduce income received in the following tax periods, but not beyond the fifth year.
Recent special regimes	How to participate	Tax base

Recent special regimes	Minimum taxpayers (Law 244/2007)	Favourable tax regime (Decree Law 98/2011)	Simplified accounting regime (Decree Law 98/2011)	New regime for minimum taxpayers (Art. 9 of 2015 Stability Bill)
Taxes and socials security contributions	Alternate tax to national, municipal and regional income tax and IRAP equal to 20% of taxable income.	Alternate tax to national, municipal and regional income tax and IRAP equal to 5% of taxable income.	Ordinary national, regional and municipal income tax; exemption from payment of IRAP.	Alternate tax to national, municipal and regional income tax and IRAP equal to 15% of taxable income. In addition an optional social security contribution regime is envisaged involving the elimination of payments of contributions on minimum income amounts.
VAT obligations and simplified record-keeping	Taxpayers are exempt from VAT obligations (payment, tax state ments, notification, book-keeping, submission of customer and supplier lists). Therefore, invoices must be issued without charging VAT and the VAT paid on purchases is not deductible and instead becomes a cost deductible from income.	Taxpayers do not apply VAT to sales and do not deduct VAT on purchases; they are exempt from making electronic notification of transactions involving VAT (so-called "spesometro") and from reporting transactions with parties in tax havens (so-called "black list notification"). However, they are required to keep copies of documents received and sent and issue invoices and certification of payment.	Taxpayers apply VAT on sales and deduct VAT on purchases, but are exempt from periodic settlements and payments (only required annually). They are also required to make so-called "spesometro" notifications and to report transactions with parties located in tax havens ("black list notification").	Taxpayers are exempt from payment of VAT and all the associated obligations, exceptior numbering and keeping invoices for purchases and customs declarations, certification of payments and maintaining related documents. For transactions on which the taxpayer must pay VAT, the taxpayer must issue an invoice or supplemental invoice indicating the tax and related rate and pay the tax monthly.
Simplified tax formalities	Exempt from registration and book-keeping requirements. However, they are only required to number and keep invoices for purchases made and customs declarations, certification of payments, copies of documents sent and received, supplemental invoices issued for intra- Community purchases or under the reverse-charge regime.	Exempt from registration and book-	keeping requirements.	Although they are required to keep copies of documents received and sent, they are exempt from registration and book-keeping requirements.
Application of statistics- based tax assessments or estimated parameters and dealings with the tax authority	Exempt	Exempt	Subject to statistics-base tax assessments (to identify the limit on the amount of revenues generated and compensation received, the revenues or compensation determined based upon statistics-based tax assessments or estimated parameters are not considered).	Exempt, however special reporting requirements concerning the business conducted will be imposed.



3. Fiscal policy targets in the light of European fiscal rules

Introduction

This chapter offers an assessment of the fiscal policy targets set out in the 2015 Draft Budgetary Plan and in the Update of the 2014 EFD within the context of the rules of the Stability and Growth Pact (SGP). Sections 3.1 and 3.2 analyse the fiscal policy targets in the light of the rule on the structural budget balance and the expenditure rule, i.e. the two criteria underlying the preventive arm of the SGP. Section 3.3 examines the issues regarding compliance with the rule on diminishing the ratio of the public debt to GDP, which together with the deficit rule underpin the corrective arm of the SGP. Finally, section 3.4 discusses certain issues concerning the application of the European rules. The discussion regards the estimation of potential output and the output gap, the impact of fiscal policies on growth (fiscal multipliers) and the impact of inflationary shocks on developments in the debt.

3.1 The medium-term objective and exceptional circumstances

In the Update of the 2014 EDF and its Report to Parliament of 30 September, the Government declared that the revision of the fiscal targets and the adjustment path towards the medium-term objective (MTO) was prompted, among other factors, by the need to respond to the deterioration in economic conditions during the year, which could be considered exceptional circumstances under the provisions of European³² and Italian³³ law.

The law providing for the inclusion of a balanced budget rule in the Italian constitution (Law 243/2012) establishes that budget balance corresponds to the medium-term objective (Article 3, paragraph 2). It also requires the financial and budget policy documents to set targets for net general government borrowing that will at least ensure achievement of the medium-term objective or compliance with the adjustment path authorised previously (paragraph 3). The objective may, however, take account of the financial impact of the structural reforms with a significant positive impact on the sustainability of the public finances (paragraph 4). In Italian law, temporary divergences of the structural balance from the objective are permitted solely in the case of "exceptional circumstances" (Article 6). These include: a) periods of severe economic downturn, including those involving the euro area or the entire European Union; and b) extraordinary events outside the control of the government with a major impact on the general financial position of the country.



³² More specifically, see Article 5 of Regulation (EC) no. 1466/1997.

³³ See Article 6, paragraph 5, of Law 243/2012.

These definitions are to be interpreted consistently with European law, in particular the preventive arm (Regulation (EC) no. 1466/97) and the corrective arm (Regulation (EC) no. 1467/97) of the SGP. The corrective arm defines a severe economic downturn as a situation characterised by a fall in real GDP or an accumulated loss of output relative to potential output (Box 1).

Under the preventive arm, countries that have not achieved their MTO (such as Italy) may be granted a waiver from the requirement to improve their structural budget balance in the event of a severe economic downturn. More generally, an improvement of the balance by 0.5% of GDP per year is to be considered as a benchmark: adjustment should be faster than 0.5% during good times but may be slower during bad times.

Box 1 – The definition of "exceptional circumstances" in European legislation

The literature acknowledges the wisdom of permitting exceptions from the application of numerical budget rules (escape clauses): in order to avoid procyclicality, well-designed rules should provide for suspension of their application in the case of exceptional events.

The Treaty of Maastricht had itself provided for a waiver of the deficit and debt ratio thresholds (3% and 60% of GDP, respectively) where "the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value" (Article 104 C). The rule in question was maintained in the subsequent redraftings of Europe's founding treaties (the Treaties of Nice, Amsterdam and Lisbon) and has been incorporated in the current Treaty on the Functioning of the European Union (Article 126). Developments in the secondary legislation implementing this rule reflect an interpretive stance that seeks to allow an assessment of economic conditions to permit the waiving of the numerical rule.

The Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (which includes the Fiscal Compact) also confirms this stance, permitting temporary divergence from the medium-term objective or the adjustment path only in exceptional circumstances (Art 3, paragraph 1, letter c). The Fiscal Compact defines exceptional circumstances as "... the case of an unusual event outside the control of the Contracting Party concerned which has a major impact on the financial position of the general government or to periods of severe economic downturn as set out in the revised Stability and Growth Pact, provided that the temporary deviation of the Contracting Party concerned does not endanger fiscal sustainability in the medium-term." This confirms the concept of the temporary nature of the event and the need to present a corrective plan in order to avoid compromising the medium-term sustainability of the budgetary position.

In the version of the SGP as amended and implemented with the regulations, the waiver option is found first in the procedures of the corrective arm, which envisages the possibility of not opening an excessive deficit procedure in the case of exceptional circumstances such as a severe economic downturn. Subsequently, under the surveillance procedures (the preventive arm), not only are countries allowed to reduce their adjustment efforts in bad times, they may also be granted a waiver in the event of exceptional circumstances.

It is interesting to note how the definition of exceptional circumstances has evolved over time, in particular with regard to the definition of severe economic downturn. For the purpose of applying the rules of the corrective arm (the first to be introduced), before 2005 a severe economic downturn was considered an annual fall in GDP of at least 2%, or less than 2% in very special cases (the abruptness of the downturn or the accumulated loss of output relative to past trends). After 2005, it has been sufficient to experience a negative annual GDP volume growth



rate or an accumulated loss of output during a protracted period of very low annual GDP volume growth relative to its potential.

Since 2011, following the modifications introduced with the six pack, the waiver of adjustment in a severe economic downturn has also been extended to the procedures of the preventive arm, clarifying that it can apply to the euro are or the EU as a whole or when resulting from an unusual event outside of the control of the Member State concerned which has a major impact on the financial position of the general government. In these cases, *"Member States may be allowed temporarily to depart from the adjustment path towards the medium-term budgetary objective referred to in the third subparagraph, provided that this does not endanger fiscal sustainability in the medium term."*³⁴ However, the regulation does not further define what is intended by severe economic downturn.

A more detailed definition is provided in the procedures regarding the corrective arm,³⁵ under which a severe economic downturn is characterized with more specific operational features. Two conditions must be met, jointly or separately, to qualify a period of recession as an exceptional circumstance. These are:

a) negative real growth of GDP;

b) an accumulated loss of output during a protracted period of very low annual GDP volume growth relative to its potential.

Although provided within the provisions concerning the corrective arm, this definition carries general weight, as indicated in the vade mecum on the SGP drafted by the European Commission in May 2013, which expressly specifies that the definition of a severe economic downturn given in the Regulation on the corrective arm may also be used to guide assessment of a temporary deviation from the MTO for the purposes of the preventive arm. The vade mecum also specifies that once the exceptional circumstances no longer apply, the structural adjustment should be resumed and emphasises the requirement that the deviation from the objective shall not endanger fiscal sustainability in the medium term.

More specifically, in the interpretive practice of the European Commission, which is known to the Member States, it is acceptable to make no progress along the adjustment path towards the MTO for a country that in a given year registers a negative GDP growth rate and an output gap of more than 4%. In the practice of the Commission, these two conditions function as rules of thumb in defining a severe economic downturn in operational terms, permitting a waiver of the requirement to pursue adjustment towards the MTO. However, under this interpretation it would seem that if neither of the two conditions is met, a country would be required to pursue adjustment towards the MTO as normal. The notion that in bad times it would be possible to implement a smaller-than-normal fiscal effort (and vice-versa in good times) does not appear to have been transformed into an operational rule.

In the case of Italy, in normal conditions the adjustment path means an improvement of 0.5% of GDP in the structural balance. For 2014, the Government estimates that the structural balance will deteriorate from the -0.7% registered in 2013 to -0.9% in 2014. Nevertheless, since 2014 is forecast to see output contract by 0.3% and register an



³⁴ Art. 5 of Reg. (EC) no. 1466/97.

³⁵ Art. 2 of Reg. (EC) no. 1467/97.

output gap of -4.3%, both of the threshold conditions used by the Commission would be met: negative real growth and an output gap of more than 4%.

The situation is different for 2015. On the basis of the targets indicated in the Update of the EFD approved on 30 September, the structural balance is expected to improve by 0.1 percentage points compared with 2014, less than the normal value of 0.5 points.³⁶ Neither of the two threshold conditions of the Commission would be met: output is forecast to increase, albeit at a slow pace (0.6%) and the output gap is forecast at less than 4% (3.5%).

Defining the concept of "exceptional event" in Italian law on the basis of the rule of thumb appears insufficiently progressive, however. It would be reasonable to argue that a scenario such as that forecast for Italy in 2015 should not be treated in the same way as one with a much smaller or zero output gap. In addition, the formulation set out in the SGP refers to a definition of the stage of the cycle that should also take account of recent history, such as when the corrective arm refers to an accumulated loss of output during a protracted period of very low annual GDP volume growth relative to its potential. For Italy, the modest growth forecast for 2015 would come after three consecutive years of contraction, with an output gap of more than 4% in the last two years. Moreover, since 2009, GDP in Italy has experienced decreases unprecedented in the last 45 years (see Box 2).

Alternatively, one way of defining a "period of severe economic recession" and thus an "exceptional event", to use the terminology adopted in Italian legislation, it would be possible to adopt threshold values specified in terms of the representative output gap (ROG, a concept already used in European legislation, and discussed in Box 3). It is the value of the output gap over a period of twenty-five years that is exceeded in only 5% of those years. In other words, it is the value of the output gap that is worse that the gap actually measured in 95% of the years in the period. If we take this measure as our benchmark, the macroeconomic scenario forecast for 2015 could in fact be considered "exceptional": the ROG for Italy has been estimated at 2.7%. With a forecast output gap of 3.5% in 2015, the year would easily fall among those afflicted by an exceptionally adverse economic climate. Conversely, in the Government's forecasts, 2016 is expected to have an output gap of 2.6%, which smaller than the ROG. In addition, as from 2009 to 2018 the output gap is smaller than the ROG in five out of 10 years (including 2015).

³⁶ As we saw in Chapter 2, the amended Stability Bill would, according to the Government, produce an improvement of 0.3 percentage points, which is still less than 0.5 points.



Box 2 – The persistence and depth of recessions in Italy in the 2008-18 period

The Italian economy has recently been hit in quick succession by two periods of deep contractions in output, the likes of which have not been seen in the last 45 years.

Figure 3.1, which compares developments in output in the main periods of recession, shows that the persistence of the decrease in GDP characterizes the recessions of 2008 and 2012 compared with those experienced in 1974 and 1992. While the initial impact (the change in output at time t) of the recent recessions is comparable to that experienced in the earlier downturns, the path of recovery differs radically. In the 1970s and the 1990s, the recovery returned output to its precrisis levels in the year following the start of the recession. By contrast, in 2008 the acute phase of the recession lasted two years, with the sharpest contraction in the second year; in the 2012 recession, the contraction lasted for three consecutive years, with a very slow and fragile recovery forecast for the next three years.

Figure 3.2 illustrates the accumulated loss of output in the phases when the output gap in Italy was largest. The bars show the change in the output gap, while the lines show the accumulated loss in the (contiguous) periods in which the output gap was worsening. The scale of the loss was especially significant in the two most recent recessions: the loss of GDP amounted to about 6.6 percentage points in the 2008-09 recession and about 4.5 points in the 2012-14 recession. Considering that the recovery of output in 2010 and 2011 was extremely small (totalling just over two points over the two years), the accumulated loss between 2008 and 2014 amounted to about 9 percentages points of GDP.

As regards the relationship between actual output and potential output, note that although the methodology agreed at the European level provided for a number of downward revisions of potential output (thus reducing the output gap at each level of actual output), Italian GDP remains well below potential over the 2014-18 policy scenario. This appears to be an exceptional difference, both in terms of the duration of the contraction and the size of the gap (Figure 3.3). Since 2009, Italian GDP has been below potential, even during the recovery of 2010-11. This is the longest stretch of below-potential output since the European Commission has been producing estimates (1967-2015).









Box 3 – Representative output gap

The representative output gap offers a metric of the "typical" scale of cyclical fluctuations specific to an individual economy.

The calculation of the ROG takes the average, calculated over a period of 25 years, of significantly large output gaps (5% percentile after eliminating outliers) for an individual country and for the European Union as a whole. The ROG, which has been estimated for Italy at -2.7% for 2012, represents the output gap threshold that minimises the probability of encountering even larger output gaps. Finding such a gap would therefore be indicative of an exceptionally severe recession. The formula for calculating the ROG is as follows:

$$ROG = \frac{N_i}{(N_t + N_i)} P_{5\%}^{ITA} + \frac{N_t}{(N_t + N_i)} P_{5\%}^{EU}$$

Where $P_{5\%}^{ITA}$ represents the 5% percentile of the distribution of the output gap in Italy and $P_{5\%}^{EU}$ the 5% percentile of the distribution of the output gap in all countries of the European Union. N_t and N_i are the number of common and country-specific annual observations available, respectively, for the set of Member States and for Italy.

The representative output gap is determined individually for each country, so as to capture the specific features of the domestic business cycle. For example, the ROG of smaller countries, which tend to experience larger fluctuations, is generally larger in absolute value that that of bigger economies.



So far, this parameter has only been used in calculating the minimum benchmark of the MTO for each country. It has not be employed as a quantitative indicator of the exceptional nature of economic downturns.

The considerations discussed above allow us to conclude that economic conditions in 2015 remain exceptional enough to justify, under Italian law, a temporary deviation in the structural balance from the policy objective.

Nevertheless, this conclusion is subject to a number of qualifications. The first strengthens the previous conclusion. Among the factors that would permit temporary deviations from the adjustment path towards the MTO, European law and the associated Italian legislation transposing the European rules both envisage "the implementation of major structural reforms which have direct long-term positive budgetary effects, including by raising potential sustainable growth, and therefore a verifiable impact on the long-term sustainability of public finances" (Reg. (EC) no. 1466/97, Article 5). The Update of the EFD refers to a series of reforms with just these characteristics, in four areas of action: the reform of public administration, measures to enhance competitiveness, the reform of the labour market, and the reform of the justice system. These interventions have the potential to impact the long-term growth of the Italian economy. In some cases, the reforms will require immediate additional expenditure that will affect the general government budget balance (although we will only be certain of this after the approval of the Stability Bill). From this perspective, they could justify a deviation that reflects the amount of that additional expenditure (a provision of the preventive arm of the SGP makes express mention of this possibility). Currently, however, it is necessary to proceed with prudence in this direction, both because much of the reform programme is still being defined and because considerable uncertainty still surrounds the intensity of the reforms' impact on growth and the time it will take for those effects to materialise once the changes are implemented. These considerations are the same as those raised in arguing for not immediately including the effects of the reforms in macroeconomic forecasts (see Chapter 1). Careful monitoring of the state of progress of implementation and a new assessment of their effects should be carried out as part of the preparation of the Stability Programme.

The second qualification of the general justification of a deviation from the adjustment path for 2015 underscores the need for caution in establishing the size of the deviation. European law establishes that in any case (both in the presence of a severe downturn or of structural reforms) temporary deviations from the MTO or the adjustment path must not endanger fiscal sustainability in the medium term. For this reason, a safety margin must be maintained with respect to the threshold of 3% for the ratio of the nominal deficit to GDP. The policy forecast for that ratio in 2015 indicated in the Update of the EFD, equal to 2.9%, represents a major risk factor in this regard.

The change in the target for the structural balance proposed in the updated Draft Budgetary Plan anticipates an improvement in fiscal balances for 2015 compared with the policy



scenario envisaged previously (from 2.9% in the initial version of the Update to 2.6%). The deviation from the adjustment path towards the MTO therefore remains, but it is now much smaller. For the purpose of assessing compliance with the fiscal rules, this represents a substantial safety margin with respect to the 3% limit on net borrowing.

However, the changes in the targets for 2015 will necessitate a revision of the planned adjustment path in subsequent years. For 2016-18, the Government has not presented amendments of the initial fiscal scenario. More specifically, in 2016, in what is forecast to be a less exceptionally unfavourable phase of the cycle (GDP growth is projected to be 1%), the structural balance is forecast to improve from -0.6% in 2015 to -0.4%. The improvement would only be two tenths of a point, rather than the 0.5% required under the adjustment path. Accordingly, it would therefore be necessary to revise the policy targets for 2016, an issue that will presumably be addressed in the spring, during the preparation of the Economic and Financial Document.

3.2 The expenditure benchmark

In the preventive arm of the SGP, the rule on the MTO is supplemented by an expenditure rule. It essentially establishes that the real change in public expenditure shall not exceed long-term growth in potential output (unless financed by discretionary revenue increases).³⁷ The composition of the budget that emerges from the updated DBP confirms compliance with the expenditure benchmark: in 2014, thanks to the effects of the waiver granted in the case of a negative growth rate, the rule would have required no change in the expenditure aggregate, which instead shrank by 1%; in 2015, the benchmark calls for a reduction of 1.1% in expenditure, a decline that is reflected in the new policy scenario.

3.3 The rule on reducing the ratio of debt to GDP

For the purposes of the debt reduction rule, until 2015 Italy will be in the transition period subsequent to the closure of the excessive deficit procedure in 2012. The country has been asked to make an adjustment to the structural balance of 1 percentage point of GDP in 2014 and 2.2 points in 2015. In the Update of the EFD, the Government stated that it did not think the correction was either feasible or desirable. Accordingly, the Government's policy scenario – including that presented in the updated Draft Budgetary Plan – does not comply with the parameters for the reduction of the debt-to-GDP ratio for the transition period.

³⁷ The relevant expenditure aggregate addressed by the rule does not include interest payments, the cyclical elements of unemployment benefits, and spending on European Union programmes paid for by EU funds; it also smoothes investment spending by taking an average over four years.



The PBO feels that it is appropriate to reiterate the arguments concerning the existence of the circumstances that would justify slowing the adjustment towards the MTO with regard to the assessment of compliance with the debt reduction rule as well. The arguments are strengthened by analyses that have identified "self-defeating" fiscal policy parameters, where budget correction measures would give rise to a recession severe enough to increase the debt-to-GDP ratio through its impact on the denominator. The sign of the impact of measures to change the debt/GP ratio depends on the size of the multipliers. In other words, there is a threshold for the parameters above which fiscal adjustment measures (intended to improve the sustainability of the public finances) would have the opposite effect, at least in the first year.

In assessing developments in the public debt, the PBO feels that two features of the Italian situation must be given consideration: the acceleration of the payment of the public administration's commercial debts in the last two years and the low level of inflation. With regard to the latter, it should be emphasised that the entire supranational reference scenario has neglected prices, while recent developments would appear to call for reconsideration, so as to take account of the implications (which are especially large in the case of the debt rule) that low inflation has for current analytical approaches (see section 3.4.3).

These elements should not however obscure the importance of the size of the debt, especially in the medium term. The volume of annual debt issues remains very large, making the country vulnerable to the uncertainty engendered by interest rate developments. Interest payments, equal to nearly 5% of GDP, force Italy to maintain a large primary surplus, with clear implications for the composition of the budget. Regardless of the application of numerical rules, the high volume of the debt in relation to GDP represents a permanent constraint on the determination of Italian fiscal policy.

3.4 Issues concerning the application of the European fiscal rules

3.4.1 Estimating potential output and the output gap

As noted previously, the estimation and assessment of the structural balances of the public finances are key tools in verifying compliance with the balanced budget requirement in Italian law and in the multilateral surveillance process of the SGP. The main reason for the central importance of the structural balance is to avoid adopting fiscal policies that could aggravate undesirable developments in the economy, namely recessions, excessive slowdowns in GDP growth or even expansions that might fuel inflation (pro-cyclical fiscal policies).

The foundation of the calculation of the structural balance is potential output and the output gap, which are not observable variables and therefore must be estimated. Potential output is the maximum output that can be produced with full use of resources



(labour and capital) consistent with stable inflation. The output gap is the difference between actual GDP and potential GDP; it is therefore an indicator of inflationary pressure.

Owing to the difficulties of calculating potential output and the output gap and the uncertainty of those estimates, it is generally accepted that the figures must be employed with caution, especially in determining economic policy choices. To a certain extent, this conflicts with the decision to put change and the level of the structural balance at the centre of the surveillance and assessment of fiscal policy. In principle, this decision is a reasonable one from the economic point of view, as it should reduce the risk of adopting pro-cyclical policies. However, in practice it raises a number of technical challenges that counsel prudence, especially in the use of the levels of unobservable variables.³⁸

Owing to the frequent revisions of these estimates, it is also possible that they can be used as the basis of ex-ante fiscal recommendations that are revealed to be counterproductive ex post. One clear example of this occurs when, following a series of revisions, the output gap changes sign in the same year, for example when the economy is found to be in recession ex post after having been estimated to be growing ex ante.

In order to deal with the uncertainty of the estimates, one possible solution could be to estimate potential output using different methods in parallel. Analysts could then compare the results and assess their sensitivity to the underlying assumptions. The use of estimates of structural balances for economic policy-making would therefore only be advisable if the results of the estimates produced by the different methods are similar and not highly sensitive to the underlying assumptions. When the results are not similar or are not highly robust, it might be appropriate to use other assessment strategies together, approaches that rely solely on observable variables. For example, the monitoring and assessment of developments in the expenditure components less sensitive to the business cycle could serve as a good indicator of the fiscal position. The expenditure benchmark established with the recent reform of the SGP is a step in this direction, although in some respects the rule remains influenced by the estimate of potential output and the output gap.

Calculating potential GDP and the output gap

The two main strategies for estimating potential GDP comprise purely "statistical" approaches, which are based entirely on the GDP time series, and "economic" approaches, which are based on the production function.

³⁸ The use of changes should be more reliable, since errors in levels could cancel each other out.



Statistical methods for estimating potential output directly decompose the GDP series into a trend component and a cyclical component. The most commonly used statistical method is that based on the Hodrick-Prescott (HP) filter, so named for the two economists that initially proposed it. Under this method, the trend component of GDP is obtained using an algorithm to filter out cyclical fluctuations, thereby extracting the less variable component of GDP.

The HP filter has the advantage of being relatively simple to apply or replicate. However it is also has numerous drawbacks. First, the results (developments in the trend and the amplitude of the cycle are quite sensitive to the choice of the parameter λ , which is not estimated but is instead selected arbitrarily. It impacts the variability of the GDP trend component. For this reason, if λ is not well-calibrated, the frequency of the observations in the series used can have an impact on the amplitude of the cycle component: using annual GDP can produce different results from those obtained using the quarterly GDP series. The same holds for observation intervals with different amplitudes. Another problem is the implication in the implicit choice in the algorithm that the sum of the output gaps over the observation period must be zero, even if the observation period does not encompass an exact number of full cycles.

One of the greatest problems with this method is that potential GDP is excessively influenced by the final observations of the time series, and therefore tends to be procyclical at the end of the observation interval. This is known as "end-of-sample bias", which is tied to the fact that data from previous years and data from subsequent years are used to produce a trend GDP series for a given year. As a result, at the end of the observation interval, the absence of data from subsequent observations will generate a value that gives excessive weight to the final years observed (in technical terms this is equivalent to obtaining an asymmetric moving average at the end of the period under consideration). This increases the likelihood of inaccurate estimations of potential GDP at the end of the series, which is precisely the time of greatest interest to economic policy-makers.

For these reasons, in 2002 the European Commission, in cooperation with the output gap working group of the Economic Policy Committee (the OGWG, composed of delegations from the Member States) decided to abandon use of the HP filter in estimating potential output and to instead use a production function approach. The same method is also used by the MEF in its policy documents. With this method, potential GDP can be represented as a combination of production factors (labour, capital) multiplied by the trend component of so-called total factor productivity (TFP), which is a metric of technological and organisational innovation. Labour, defined as the trend component of total hours, is in turn broken down into a demographic component (working age population), the trend component of the average number of working hours. This approach has the additional advantage of supplying an economic explanation of developments in potential output, as it can



demonstrate the contribution of each factor of production and productivity. This can be useful in determining the priorities of economic-policy decisions.

However, the production function method also requires the use of a number of unobservable variables, which must therefore be estimated. The most significant unobservable variables are the trend component of TFP and structural unemployment. For the latter, the Commission and the OGWG, in line with other national and international organisations, have opted to use the non-accelerating-wage rate of unemployment (NAWRU). To estimate the NAWRU and the trend component of TFP, the Commission and OGWG elected to use "semi-structural" methods, namely approaches that employ theoretical or empirical economic assessments to improve the results of statistical filters. More specifically, the bivariate Kalman filter is used for both. In the case of TFP, the method exploits the relationship between TFP and capacity use in the economy to eliminate the cyclical component of TFP and extract the trend. A similar approach is used to estimate NAWRU, in this case exploiting the relationship between the unemployment rate and changes in wage growth (the Phillips curve). Finally, the European Commission and the OGWG use the HP filter to estimate the trend component of the participation rate and the trend component of the average number of hours worked.

The method for estimating potential output employing the production function used by the European Commission has a number of advantages over statistical methods. First, as noted above, the method can be used to obtain an economic interpretation of the outcomes. This has the dual benefit of facilitating the assessment of outcomes and of identifying priority policy actions to increase potential output. Second, the new method adopted by the Commission eliminates end-of-sample bias in the estimation of the trend component of TFP, increasing its accuracy and reducing its pro-cyclicality at the end of the observation period and, therefore, the pro-cyclicality of the potential output estimate.

The production function approach is not without shortcomings, however. First and foremost, the method does not entirely eliminate the pro-cyclicality of potential GDP estimates. This is attributable to a number of factors: 1) the relationship between the unemployment rate and the change in wage growth (the Phillips curve) could be fragile and, therefore, developments in the NAWRU could closely track those in the actual unemployment rate; 2) certain components of the production functions, such as the participation rate and average hours worked, continue to be estimated using the HP filter approach; 3) the capital stock depends on investment, which is affected by the business cycle.

In addition, the use of the production function method increases the need to make arbitrary choices, such as, the nature of the data (especially for the capital stock) and the estimation methods in the specification of the production function. Moreover, the Kalman method is not free of statistical issues. In this method, the volatility of trend



components is especially sensitive to the choice of a number of parameters for which it is very challenging, if not impossible, to provide an economic interpretation. These choices can significantly affect final results, underscoring their lack of robustness.

Finally, the production function method, like statistical approaches, also produces estimates for potential output that may be subject to major revisions in the course of time, especially as regards the end point of the estimation period, the most important for economic policy purposes. This is due in part to revisions of actual GDP time series and the other variables included in computing potential GDP (hours worked, capital stock). Another reason is the use of forecasts for estimating certain components of the production function. These forecasts may prove to be inaccurate ex post (they are generally too optimistic) and undergo correction. In the forecasting period, within the framework of EU surveillance, the output gap is also influenced by the arbitrary termination of the business cycle within the three years following the final forecasting year. This assumption can be especially difficult to satisfy when the output gap is large.

The case of Italy

The estimates of potential GDP and the output gap in the Update are exposed to some of the problems discussed above.

For example, the estimation of the NAWRU is affected by a number of issues. More specifically, the NAWRU consistent with the macroeconomic scenario estimated in the Update has a large cyclical component, as shown in Figure 3.4. The presence of such a large cyclical element in the estimates of the NAWRU has recently been emphasized in a number of studies by the European Commission (see, for example, box I.4 of the *European Economic Forecast, Spring 2014*). The cyclicality of the NAWRU could represent a serious concern for the validity of the output gap as an indicator of the cyclical position of the economy.

To verify the impact of a different estimate of structural unemployment, the PBO has assumed a NAWRU with a less pronounced cyclical component to assess its impact on potential output and the structural budget balances. The Italian non-cyclical NAWRU was constructed by assuming similar developments in the indicator as those in that estimated by the Commission for the euro area in the above study. In other words, we assumed that the NAWRU and the non-cyclical NAWRU were virtually identical in 2008 (at the dawn of the crisis) and that they began to diverge at that time, reaching a difference of 1-1.5 percentage points in 2012 (Figure 3.4).

Using this non-cyclical NAWRU and maintaining all other components of potential output unchanged could have substantial policy implications. Owing to the improvement in potential output, the level of the structural balance would also improve significantly, including for past years (Table 3.1). In particular, these estimates show that



the budget would have already been close to structural balance in 2013. In addition, taking the policy scenario as our frame of reference, the structural budget balance would turn slightly positive in 2015 after a slight fall in 2014.





Table 3.1 – Comparison of structural budget balances with different definitions of structural unemployment (percentages)

	2011	2012	2013	2014	2015	2016	2017	2018
NAWRU - Update	8.5	9.4	9.9	10.2	10.3	10.4	10.5	10.5
Non-cyclical NAWRU hypotheses	8.0	8.3	8.5	8.6	8.7	8.7	8.7	8.7
Policy structural budget balance	-2.5	-1.5	-0.7	-0.9	-0.6	-0.4	0.0	0.0
Structural budget balance corrected for	-23	-11	-0 1	-0.3	0 1	03	07	07
impact of non-cyclical NAWRU	-2.5	-1.1	-0.1	-0.5	0.1	0.5	0.7	0.7

3.4.2 Fiscal multipliers

There is a general consensus within academia and in national and international institutions (for example, see the OECD's *Economic Outlook* for 2010) that the impact in the first year of an expenditure reduction of 1% of GDP in advanced economies will reduce output by between 0.5 and 1%; the impact of a corresponding increase in revenue it thought to be smaller, generally less than 0.5%. These impacts are estimated using macroeconometric and statistical models, which generally assume that their value is essentially stable over time.



In recent years, numerous studies have cast doubt on the stability of fiscal multipliers, especially in periods of prolonged recession such as the current one. There are in fact a number of theoretical reasons why multipliers might not be stable over time. For example, fiscal multipliers should be larger in prolonged recessions, especially those caused by financial crises. In this case, the ordinary channels of financing to firms and households might not operate as they do in normal times. Financial institutions could be forced to reducing their lending, especially to households and firms that cannot post sufficient guarantees. In this context, a budget cut that reduces transfers to households or that increases taxes on firms might not be offset by an increase in credit from banks, which would lead to a substantial reduction of consumption by households or investment by firms. The fiscal multipliers could also be higher when monetary policy rates are close to zero or negative. In such circumstances, monetary policy might not be able to play an accommodative role, at least with its conventional policy tools.

The current economic environment in Italy displays many of the features that could produce larger fiscal multipliers than those estimated using traditional macroeconometric models. As we know, GDP contracted by 1.9% in 2013 and is forecast to contract by 0.3% this year. In 2015, the economy could return to growth, but the output gap, an indicator of the business cycle, is forecast in the Update at -3.5%, an especially large shortfall. In addition, interest rates are already very low.

In these circumstances, a number of studies – especially those of the IMF – have estimated that the expenditure multiplier could reach 2, i.e. more than twice the level estimated using traditional approaches. The revenue multiplier could also increase, but nevertheless remains below 0.5.

With a very simple exercise the PBO has used a range of average multiplier estimates (that is, calculated as the simple average of expenditure and revenue multipliers) to conduct an initial assessment of the possible impact on GDP growth in 2015 of the implementation of the budget measures necessary to achieve the adjustment path towards the MTO or comply with the debt rule. The average multipliers selected were: a) 0.5 - indicated by the MEF in the Update (p. 33); b) 0.65 - the simple average of a number of multipliers indicated by OECD for Italy in its *Economic Outlook* for 2010; c) 1.1 - the simple average of expenditure and revenue multipliers during recessions in the advanced economies proposed in a number of IMF studies.³⁹

According to the Update, to achieve the MTO in 2015 it would be necessary to enact budget measures with an impact of 0.9% of GDP, whereas compliance with the debt rule would require a correction of 2.2% of GDP.

In this initial assessment, assuming that the other factors determining growth forecasts are unchanged, we can estimate that corrective measures necessary to achieve the MTO

³⁹ See in particular Batini, Eyraud and Weber: "A simple method to compute fiscal multipliers", WP/14/93, 2014.



in 2015, with the measures divided between expenditure and revenue, would produce a virtually stagnant economy in 2015 as well. GDP could change in a range between -0.1%, using a multiplier in line with those estimated by the IMF for periods of recession, to 0.2% using the multiplier adopted in the Update. In the case of corrective measures to ensure compliance with the debt rule, the economy would be in recession with all the multipliers contemplated. The contraction in GDP would vary from -1.5% to -0.5% depending on the specific multiplier used.

3.4.3 Inflation and changes in the debt-to-GDP ratio

One of the problematic issues that Italy must face is the risk of a long period of deflation, with an adverse impact on the public finances. A prolonged period of low inflation can make it especially difficult to reduce the stock of public debt as a proportion of GDP and to comply with the debt rule under the SGP. Conversely, an inflation rate closer to 2% reduces the real value of the stock of existing debt and could accelerate compliance of the rule compared with the policy scenario envisaged in the Update of the 2014 EFD.

The PBO conducted a sensitivity analysis of developments in the debt as a proportion of GDP under different inflation rate hypotheses.⁴⁰ More specifically, we simulated two alternative scenarios to the baseline forecast represented by the policy scenario of the Draft Budgetary Plan until 2018 and extended to 2025.⁴¹ In the first alternative scenario, the rate of growth in the GDP deflator is assumed to be zero as from 2015. In the second alternative, the GDP deflator is assumed to increase at 2% a year as from 2015.

The exercise takes account of the structure of Italy's public debt, as this significantly influences the effect of an inflationary shock on the dynamics of the debt-to-GDP ratio. The impact of an unexpected increase in inflation on the stock of debt as a proportion of GDP is all the greater the smaller is: 1) the share of short-term debt; 2) the share of inflation-linked long-term debt; 3) the share of non-inflation-linked long-term debt maturing in the period under consideration. These segments of the overall debt would have to be refinanced at higher interest rates as a result of the increase in inflation. Conversely, the real value of non-inflation-linked long-term debt that is not maturing in the period under consideration would be eroded by the inflationary shock.

The analysis was conducted using a number of other hypotheses: 1) the remainder of the macroeconomic framework is unchanged with respect to the policy scenario envisaged in the Update notwithstanding the change in the inflation rate scenario; 2)

⁴¹ The assumptions underlying the baseline scenario from 2019 to 2025 are discussed in note (1) to Table 3.2.



⁴⁰ For recent similar exercises, please see Akitoby B., Komatsuzaki T, and A. Binder, "Inflation and public debt reversal in the G7 countries", IMF Working paper, WP/14/96, 2014, and European Commission, "The impact of unanticipated disinflation on debt", Box I.3, European Economic Forecast, Autumn 2014.

the primary balance and stock-flow adjustments as a proportion of GDP are unchanged with respect to the policy scenario in the Draft Budgetary Plan and the Update; 3) the composition of the public debt in the period under consideration is that same as that observed at the end of 2013; 4) the medium-long term securities (non-inflation-linked) maturing during the year are refinanced at mid-year (it is assumed that for this segment of debt half of the interest is computed using the old medium/long-term interest rates and half using the new rates); 5) the interest on inflation-linked securities is calculated using medium/long-term rates. The formula for the dynamics of the debt and additional details on the assumptions adopted are provided in Box 4.

The results of the exercise are reported in Table 3.2. As expected, the alternative inflation rate assumptions produce significantly different debt-to-GDP dynamics.

Assuming the current economic situation continues and inflation is equal to zero until 2025, the debt-to-GDP ratio would still be sustainable thanks above all to the large primary surplus, but it would decrease much more slowly than in the baseline scenario. The ratio would stabilize at about 134% in 2015-16 before declining subsequently. In 2025, the ratio would still be higher than 110% and Italy would comply with the debt rule only as from that year. Conversely, if the inflation rate rose to 2% as from 2015, the debt-to-GDP ratio would already be equal to 130% in 2016 before falling below 98% in 2025. Compliance with the debt rule would begin in 2018. The two alternative scenarios would produce a difference of about 13 percentage points in the debt-to-GDP ratio in 2025.

	2014	2015	2016	2017	2018	2025
Baseline (DBP from 2015 to 2018 and our forecasts for years until 2025) (1)	131.6	133.1	131.6	128.4	124.3	99.4
Zero inflation rate as from 2015	131.6	133.7	133.6	131.9	129.3	110.9
Inflation rate of 2% as from 2015	131.6	131.8	130.0	126.7	122.6	97.8
Difference	0.0	1.9	3.6	5.3	6.7	13.1

 Table 3.2 The dynamics of the debt-to-GDP ratio in alternative inflation scenarios (percentage of GDP)

Source: 2015 Draft Budgetary Plan and PBO.

(1) The baseline scenario for 2019-2025 was calculated assuming that the rise in the GDP deflator, the primary balance as a proportion of GDP and short- and medium-term interest rates on new debt and those implicit in existing debt are equal to the values for 2018. Real GDP growth is assumed to decline from its 2018 level to 1% in 2022, where it stabilizes. The stock-flow adjustment is assumed to be zero.



Box 4 – The dynamics of the debt

Developments in the public debt can be described as follows:

$$(1) \ b_{t} = \frac{1}{\left(1+g_{t}\right)\left(1+\pi_{t}\right)} \alpha^{M} b_{t-1} + \frac{1+r_{t}^{ST}}{\left(1+g_{t}\right)} \alpha^{ST} b_{t-1} + \frac{1+r_{t}^{LT}}{\left(1+g_{t}\right)} \left(\alpha^{IND} + \frac{1}{2} \alpha^{LTnew}\right) b_{t-1} + \frac{1+i_{t}^{IMP}}{\left(1+g_{t}\right)\left(1+\pi_{t}\right)} \left(\alpha^{LTold} + \frac{1}{2} \alpha^{LTnew}\right) b_{t-1} - ps_{t} + sfa_{t}$$

where:

 b_t : public debt as a proportion of GDP at time t;

 q_t : real GDP growth rate at time t;

 π_t : rate of growth in GDP deflator at time t;

 α^{M} : public debt in the form of deposits less postal funding and currency as a proportion of total public debt;

 α^{ST} short-term public debt as a proportion of total public debt;

 α^{IND} : inflation-linked public debt as a proportion of total public debt;

 α^{LTnew} : medium/long-term public debt maturing during the year as a proportion of total public debt;

 α^{LTOID} : medium/long-term public debt not maturing during the year as a proportion of total public debt;

 r_t^{ST} : real short-term interest rate at time t; r_t^{LT} : real long-term interest rate at time t;

 t_t^{IMP} : implicit nominal interest rate on medium/long-term debt at time t;

 ps_t : primary balance as a proportion of GDP at time t;

sfa_t: stock-flow adjustments as a proportion of GDP at time t.

The real GDP growth rate, the primary balance as a proportion of GDP, stock-flow adjustments as a proportion of GDP and real interest rates are those assumed in the policy scenario of the 2015 Draft Budgetary Plan and the Update until 2018, as are the debt as a proportion of GDP and the rate of change in the GDP deflator in the baseline scenario. For the assumptions for years after 2018 until 2025, see note (1) of table 3.2.

The shares of debt as a proportion of the total were estimated on the basis of the Supplements to the Statistical Bulletin of the Bank of Italy: "The public finances, borrowing requirement and debt" and the quarterly bulletins of the Public Debt Directorate of the Department of the Treasury. Short and long-term interest rates were estimated on the basis of the yield curve assumed in the Draft Budgetary Plan and the Update for the policy scenario.

The implicit interest rate was computed endogenously from equation (1) in the baseline scenario until 2018. For subsequent years, the rate was assumed to be unchanged at the 2018 value. The alternative scenarios assume that the implicit interest rate is adjusted to changes in medium/long-term rates caused by deviations in inflation rates from those in the baseline scenario, in proportion to the share of maturing medium/long-term debt. In formal terms:

 $i_{t+1}^{IMP}(alternative) = i_{t+1}^{IMP}(baseline) + \alpha^{LTnew}[\pi_t(alternative) - \pi_t(baseline)],$

 $i_{t+2}^{IMP}(alternative) = i_{t+2}^{IMP}(baseline) + \alpha^{LTnew}[\pi_t(alternative) - \pi_t(baseline)] + \alpha^{LTnew}[\pi$ $\alpha^{LTnew}[\pi_{t+1}(alternative) - \pi_{t+1}(baseline)]$,

etc.





4. The measures in the Stability Bill: a closer look

Introduction

This chapter focuses on an analysis of the financial and economic effects of a number of measures in the Stability Bill that are of particular importance to the overall design of the Government's actions.

More specifically, we examine two areas: the measures to reduce the tax wedge on labour and those intended to support household spending.

The impact of these measures on 2015 GDP has been assessed by the panel of PBO forecasters. Table 4.1 shows the highest and lowest estimates emerging from this forecasting exercise.

	Min	Max
€80 bonus for employees	0.17	0.28
IRAP reduction	0.00	0.01
Contribution relief	0.04	0.18
TFR advance	0.07	0.15
Other measures	-0.26	-0.38

Table 4.1 - Impact of the main measures of the Stability Bill on % 2015 GDP

Given the significant involvement of local government finance in the adjustment of public accounts as envisaged in the budget measures, the concluding sections have been dedicated to an analysis of the measures concerning the accounts of the regions, provinces and municipalities and, in particular, of the redistributive impact among entities in the individual authorities.

4.1 Reduction of the tax wedge on labour

4.1.1 Measuring the change in the tax wedge

There are three main mechanisms envisaged in the Stability Bill to reduce the tax wedge on labour:

 the full deductibility of the labour cost of permanent employees from the tax base used for the purposes of IRAP, accompanied, however, by an increase in IRAP tax rates to the levels prevailing in the 2013 tax year;



- the exemption from social security contributions for businesses that hire new employees on permanent contracts in 2015 (up to €8,060 per employee for a period of up to 36 months);
- the €80 monthly tax credit for employees with a total annual income of up to €26,000, which is to be made permanent.

The "tax wedge" is often used to provide a concise measurement of the total fiscal burden (i.e. taxes and social contributions). The global tax wedge measures the difference between the total cost of labour for employers and the corresponding net income paid to employees. This difference is calculated as the ratio between the fiscal burden on employment (direct taxation net of transfers,⁴² indirect taxation and social security contributions paid by the employee and the employer) and the cost of labour incurred by the company.

It could be an interesting exercise to determine the extent to which the measures contained in the Stability Bill will reduce the tax wedge for certain significant categories of worker (Table 4.2).

Taking an employee on a permanent contract with a relatively low salary (about two-thirds the national average – equal to $\leq 19,700$ – i.e. a level eligible for the full " ≤ 80 bonus") as an example, the overall tax wedge would be reduced by about 4.7 percentage points as a result of the IRAP measures and the ≤ 80 bonus, i.e. from 44.5% to 39.9%. Nevertheless, for a higher gross salary, i.e. one that exceeds the eligibility ceiling for the ≤ 80 bonus, the reduction in the tax wedge (attributable to the IRAP measures alone) would be just 1.1 percentage points (from 48.3% to 47.2%). Relatively smaller reductions would be achieved in the case of other categories (women and people under 35 years of age, new hires in 2014) which already benefit from deductions – either specific or lump sum – from the IRAP tax base.

If a "low income" employee – i.e. one who would be eligible for the $\in 80$ bonus – were a new hire on a permanent contract, and would therefore benefit from the full contribution exemption for the year in which he is hired and for the two subsequent years, the overall tax wedge would be reduced by more than half, falling by 23.9 percentage points of the cost of labour, from 44.5% to 20.6%. As such, the contribution exemption is far and away the mechanism that produces the largest reduction in the wedge, although it is a temporary measure that applies to new hires and, above all, directly benefits employers only.

 $^{^{\}rm 42}\,$ In particular, household allowances, which are paid by INPS, but are advanced to the worker by the employer.


			POLICY			DIFFERENCE	
	TREND	€80 bonus alone	80€ bonus, changes to IRAP rates and to deductions from tax base	80€ bonus, changes to IRAP rates, deductions from tax base, and contribution exemption for new hires	€80 bonus alone	80€ bonus, changes to IRAP rates and to deductions from tax base	80€ bonus, changes to IRAP rates, deductions from tax base, and contribution exemption for new hires
			Employee with	n gross salary equal to	the national	average	
Ordinary employees	48.3	48.3	47.2	33.4	0.0	-1.1	-14.8
Women and people under 35	48.0	48.0	47.2	33.4	0.0	-0.8	-14.5
New hires - SL2014	47.5	47.5	47.2	33.4	0.0	-0.4	-14.1
			Employee with gr	oss salary equal to 2/	3 of the natior	nal average	
Ordinary employees	44.5	40.9	39.9	20.6	-3.6	-4.7	-23.9
Women and people under 35	44.0	40.4	39.9	20.6	-3.7	-4.2	-23.5
New hires - SL2014	43.5	39.9	39.9	20.6	-3.7	-3.7	-23.0

Table 4.2Effects of the plan on the global tax wedge (1)

(as a percentage of cost of labour; worker without dependents)

(1) The division of workers into three categories (ordinary employees, women and people under 35, new hires – SA 2014) is necessary in order to take account of the different trend tax wedge for employers due to different deductions from the IRAP tax base – both specific and lump sum – already allowed under applicable legislation (Article 11, paragraphs 1(a), 1-bis, 4-bis1 and 4-quater, of Legislative Decree 446 of 1997).

On the whole, this outcome places the Italian tax wedge on labour, at least for certain categories of worker, not far from the average for all EU countries excluding Italy (+6.1 percentage points for a worker earning a wage equal to the national average and +6.8 percentage points for a worker earning a wage equal to two-thirds of the national average).

4.1.2 Contribution exemption for new hires on permanent contracts

The goal of the exemption from social security contributions for companies that hire new employees on permanent contracts in 2015 is to promote more stable forms of employment by helping to reduce the tax wedge for new hires.

In order to assess the macroeconomic aspects of this measure, we first consider which categories of worker would be covered by the incentive mechanism. In principle, the contribution exemption could involve:

- those who would have been hired on new permanent employment contracts in 2015 even without the incentive, with the exclusion, provided for in the legislation, of those who already had a permanent employment contract during the six months prior to signing the new contract (the invariant "deadweight" component referred to in the tax-incentive literature);
- 2) those who, in 2015, would have continued to work under a contract other than a permanent employment contract or would have been hired under a new nonpermanent employment contract, but who, because of the incentive, have their



employment transformed into a permanent contract (the "transformed to permanent employment" component);

3) those who would not have been employed in 2015, but who, because of the incentive, are hired on permanent employment contracts (the "new employment" component).

Official estimates based on INPS administrative data show that the "deadweight" component could number around 637,000, with the "transformed to permanent employment" component being estimated at another 363,000 workers for a total of one million workers covered by the mechanism. Considering the distribution by salary level for social security purposes provided by INPS, the Government estimates that the reduction in tax revenue for 2015 will be about €1.9 billion and will continue to increase until 2017 (to €5 billion before considering the increase in tax revenue in the form of corporate income tax⁴³) before declining to zero by 2019 as the programme comes to an end.

The size of these official estimates would appear appropriate in qualifying the economic impact of the contribution exemption: not as a means of creating new jobs, but rather one for shifting existing jobs towards more stable forms of employment (the "transformed to permanent employment" component) and for reducing the tax wedge on labour, together with the measure affecting the IRAP tax base, for the new hires who would have been given permanent contracts anyway (the "deadweight" component).

Although the goals of the mechanism can be considered appropriate, two critical issues should be emphasised:

- 1) official estimates provide little information to quantify the population of those who would be involved in the transformation from fixed-term to permanent employment. An initial estimate would appear to indicate that the potential population involved in this transformation could be large. If we look at the most recent period, some 400,000 people were hired on new fixed-term contracts signed in one year and in effect at period end. However, this flow figure would only indicate the minimum number of those potentially involved in the transformation. There were many more workers on fixed-term contracts at period end (some 2.7 million) regardless of when their contracts actually began. In principle, it is this much larger population that would represent a sort of upper limit on the number of contracts that could be transformed into permanent employment under the incentive mechanism;
- in assessing the effects of the plan, we should also consider a probable "timeshifting effect" that the contribution exemption for new employment contracts

⁴³ It is apparently assumed that the contributions no longer paid by the employer would not be transferred upstream (to the workers) or downstream (to the consumer), so corporate profits would increase, thereby resulting in greater taxes being paid by business.



signed in 2015 would have on new contracts that would have been signed, without the incentive, towards the end of 2014 or in early 2016. A simulation we performed assumes that – solely for workers already on permanent contracts (the invariant component) – contracts that would have been signed in November and December 2014 would actually begin in January 2015 and that those that would have been activated in January and February 2016 would now be moved up to December 2015. This would result in about 220,000 additional workers involved in the mechanism, resulting in a greater decrease in contribution revenue than the Government's forecast of some 0.4 billion in 2015 and 1.1 billion in 2016 and 2017.

4.2 Measures to support consumer spending: advances on severance benefits and the "€80 bonus"

4.2.1 Advance on severance benefits

The Stability Bill permits private-sector employees to receive the portion of their severance benefits ("TFR") accruing during the year directly in their paycheck for the period 2015-18. This option is reserved to employees who have worked for the same employer for at least six months and excludes domestic and farm workers. The TFR received in advance is subject to ordinary income tax, but is not included in determining eligibility for the €80 bonus.

The impact of this measure on macroeconomic aggregates (consumption and growth) depends on the choice of the individual workers between an increase in disposable income now by receiving TFR in their paycheck and the present value of that TFR paid in the future as ordinary severance benefits. The present value of TFR upon maturity depends in turn on the characteristics of the household concerned. More specifically, we can divide households into two different groups. On the one hand, we have those that are not in a position to save and have disposable income that is currently insufficient to meet their consumption needs. It is likely that these households will have a greater tendency to take on debt and so will choose to take an advance on their TFR if the alternative of obtaining the same disposable income through ordinary banking channels is too expensive. On the other hand, we have households that are able to save or that have sufficient disposable income to meet their consumption needs. These households will only choose to take an advance on their TFR if the financial markets are able to provide them with more profitable alternatives to the return they would see on their TFR upon maturity. These comparisons are, in turn, affected by the tax rate on TFR received upon maturity compared with the rate applied on the advance (with the former being more favourable, at 11% on the component resulting from revaluation and at the average income tax rate on amounts paid in, which is based on the marginal income tax rate) and by the number of years remaining until retirement.



Given the interest rates actually prevailing in the market, we can determine the circumstances that would justify taking an advance on TFR based on the expected duration of employment and gross salary. Beginning from these assumptions, PBO conducted a number of simulations on a representative population of workers (taken from the Bank of Italy survey of household income and wealth) in order to estimate the overall share of TFR received in advance and the consequent impact on both the public finances and household consumption (Box 5).

Figures 4.1a and 4.1b show the curve of financial benefit in opting to receive an advance of TFR for a worker with no dependents based on income and time till retirement for a household that intends to use TFR in increase consumption (non-saving households) and for a household that intends to save (saving households).⁴⁴

In the case of workers in non-saving households, the opportunity cost of obtaining TFR immediately (less favourable taxation and reduced contributions to final TFR) is generally lower than the cost of obtaining the same amount on the consumer credit market. However, it is still more advantageous to leave TFR to mature if a worker is close to retirement: in these cases, the loss resulting from the less favourable taxation would not be offset by the financial benefit of receiving the TFR in advance.

Based on these assumptions, workers in saving households would very rarely benefit by taking an advance on their TFR. The difference in the return on alternative market investments would not offset the less favourable taxation except for a small group of individuals with a very long expected working life.

⁴⁴ The distinction between saving households and non-saving households for which income appears insufficient to meet consumption needs has been drawn on the basis of two questions in the Bank of Italy survey: the level of savings (positive, zero, negative) and the difficulty in "getting to the end of the month". Once this distinction is made, the simulation applies different discount rates to the two types of household. For non-saving households that have trouble getting to the end of the month, the discount rate has been set to the average rate on consumer credit; for saving households (or that have no difficulty in getting to the end of the month), the discount rate is equal to that of the rate on an alternative use of the TFR funds (BTPs, or Italian government treasury bonds).



Box 5 – Calculating the financial benefit of the TFR advance

We assume that workers determine whether to take an advance on TFR based on the financial benefit of the immediate availability of the funds compared with their availability at maturity. This financial benefit can be calculated by comparing the increase in disposable income provided by the TFR advance against the present value of the TFR paid at maturity upon retirement. When comparing these alternatives, we must also take account of the difference in tax rate, which is more favourable for TFR received upon maturity.⁴⁵

TFR advance =
$$Y \cdot \left(\frac{1}{13.5} - 0.005\right) \cdot [1 - AMA(Y)]$$

Present value of TFR at maturity = $Y \cdot 0.0691 \cdot \frac{\left[(1 - AME(Y)) + ((1 + r)^k - 1)(1 - 0.11)\right]}{(1 + i)^k}$

Benefit indicator (if > 0 a TFR advance is preferrable)

$$= \left\{ \left[1 - AMA(Y) \right] - \frac{\left[\left(1 - AME(Y) \right) + \left((1+r)^{k} - 1 \right) (1 - 0.11) \right]}{(1+i)^{k}} \right\}$$

Where Y is equal to the annual salary, AMA(Y) is the related marginal tax rate, AME(Y) is the average tax rate, and r is the TFR revaluation rate.

Making use of the Bank of Italy survey of household income and wealth,⁴⁶ we were able to calculate the financial benefit indicator based on the expected duration of employment, gross salary and the individual discount rate. The tax rates are determined by way of a simulation of the tax system. The individual discount rate, on the other hand, is more difficult to specify. Therefore, for our simulation, the households of the workers concerned have been divided into two groups: those that are unable to save and do not have sufficient income to meet their consumption needs and those that are able to save and have sufficient income to meet their consumption needs.

It is plausible to assume that the households of the first group would be more likely to borrow, so taking an advance on TFR can be seen as an alternative form of financing. For such households, the discount rate *i* is assumed to be the market interest rate, and for this purpose we have assumed the average rate on consumer credit, which is 7.8%.⁴⁷

Workers in the second group of households would generally opt for a TFR advance if the market offered alternative uses of the funds that would generate a higher return than the return on TFR. Therefore, the discount rate *i* can be assumed to be equal to the market rate of return (on an investment of similar risk). In our simulation, we have assumed a discount rate equal to the net implicit yield on Italian treasury bonds based on the purchase price and term. In this case, the rate of return depends on the number of periods *k*. The implicit yield increases as the term increases, up to a maximum of 3.3% for 30-year bonds, 3% for 20-year bonds, 2% for 10-year bonds, and around 1.1% for 5-year bonds.

The TFR revaluation rate is equal to 75% of the cost-of-living index for blue and white-collar workers plus 1.5 percentage points. The average expected revaluation therefore depends on forecasts of inflation, which is currently below the target of 2%. For our base scenario, under

⁴⁷ Source: Bank of Italy, statistical database, average interest rate on consumer credit (code S984694M).



⁴⁵ For TFR accrued after 2001, the average tax rate is calculated on the basis of the five years prior to the termination of employment. Calculation of the average tax rate also includes the application of a deduction commensurate with the amount of time worked.

⁴⁶ For the (net) salaries surveyed, contributions and taxes have been calculated in order to determine the amounts of the associated gross salaries.

which inflation is assumed to be 1.5%, the expected rate of return equals 2.63%. Therefore, we can assess the benefit for the various households by comparing the results of the two formulas above based on salary and the number of years until retirement for saving and non-saving households.



Figure 4.1a - Benefit of electing the TFR advance based on disposable income and

Figure 4.1b -Benefit of electing the TFR advance based on disposable income and number of years to retirement





Conversely, looking at the rates of return on investments in the financial markets, saving households would very rarely benefit from taking an advance on TFR. The difference in return on alternative investments of the funds would not offset the less favourable tax regime except for a small group of workers with a very long expected working life.

Table 4.3 shows the estimated percentage of workers who, under the decision-making scenario described above, would find it financially beneficial to take an advance on their TFR, which turns out to be about 74% of the non-saving households and 0.4% of the saving households. Overall, the advance would be beneficial for 34% of all households. The TFR advance would total \notin 4.9 billion, or about 33.7% of the total TFR assets affected by measure, assuming that the TFR already transferred to pension funds is not advanced. Given that in 2015 the option would only be available for the period of March to December, we get a total amount of TFR advanced of about \notin 4.1 billion (Table 4.4).

Taxable income (in euros)									
Years to retirement	0-15,000	15-28,000	28-55,000	55-75,000	> 75,000	Total			
Private-sector employees in non-saving households									
1-3	50.0	0.0	0.0	0.0	0.0	33.1			
4-6	92.1	67.7	21.9	95.6	100.0	66.1			
7-12	92.2	81.4	66.3	79.7	87.3	80.3			
12-24	91.4	84.2	62.1	70.3	62.0	81.6			
25+	93.2	87.8	84.0	95.6	100.0	89.3			
Total	75.5	76.3	60.3	83.1	51.6	74.1			
Private-sector employees in households that save									
1-3	0.0	0.0	0.0	0.0	0.0	0.0			
4-6	0.0	0.0	0.0	0.0	0.0	0.0			
7-12	0.0	0.0	0.0	0.0	0.0	0.0			
12-24	1.0	0.0	0.0	0.0	0.0	0.2			
25+	3.3	0.0	0.0	0.0	0.0	1.0			
Total	1.2	0.0	0.0	0.0	0.0	0.4			
		All privat	te-sector empl	oyees					
1-3	36.2	0.0	0.0	0.0	0.0	23.9			
4-6	61.5	25.2	0.0	0.0	0.0	27.5			
7-12	49.1	36.2	17.8	10.1	0.0	34.0			
12-24	65.7	35.6	14.0	0.0	0.0	37.7			
25+	52.6	33.7	17.1	0.0	0.0	37.3			
Total	48.9	31.1	13.3	1.9	0.0	34.1			

Table 4.3 – Percentage of workers opting for the TFR advance



2015 effects	Total TFR not allocated to supplemental pension funds	% TFR advanced	TFR advanced (10 months)
Companies with up to 50 employees	9.2	37.2	2.9
Companies with more than 50 employees	5.3	27.8	1.2
Total TFR available for advances	14.5	33.7	4.1

Table 4.4 – Breakdown of TFR advanced by company size (billions of euros) (billions of euros)

Given that the TFR advanced would generate greater tax revenue due to application of the ordinary income tax rate instead of the separate tax rate applied to the funds upon maturity and that the TFR advanced to the workers of companies with more than 50 employees would produce a short-term decrease in contributions to INPS (to which TFR is currently paid), we can estimate the impact of the measure on the public finances.

As shown in Table 4.5, the TFR advance in 2015 would result in a reduction in revenues paid to the treasury fund (equal to the amount of TFR advanced by the workers of companies with more than 50 employees) of ≤ 1.2 billion, an increase of ≤ 1.4 billion in income tax revenue resulting from the taxation (at the marginal tax rate) of the TFR advanced, and a reduction in tax revenue of ≤ 0.01 billion due to the lack of taxation on the revaluation of TFR assets. Therefore, under the simulation described above, the measure would have virtually no net impact on the public accounts.

Finally, these simulations enable us to determine the macroeconomic effects of the TFR advance, i.e. what portion of the TFR advanced would actually translate into an increase in consumption. Here, too, the distinction between saving and non-saving households helps us to analyse consumption behaviour. As noted, saving households would take the TFR advance only if there were a more favourable use of the funds available. Accordingly, they would certainly not elect to use the TFR advanced to purchase consumer goods. Non-saving families could, if not constrained by the credit market, use the TFR advance to "crowd out" more expensive forms of debt, which would also not result in new consumption. However, if a non-saving household is rationed on the credit market or has voluntarily elected not to make use of credit despite having unmet consumption needs, it could use all of its TFR advance for consumption.



	Lower	Greater	Lower tax	Lower TFR	Guarantee	Net effect
2015 offerte	inflows to	income tax	revenue	disbursements	fund	
2015 effects	TFR treasury	revenue	upon			
	fund		maturity			
Companies up to 50 employees	0.0	0.9	0.0	0.0		0.9
Companies with more than 50						
employees	-1.2	0.4	0.0	0.0		-0.8
Total available TFR	-1.2	1.4	0.0	0.0	-0.1	0.0

Table 4.5 – Estimated impact of the TFR advance on the public finances (billions of euros)

The simulations enable us to assess the macroeconomic impact in terms of an increase in consumption in these various individual situations. As show in Table 4.6, about two-thirds of the some \notin 4.1 billion in TFR advanced, or about \notin 2.7 billion, would be used for consumption. Assuming that only a part (70%) of this additional consumption results in a corresponding increase in domestic demand, the effect on gross domestic product can be estimated at around 0.1 percentage point, a figure within the range of projections by the PBO panel of forecasters.

Table 4.6 - Impact of the TFR advance on consumption and GDP

2015	TFR advanced	TFR for consumption	Prop. for consumptio n	Impact on GDP
Saving households	0.0	0.0	0.0	0.0
Non-saving households (insufficient income)	4.1	2.7	65.6	2.1
with debt	1.4	0.0	0.0	0.0
without debt	2.7	2.7	100.0	2.1
Total	4.1	2.7	65.5	2.1

4.2.2 The "€80 bonus"

As we know, the \notin 80 tax credit for employees is provided to taxpayers with a gross tax expense of greater than the employment deductions and a total annual income (net of notional income on primary residences) of less than \notin 26,000. The bonus is \notin 80 per month for all individuals with a total income of less than \notin 24,000. In order to avoid the "poverty trap" – whereby disposable income decreases if taxable income increases – the amount of the bonus declines in proportion to income for taxpayers earning between \notin 24,000 and \notin 26,000.

The use of micro-simulation techniques based on the Bank of Italy survey of household income and wealth enables us to assess the capacity for the €80 bonus both to boost



lower levels of income for the purposes of redistribution and to contribute to growth by stimulating consumption. $^{\rm 48}$

The &80 bonus is not well targeted at households experiencing the greatest financial difficulties. As shown in Figure 4.2, the distribution of the benefit by household income decile indicates that just 39% of the households in the first decile (the poorest 10%) benefit from the bonus, whereas the percentage of households benefitting in deciles two through eight (with the exception of decile four) is greater (ranging from 43 to 47%). This unsatisfactory redistributive performance is attributable both to the eligibility conditions of the bonus (receipt subject to being an employee, thereby excluding pensioners, the self-employed and people whose income is below the threshold for paying taxes) and the fact that it is targeted at individuals and not households (which would be the more appropriate way to measure the needs and resources of a family).





The structure of the bonus does not appear to be entirely appropriate even for stimulating consumption. The outcomes of the simulations demonstrate that the marginal propensity to consume of households that receive the ≤ 80 bonus is in line with

⁴⁸ The Bank of Italy survey collects information that can be used to estimate the marginal propensity to consume of the various household types. A sample population of Italian households is asked how an unexpected increase in income equal to one month's salary would be used. This gives us an indicator of the marginal propensity to consume for each household in the event of an income shock, i.e. a situation similar to the receipt of the bonus.



the average, at around 46%. Therefore, the method for awarding the bonus to employees who earn less than $\leq 24,000$ does not appear to ensure a greater-thanaverage response in consumption despite the fact that the estimated marginal propensity to consume declines as the financial status of households improves (Figure 4.2).

Even with these limitations, the award of the bonus in 2015 would result in \leq 4.5 billion in additional consumption, which, assuming a propensity to import of 30%, would increase domestic demand by around 0.2 percentage points of GDP. Here, too, the figure falls within the range of estimates produced by the PBO panel.

4.3 The role of local government finance

4.3.1 The finances of the ordinary regions

For the ordinary regions, the budget measures are organized into two main actions (Table 4.7):

 a) cutting transfers by about €3.5 billion annually from 2015 to 2018; for the final year, a further reduction envisaged under Decree Law 66/2014 amounting to €750 million has also been extended;

As concerns allocation, the regions are to recommend the areas of spending and the amounts of the reductions, with the proposals to be approved in the standing State-Regions Conference. Should no agreement be reached, the areas of spending and sources of revenues will be determined by an Order of the Prime Minister, taking account, for the purposes of allocation, of GDP, the resident population, and the resources allocated for the current financing of the national healthcare service.

b) adjustment of the constraint of the Domestic Stability Pact, which had previously been established as an expenditure ceiling and has now been replaced by a balanced budget restriction. The overall expected effect, which the Government claims will improve net borrowing by about €2 billion in 2015 alone, is offset by the concession of a waiver of the restriction of equal amount, to be distributed on the basis of an agreement among the regions, drawn from budget surpluses (tied and untied) and liquidity.



	2015	2016	2017	2018	Impact with full implementation
Reductions in transfers	3,452	3,452	3,452	3,452	Permanent
Extension of reduction under Decree Law 66/2014				750	Until 2018
Internal Stability Pact (1)	-60				
budget balance	2,005				
liquidity and budget surplus waiver	- <i>2,0</i> 05				
debt payment waiver	-60				
Total impact	3,392	3,452	3,452	4,202	

Table 4.7 – Measures impacting the finances of the ordinary regions

(millions of euros; + sign = improvement in public accounts borne by the regions)

Source: Technical Report and Attachment 3 of the 2015 Stability Bill.

(1) The original text of the measure also included an exception for national co-financing with EU financing in the amount of €500 million in 2015.

It is not easy to assess the effects of the introduction the principle of a balanced budget in place of the spending ceiling that has been adopted thus far. Official estimates merely specify that the amount of €2 billion has been calculated based on the cash deficits of the regions for the period 2011-13 (source: COPAFF) given that the principle of financial accrual basis accounting referred to in Legislative Decree 118/2011 will bring the system much closer to cash basis accounting beginning in 2015.

Based on information provided by the Office of the Accountant General, the average cash balance for each region was determined by applying increasing weights over time (of 25%, 35% and 40%, respectively) to the balances for the period 2011-13. The rising trend in the deficits of all of the regions⁴⁹ and the marked variability over time in the balances of the individual regions make any projection of the figures for 2011-13 to 2015 an uncertain process. In any event, the effect of the balanced budget requirement would appear to generate permanent savings effects. Therefore, it is not clear why the Government's estimates show a positive effect of \notin 2 billion for 2015 alone.

The redistributive effects of the budget measures also merit some discussion. The offsetting of the positive effects of the balanced budget – which entails the elimination of cash deficits in the amount of &2 billion in 2015 – against the negative effects of the waiver of the restriction in the same amount may apply to all ordinary regions as a whole but does not necessarily apply for the individual regions. In fact, regions that have cash deficits – in that they have insufficient resources to fund the spending allowed under the previous constraints – must bear the impact of the additional burden of the balanced budget restriction on their own. Conversely, regions that have cash surpluses – in that they have resources in excess of what they can spend under the previous

⁴⁹ On the other hand, the trend reduction in the deficit due to the budget measures already established under current legislation, which the Government estimates at \notin 991 million, would appear to be about \notin 1 billion lower than the figure obtained by comparing the budget measures in effect for the years 2011-13 and those under current legislation for 2015. The only budget measures that on average impact current pact parameters for the period 2011-13 were \notin 2.1 billion lower than those for 2015.



expenditure restrictions – may now increase their spending until they achieve budget balance. Thus, the reduction in spending required of the deficit regions will be greater than the $\notin 2$ billion estimated for the regions as a whole. This amount is in fact the net difference between the reduction in spending required of the deficit regions and the increase in expenditure granted to the surplus regions. The regions will also be able to benefit from additional resources amounting to $\notin 2$ billion, the distribution of which, under the provisions of the Stability Bill, will be determined in proportion to the aforementioned budget surpluses and cash holdings, which will likely offset – in whole or in part – the restrictive effect of the cut in transfers.

We can conduct a simple simulation to verify the potential redistributive impact of application of the balanced budget constraint and the waiver of restrictions in the amount of $\in 2$ billion to be allocated on the basis of budget and cash surpluses. In the absence of information on the regional distribution of cash surpluses and the size of budget surpluses, we assume that these assets mainly regard the surplus regions, which would therefore be the main beneficiaries of the waiver.

Figure 4.3 shows that, by applying the balanced budget constraint to the average figures for regional budgets for the period 2011-13⁵⁰ and adopting the same weights used by the Government, the corrective effort of budget balance would be borne by the six regions with the largest cash deficits (Lazio, Campania, Piedmont, Tuscany, Veneto and Emilia-Romagna), with a correction of about €3.5 billion. Against this corrective effect, the four regions with a weighted average surplus (Puglia, Lombardy, Calabria and Abruzzo) would have benefitted from an increase in their expenditure capacity of the same amount (about €1.5 billion from going from surplus to balance plus €2 billion from the waiver from the balanced budget restriction). If these past cash balances and budget surpluses were more equally distributed, the imbalanced impact shown in the chart would be partially attenuated.

⁵⁰ In the absence of information regarding the regional distribution of the effect of the increase in the impact of the budget measures under current legislation for 2015 (\notin 991 million according to the Government), we assume that these additional measures are to be allocated in proportion to the EU-compliant spending targets of the ordinary regions for 2013, as defined in the Decree of the Ministry for the Economy and Finance published in issue 52 of the *Gazzetta Ufficiale* of 2 March 2013.



restriction for cash balances and budget surpluses (weighted average for 2011-2013)

Figure 4.3 – Distributive effect of the budget balance constraint and the waiver of the restriction for cash balances and budget surpluses (weighted average for 2011-2013)

4.3.2 The finances of the provinces and municipalities

As concerns local authorities, the budget measures involve three main interventions:

 a) a permanent cut in transfers in a constant amount for municipalities (€1.2 billion) and an increasing amount for the provinces, up to a maximum of €3 billion once fully implemented;

As concerns the criteria for the allocation, which will be accomplished by way of a ministerial decree, the legislation refers generically to the need for the provinces to also take account of the difference between past expenditure and standard needs. This requirement is more specific for the municipalities, with the provision for an increase from 10% to 20% in the share of the solidarity fund to be allocated on the basis of revenue generating capacity and standard needs.

b) an easing of the balanced budget constraint until 2018;

This easing of this restriction is the net effect of two measures. First, the benchmark for the restriction has been changed from average current spending in 2009-2011 to the same aggregate for 2010-2012. This measure should have a restrictive effect given the tightening of annual budgets that has occurred. Second, the percentages to apply to the aggregate of average current spending as defined above will be reduced. This reduction will have an expansionary effect greatly superior to the restrictive effect of the change in the expenditure benchmark.



c) adjustment of the balance to the application of financial accrual basis accounting, which requires the provision for doubtful accounts to be included under liabilities. The restrictive effect of this change is permanent.

Tables 4.8 and 4.9 summarize the net effect of these measures for provinces and municipalities, respectively. The net effect is restrictive for both segments, but much more so for the provinces, which will suffer a significant cut in revenues, presumably in consideration of the reduction in their number and their functions.

The impact of the budget correction measures on municipalities is less restrictive due to the broader scope of the interventions, which for the segment as a whole tend to offset each other. The structuring of the budget measures helps correct the distortion created over time under which the successive tightening of the pact's parameters required most municipal governments to post budget surpluses. The reduction in revenues and the concomitant narrowing of surpluses required by the pact therefore serves to guide municipal budgets along a path towards balance. Indeed, under current legislation, the balanced budget requirement will take effect as from 2016 and, in the absence of corrective action, would be strongly expansionary for municipalities.

Table 4.8 – Measures impacting the finances of metropolitan cities and provinces (millions of euros; + sign = improvement in public accounts borne by metropolitan cities and provinces)

	2015	2016	2017	2018	Impact with full implementation
Reductions in transfers	1,000	2,000	3,000	3,000	Permanent
Extension of reduction under Decree Law 66/2014				563	Until 2018
Internal Stability Pact	-100	-100	-100	-100	
easing of budget balance requirement	-255	-255	-255	-255	Until 2018
recognition of provision for doubtful accounts	155	155	155	155	Permanent
Total effect	900	1.900	2,900	3.463	

Source: Technical Report and Attachment 3 of the 2015 Stability Bill.

Table 4.9 – Measures impacting the finances of municipalities

(millions of euros; + sign = improvement in public accounts borne by municipalities)

	2015	2016	2017	2018	Impact with full implementation
Reductions in transfers	1,200	1,200	1,200	1,200	Permanent
Extension of reduction under Decree Law 66/2014				786	Until 2018
Internal Stability Pact	-840	-900	-900	-900	
easing of budget balance requirement	- <i>3,095</i>	- <i>3,095</i>	- <i>3,095</i>	- <i>3,0</i> 95	Until 2018
recognition of provision for doubtful accounts	2,195	2,195	2,195	2,195	Permanent
reduction of debt payment waiver	60				
Total effect	360	300	300	1,086	

Source: Technical Report and Attachment 3 of the 2015 Stability Bill.



The redistributive effects on municipal budgets

While the three main budget measures (incorporation of the provision for doubtful accounts into the pact, reduction of the pact target and cuts in transfers) tend to offset each other at the level of the municipalities as a whole, the impact on individual local governments could be quite diversified. It is therefore useful to examine the effects of the three measures on the accounts of the various entities separately and how they interact in order to determine the redistributive effect of the measures from one municipality to another.

We look first at the provision for doubtful accounts. The budget measures require the provision, which is governed by Legislative Decree 118/2011, to be considered under the Stability Pact. This reduces the expenditure capacity of local governments, with a consequent positive effect on net general government borrowing. In its first year of application, the provision charged to the budget can be equal to 50% of estimated total doubtful accounts. This then increases to 75% in the second year and 100% as from the third year. In any event, municipal governments must recognise the full amount of the provision in their financial reporting. If, in preparing the report, the budget surplus is not sufficient to fund the provision, the deficit is to be applied to the budget for the current year.⁵¹

The Government estimates the total value of doubtful accounts at ≤ 4.4 billion and, given the obligation to recognise 50% of the provision in the budget for 2015, has prudently measured the restrictive impact on municipal spending capacity at ≤ 2.2 billion, with a corresponding positive effect on borrowing.

Figure 4.4 shows the distribution of the restrictive impact of recognition of the provision for 2015 in euros per capita, as estimated by the Ministry for the Economy and Finance (MEF), for municipalities subject to the Stability Pact and the impact on their own revenue. We can see a certain variability in the proportion of doubtful accounts. While the estimated amount is less than 5% of own revenue for 40% of the municipalities,⁵² the figure is more than 10% for another 20% of towns. In the most extreme 5% of cases, doubtful accounts are greater than 20% of revenue.

⁵² Revenues recognized in the most recent financial reports available, those for 2012. Data not present in the Minister of the Interior's database have been estimated.



⁵¹ In accordance with Legislative Decree 118/2011, the overall level of doubtful accounts is determined by the government on the basis of the level of provisions for doubtful accounts that are expected to arise during the year, of their nature, and of the trend over the previous five fiscal years (i.e. the average ratio between collections and assessments for each type of revenue stream).



Figure 4.4 – Distribution of MEF estimates of doubtful accounts by municipality (euros per capita and as a percentage of revenue; municipalities subject to the Stability Pact)

When the compression of spending capacity associated with the introduction of the provision for doubtful accounts into the pact is considered along with the reduction in the pact target for each municipality, we obtain a highly variegated picture of the redistributive effect of the budget measures. Figure 4.5 shows the net distribution of the measures on the pact to come out of this simulation. For about one entity out of eight, the tightening due to the doubtful accounts would exceed the benefit generated by the reduction in the pact target, so the net effect of the measures would be restrictive. For 3.5% of the entities, the balance between the doubtful accounts and the loosening of the stability pact would result in a compression of spending capacity, without considering the additional transfer cuts, of greater than 5% of total revenue.⁵³ Conversely, for over one-third of the entities, the balance between the doubtful accounts and the loosening of the stability pact would result in a benefit of greater than 5%.

Finally, if we add the impact of the reduction in state transfers to the first two components of the budget measures, we obtain an overall picture of the redistributive effects of the measures. This also highlights the critical unsustainability of the accounts of certain municipalities. Because the budget measures do not set the criteria for allocating the cuts among municipalities, the simulation uses a distribution defined as the average of the



⁵³ Also drawn from the 2012 financial reports.

reductions in transfers to local government as mandated by Decree Laws 95/2012 and 66/2014 (the "spending review").





Overall (Table 4.10), the budget measures would result in a loss of revenue for around 1,300 municipalities (representing about 40% of the population) for a total amount of about €1 billion, while they would have an expansionary impact of about €700 million for the remaining 4,300 towns.

Figure 4.6 shows that, taking account of the value of the cuts, 5.3% of municipalities (the most disadvantaged) would experience a net negative impact from the measures of greater than 5% of their total revenue, with about half of these authorities seeing effects in excess of 9% of revenue.



	Bodies with	Bodies with	
	negative budget	positive budget	Total
	impact	impact	
%	23,5	76,5	100,0
%	41,3	58,7	100,0
es			
Millions	-994	694	-300
%	-3,7	2,4	-0,5
Millions	-431	1.331	900
%	-1,6	4,6	1,6
	% % Millions % Millions %	Bodies with negative budget impact % 23,5 % 41,3 es Millions -994 % -3,7 Millions -431 % -1,6	Bodies with negative budget impactBodies with positive budget impact%23,5%23,5%41,358,7esMillions-994%-3,72,4Millions-431%-1,64,6

Table 4.10 -	- Distributive effect of the budget measures broken down by advantaged
	and disadvantaged municipalities

Source: PBO based on data from Ministry for the Economy and Finance and Ministry of the Interior.

Figure 4.6 – Distribution of the overall impact of the budget measures on local bodies (euros per capita and as a percentage of total revenue; municipalities subject to the Stability Pact)



Table 4.11 reports the number of municipalities and the impact of the budget measures as a percentage of total revenue as incurred by the most disadvantaged governments at various levels of minimum loss (1.3% and 5%). For each band, we have also calculated the amount of losses in excess of the minimum thresholds, i.e. the amount of revenue that would be needed to offset the municipalities' losses that exceed these thresholds. The thousand or so bodies that would lose more than 1% would require compensation



of greater than €750 million in order to reduce the restrictive impact of the budget measures to just 1% of revenue, with an average loss of 4.5%. Over 530 municipalities would lose more than 3% of revenue, and their compensation would total about €415 million, €215 million of which accounted for by three major cities (Rome, Milan and Reggio Calabria). The amount of this compensation would decline to about €190 million for a loss threshold of 5%, which would involve some 300 municipalities and two major cities (Rome and Reggio Calabria).

Finally, Figures 4.7 and 4.8 show the impact of the budget measures on the municipalities classified by size and by region. The bars report the net effect of the budget measures as a percentage of total revenue, while the line indicates the number of governments that would suffer a loss compared with 2014. In particular, Figure 4.7 shows that the percentage of major cities that would post a loss would reach 60%, whereas 85% of small municipalities (with populations of less than 5,000) would improve their positions.

 Table 4.11 –
 Distributive effects on the municipalities most penalized by the budget measures

(loss thresholds calculated as a percentage of total revenue)

	Minimum I	oss of 1%	Minimum lo	oss of 3%	Minimum loss of 5%		
	All municipalities	Cities > 150,000 inhabitants	All municipalities	Cities > 150,000 inhabitants	All municipalities	Cities > 150,000 inhabitants	
No. of municipalities	1,008	10	533	3	303	2	
Avg. % of revenues	4.5	4.7	6.0	5.5	7.5	6.3	
Total loss (millions of euros)	751	401	415	215	194	68	

With regard to the distribution of gain and losses by region, Figure 4.8 shows a significant penalty for the regions of southern Italy, as well as for Lazio and Lombardy, which are negatively affected by Rome and Milan. In Calabria, Abruzzo and Campania, the reduction in average expenditure would be around 2% of total revenue, but with around one-third of the municipalities posting a loss.





Figure 4.7 – Per capita impact of the budget measures and percentage of municipalities with a loss





(analysis by region)



This analysis demonstrates how the combination of budget measures can create critical problems for the accounts of a significant number of municipalities. Enhancing the sustainability of the budget measures for municipalities would be possible if the distributive impact of the various components was restructured such that the maximum burden on each authority remained below a given threshold. This could be achieved by adopting an approach that has already been tested on multiple occasions in the same field. For example, if the ratio of the net impact of the measures to total revenue were used as an impact indicator, €415 million would have to be redistributed in order to limit the impact of the measures on revenue to below 3% (Table 4.11). This would reduce the negative impact on the 533 public bodies with losses in excess of 3% by placing a greater burden on the other municipalities through greater cuts in transfers.

However, it must be emphasised that the quantification of the impact when designing the safeguarding mechanisms produces only ex-ante estimates, whereas the actual level provisions for doubtful accounts for each individual municipality cannot be determined until their budgets are prepared. Therefore, it would not be possible to obtain an accurate calculation of the amount of compensation that would be needed once the provision is actually specified. This would create a risk of over-compensating (i.e. rewarding) municipalities that established a small provision than estimated doubtful accounts and under-compensating (i.e. penalizing) those that established a larger, more prudent provision than estimated doubtful accounts. This safeguard mechanism could distort incentives to recognize doubtful accounts and might be inadequate to its purpose in certain cases. An ex-post revision mechanism could be created, but the overall level of compensation for the rest of the segment (which must necessarily be established before the fact) could still prove incorrect, thereby altering the overall impact of the budget measures.

Alternatively, enhancing the sustainability of the budget measures, especially for municipalities that recognise a large provision for doubtful accounts, could be achieved by adjusting the lowering of the Stability Pact targets, rather than compensating by way of cuts in transfers. The negative impact of provisioning could be neutralised with corresponding reductions in the Stability Pact objective. With this strategy, the overall reduction of the pact objective would feature two components: a purely expansionary component in the amount of €900 million⁵⁴ (distribution of which could be based on various reward parameters) and another amount that cannot be known a priori, but would be equal to provisions for doubtful accounts. The net desired impact of the budget measures would be achieved while not, in theory, jeopardising their sustainability for any municipality given that the negative component (provisions for doubtful accounts) would be precisely offset by a corresponding reduction in the pact target for each municipality. This would also remove the disincentive to recognise greater provisions for doubtful accounts.

⁵⁴ Equal to the net effect of the easing of the Internal Stability Pact as established by the Stability Bill (Table 4.9).



However, such an approach does have one limitation. Given that the current level of the pact objective and that of the estimate of doubtful accounts are close to each other, the compensation mechanism could produce a negative pact objective for a not insignificant number of local governments. In other words, the reduction in the objective resulting from the distribution of the €900 million and that equal to the provision for doubtful accounts could be greater than the pact objective prior to the reform. To the extent that local governments do not have the resources to take advantage of this room for manoeuvre, the net impact of the budget measures could, on the whole, be a greater burden on the segment than actually provided for in the measures. In this environment, only the reallocation of unexploited fiscal leeway during the year, as determined through appropriate monitoring, would make it possible to re-equilibrate the overall balance.



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