

Work Plan of the Parliamentary Budget Office

Year 2017

(as required by Law 243 of 24 December 2012, Article 18, paragraph 4)

The objective of the Parliamentary Budget Office (PBO) is to contribute to the sustainability of Italy's public finances, ensuring that the public accounts are transparent at the service of Parliament and the general public. As specified in the law establishing the PBO (Law 243/2012, pursuant to the new Article 81 of the Constitution), the PBO assesses macroeconomic and public finance forecasts; quantifies the macroeconomic effects and the impact on the public finances of the most important legislative measures; analyses public finance trends, including by sub-sector, and verifies the long-term sustainability of the public finances; assesses compliance with fiscal rules and analyses the activation and use of a number of mechanisms envisaged in the new framework of European rules (specifically, the corrective mechanism and deviations justified by exceptional events). Finally, the PBO prepares analyses and reports, also at the request of the parliamentary committees responsible for public finance matters.

1. Analysis

1.1 *Activities performed in 2016*

In 2016 the PBO continued its work to validate the official macroeconomic forecasts (trend and policy) in accordance with the memorandum of understanding between the MEF and the PBO signed in September 2014. The results of this activity and the assessments of the public finances were provided to the Budget Committees of the Senate and the Chamber of Deputies on the occasion of the hearings during the parliamentary consideration of the Government's planning documents and were then incorporated in two Reports: in April, the *2016 Budgetary Planning Report* and in November the *2017 Budgetary Policy Report*. The PBO's Reports are published in time for the European Commission's review of the documents submitted by the Italian Government.

In addition to the Reports, the PBO published studies offering an in-depth examination of specific issues, chosen independently by the PBO as part of the duties assigned to it under the law establishing it or prepared in response to requests from parliamentary committees. More

specifically, four hearings were held on issues of concern to the public finances (“Reform of the structure of the budget and strengthening of the cash-based budget”, “Reform of the Budget Act and the budget rules for local governments”, “Fiscal support measures for families” and “Standard funding requirements and fiscal capacities of local governments and criteria for allocating resources”) and numerous analytical works were published in the document series established by the PBO (seven *Focus Papers*, two *Working Papers* and four *Flash* analyses). The issues addressed included: investment incentives; the civil justice system; pension flexibility; the problem of former employees no longer eligible for pensions following pension reform and the safeguard measures of the Fornero reform; gender budgeting; the appropriateness of healthcare treatment and outpatient assistance; the 2016 Stability Act; the stability and convergence programmes of the EU Member States and the issues associated with using the output gap in estimating structural balances.

Last year also saw the publication of four *Reports on recent economic developments*. On a quarterly basis, these publications analysed developments in the Italian and international economies, assessing any divergences during the year in the main macroeconomic variables from the values incorporated in the government forecasting scenario. The Reports contain short-term forecasts (up to two quarters) on changes in GDP on the previous period and year-on-year, offer qualitative assessments of the main components of demand, inflation and the labour market and present simulations using the macroeconomic model of the impact of new events not incorporated in government forecasts.

This was made possible by strengthening our investigative tools. In the field of macroeconomic analysis, the PBO acquired the Istat MeMo-it econometric model in order to manage that tool independently and direct further development for the PBO’s own purposes. The acquisition of the macroeconomic model increased the timeliness and flexibility of producing forecasts during the validation exercise and of estimating the macroeconomic impact of budget measures. The PBO also developed the section of the model regarding firms, which will make it possible to examine the macroeconomic impact of public finance decisions on this sector of the economy with greater precision. In addition, the start of the publication of the *Report on recent economic developments* made it necessary to develop short-term forecasting tools in order to monitor the performance of the economy during the year. These tools were then used in tandem with the MeMo-it macroeconomic model in the validation exercise as an additional benchmark for assessing the government projections for the first forecasting year.

Within the analysis of the public finances, the capacity for forecasting the individual components of the general government accounts has been strengthened, including the use of specific estimation models for a number of revenue and expenditure items. The consistency between the public finance block and the macroeconomic forecasts of the econometric model was also refined even further. With regard to the use of the macroeconomic model with the budget package, the PBO analysed the budget measures with a view to assessing their macroeconomic effects. The procedures for the development of medium-term projections for the public accounts and the

public debt were expanded with tools that enable the evaluation of the macroeconomic uncertainty (the impact of growth, prices and interest rates) that characterises those forecasts. With regard to monitoring compliance with fiscal rules, the interpretation of the exceptional events clause, which was invoked for the first time in 2016, in EU regulations and the position of the European Commission was examined in greater detail. The possibility of implementing the investment plan developed by the Government was assessed in response to the request for budget flexibility under the investment clause. Tools were also developed to assess the relationship between the structural balance rule and the expenditure rule under the preventive arm of the Stability and Growth Pact.

Finally, more sophisticated analysis was conducted of the impact of specific measures on the public finances, income distribution and the activity of economic agents on the basis of administrative data – in some cases of a fiscal nature – and microdata from corporate financials. This analysis was extended to other sectors with an impact on growth, such as the civil justice system.

The above analytical work was performed by the PBO despite the difficulty encountered at times in accessing the databases maintained by government departments. The amendment of Law 243 introduced in 2016, which gives the PBO the status of agencies belonging to the national statistical system, should help overcome these challenges.

1.2 The 2017 work plan

The primary objective for 2017 is to strengthen the tools and analytical capabilities used in performing the PBO's ongoing institutional duties: first, the assessment of budget policy documents in the spring and autumn and the effects of major legislation; second, monitoring and forecasting developments in the economy and the public finances.

Without jeopardising this priority, the PBO will also pursue specific lines of research into issues of special importance in the economic policy debate.

1.2.1 Ongoing institutional activities: development of analytical tools and the permanent research programme

Upgrading macroeconomic estimation and forecasting tools will remain at the centre of our macroeconomic analysis activity in 2017, both to support the validation of the Government's forecasting scenarios and to study long-term macro trends in the Italian economy. More specifically, the PBO will maintain and update the MeMo-it macroeconomic forecasting model, with periodic assessment of the stability of the equations, the respecification of those equations where necessary, and the development of additional parts of the model. The verification activity

will essentially address the stability of the behavioural equations. In addition, the structure of the model will be developed, enhancing the parts of greatest relevance to the PBO's activity. In particular, similar to the efforts regarding the business sector, work will focus on developing a more complete model of the household sector. Consequently, the connection between the macro model and the components of the public finances of greatest relevance to these sectors will be improved.

A method will be developed for application when an adequate time series of forecasts becomes available for comparison with actual developments, in order to assess the accuracy of the forecasts produced by the PBO and the panel of professional forecasters, with specific testing of the main variables. The method will be designed to verify the size, persistence and sign of forecasting error and the dependence of the errors on exogenous variables.

Short-term forecasting tools, which are used to guide the forecasts of the macroeconomic model and the in-year analyses disseminated with the *Report on recent economic developments*, will be strengthened. In particular, models for forecasting other variables of essential importance for analysing current economic conditions and determining turning points in the cycle (industrial production, coincident and leading composite indicators of the economic cycle, employment, inflation) will be added to the existing short-term forecasting tools, which regard GDP and the main components of demand.

Attention will also be devoted to the issues associated with the potential output of the Italian economy and estimating the output gap. The uncertainty surrounding the quantification of that variable by the European Commission, which is of crucial importance in determining budget policy, has prompted the assessment of multiple methods for calculating the gap.

An issue associated with potential output is hysteresis, i.e. the possibility that the prolonged weakness in Italy's economy has also contributed to the decline in potential output through a reduction in the formation of physical capital, the cutting of R&D expenditure, the expansion of structural unemployment and the slowdown in the reallocation of resources to more productive uses. In order to test this hypothesis, it is necessary to develop models that enable us to consider the existence of a correlation between the economic cycle and trend and that permit identification of the direction of causation between these two components. A number of preliminary estimates have been made, as discussed in the *2016 Budgetary Planning Report* (see Appendix 1.2 *Estimates of hysteresis in the Italian economy*), which show an increase in hysteresis in the Italian economy in the last two recessions.

In the more specific context of the public finances, the PBO will integrate and systematise the statistical resources we use in order to improve both forecasting capabilities and monitoring capacity at the sectoral level. In particular, the tools currently used to estimate short-term pension expenditure and other social benefits, health expenditure, compensation of employees and interest expenditure will be further developed. To this end, agreements with a number of public institutions

for the completion of databases will also be renewed and developed. This will lay the groundwork for the future inclusion of a public finance section in the *Report on recent economic developments*.

To support analytical work, the microsimulation models already used in 2016 for the ex-ante assessment of some legislative initiatives will be completed for companies and households. The completion and improvement of these models will ensure continuity in the PBO's analytical capabilities for issues such as the direction of tax policy and developments in taxation for specific sectors.

Another area of development for analytical tools is debt sustainability. In this area, the development of models for calculating the sustainability indicators in line with the methods used by the European Commission and the International Monetary Fund will be completed. A dynamic model for medium/long-term forecasting of the impact of population aging on the public finances will be developed, with a focus on pensions and healthcare spending.

With regard to fiscal rules, the PBO will refine the method used to monitor compliance with the expenditure rule in its most recent interpretation by EU institutions.

Work will continue on monitoring the Government's investment plan (including the effects of the Juncker Plan), the main structural reforms and expenditure on refugees, security and the earthquake response, especially with a view to assessing their compliance with the flexibility criteria under the European rules.

Moreover, as in 2016, specific analysis will regard a comparison of the budget strategies of the leading EU Member States, as set out in their stability programmes and draft budgetary plans, and the related opinions of the European Commission.

1.2.2 Specific lines of research

As provided for by the law establishing the PBO, the Office's duties include the preparation of analyses of "other economic and public finance issues relevant to analysis, monitoring and assessment" selected independently by the PBO.

For 2017, the research areas we have identified regard to the combination of monetary and fiscal policy, the links between budgetary policy and the economy (the variability of fiscal multipliers with respect to the economic cycle and the elasticity of taxes and social contributions), budget formation procedures (the medium-term planning of budgetary objectives) and sectoral issues, revenue (the effects of the allowance for corporate equity in the field of corporate taxation) and expenditure (labour market and social welfare). These areas of research are discussed in greater detail below.

Fiscal stance – As part of a more general assessment of the fiscal stance, and tying into the European debate on the adequacy of fiscal policy compared with the objectives of stabilising the cycle in the

euro area, work will seek to verify the effects on the euro area and the Member States of more expansionary fiscal stances in the economies that have scope for expansionary intervention (Germany and the Netherlands). An initial application will be developed with scenario simulations based on the multi-country econometric model (Oxford economic model) of the PBO.

Fiscal multipliers. –The research based on using the MeMo-it macroeconomic model for the purpose of determining the size of fiscal multipliers in Italy will be completed. A copious literature has developed in recent years that has shown that the size of fiscal multipliers (the response of GDP to the impulse of revenue and expenditure measures) varies depending on the phases of the economic cycle. They tend to be larger in adverse periods of the cycle and are especially significant, as has occurred in recent years, in the case of recessions where monetary policy has lost effectiveness.

The parameters of a structural econometric model like MeMo-it are independent of the economic cycle by construction. However, this tool can be used to analyse the variability of the multipliers in the recent crisis, verifying the stability characteristics of the model, estimating the multipliers for sub-periods once any structural instabilities in the equations have been corrected and using that information to estimate the impact of budget measures adopted during the crisis on GDP.

Variability of the elasticity of taxes and social contributions with respect to the economic cycle. - The elasticity of taxes and social contributions with respect to income are the main tool for forecasting developments in government revenue over the horizon of multiannual programming, for evaluating *ex post* the effectiveness of specific tax policies and for calculating the cyclical component of the budget, which is necessary for estimating the structural balance. In current practice, the official estimates are produced by using constant values for the semi-elasticity of individual revenue items compared with their tax bases and the individual tax bases with respect to GDP.

The work uses an econometric approach to show the variability of the elasticities of the main taxes and social contributions in the various phases of the economic cycle. More specifically, within the model the short-term semi-elasticities are left free to move in the different states of the economy and their difference between states appears statistically significant, being relatively large during the negative phases of the economic cycle. The result is particularly important in a context in which an inaccurate estimate of elasticity could lead to an incorrect assessment of the public finances and the scale of the measures to be taken.

Planning budgetary objectives and the results of the public finances in Italy. – Effective medium-term budgetary procedures should help to reconcile the sustainability of the public finances in the medium term with short-term needs for macroeconomic stabilisation. One of the indicators to measure the effectiveness of medium-term budgetary procedures is the stability over time of public finance objectives, the consistency of the latter with the conditions for sustainability in the medium/long term and the actual *ex post* achievement of the planned results. The stability of taxation and expenditure decisions facilitates the operation of the economic system, lending greater certainty to agents' expectations.

In an ideal world, Governments would announce their priorities and make a commitment to implement those policies at the start of their term of office. Any deviations should be connected with either the need to respond to exogenous shocks or the rethinking of policy priorities, justified within the sustainability scenario indicated previously and transparently reconciled with it. The most successful experiences among European countries have come in similar frameworks, in particular by accentuating the focus on controlling developments in non-cyclical expenditure and the ability to achieve the planned growth.

For the Italian case, the PBO will examine the aspects associated with the programming of public finance targets in the recent past, the reasons underlying their variation (significant changes in the macroeconomic environment or in interest rates, extraordinary events such as natural disasters, changing political priorities) and the degree to which they were achieved.

This phenomenon has particular relevance for Italy, which risks losing a significant share of revenue. The work is intended to provide an assessment of the quantitative dimension of the phenomenon in Italy and other countries and a discussion of proposals for the revision of tax systems in Italy and at the international level.

Ex post assessment of the economic and distributive effects of the application of the ACE. - The introduction of the allowance for corporate equity (ACE, translated as aid for economic growth in Italian) had two objectives: a) to reduce the tax distortions created by the financial structure of firms and prompt the latter to rebalance its composition between debt and equity capital; b) support economic growth by reducing the tax burden on firms.

Using the microsimulation model of corporate taxation developed by the PBO for 2011-2015, we will verify the expected (and unexpected) effects of the measure in the first five years of implementation. To evaluate the role of the economic cycle in determining the effectiveness of the mechanism, the results obtained will be compared with those from the analysis of the effects of the Dual Income Tax system (DIT) in 1999-2004.

The labour market and social shock absorbers. – Two works are planned. The first is devoted to workers employed under occasional and ancillary forms of contract that make use of social contribution vouchers. The topic has been the subject of much debate, especially after recent INPS data showed rapid rates of growth in the number of those involved in the voucher system and the overall value of those vouchers. The mechanism could, however, be revised, partly in response to the greenlighting of a referendum on the issue. The study will include a reconstruction of recent legislative developments, international comparisons and quantitative assessments on the dissemination of employment under the voucher system.

The second study concerns the overall system of social shock absorbers for the unemployed. The aim is to build a map that will make it possible to track the evolution of active and passive instruments before and after the Jobs Act reform, against the background of the changes occurring in the labour market, in particular the introduction of open-ended contracts with increasing

protections. The first part will present and summarise legislative developments, followed by a second part with statistics on historical expenditure and that expected after the passage of the Jobs Act.

2. The transparency of the public accounts and communication

During 2016, the PBO strengthened its channels of communication with the media and the general public, with the aim of strengthening our capacity to inform Parliament and the public and to foster greater transparency in the public accounts. More specifically, emphasis was placed on how the results of analysis are disseminated, appointing a PBO spokesman, who also acts as a press officer, in order to promote the external communication of the PBO's activities and to liaise with the media. For 2017, communication will be further enhanced with wider use of visual data tools and infographics in the presentation of the main results of the analyses we conduct.

3. The organisational structure

The year 2016 saw the PBO make progress towards the completion of its staffing effort (30 employees for the first three years, rising to 40 once fully staffed, as provided for under the law forming the PBO). A competitive procedure was organised that led to the recruitment of six experts, bringing the number of staff from 18 to 24. In the course of 2017, we plan to create extracurricular internships under specific agreements with universities, using this additional tool for specific research projects.

This year will also see the start of the activities of the PBO's Scientific Advisory Committee, composed of experts of proven experience and expertise in economics and public finance at the national and international levels. It will be charged with the task of providing methodological guidance for the PBO's activities. One of its first steps will be to conduct a methodological assessment of the validation process for official macroeconomic forecasts.

One further essential task is to find premises for the PBO that will provide sufficient space to house the entire staff, overcoming the organisational difficulties arising from the continuing division of staff between two separate buildings.

4. International activities

In 2017, the PBO will continue its international activities: bilateral meetings with the European Commission, the International Monetary Fund, the European Central Bank, the OECD, economic advisors at embassies in Italy and the rating agencies; and participation in multilateral meetings of the network of budget officials of the OECD countries. Of particular importance is the network of national fiscal councils of the European Union. As in Italy, following the implementation of the so-

called Two-Pack, every Member State has established independent fiscal institutions that perform the tasks of producing or validating macroeconomic forecasts and assessing the public finances. The network of fiscal councils, which meets frequently, represents an important vehicle for sharing experience and developing common positions.

In this context, the PBO will chair a working group on medium-term budgetary procedures with the objective of conducting comparative analyses at the EU level on this issue. The initial goals include providing material to the working group for the preparation of a questionnaire to be distributed to the fiscal councils and conducting an analysis among countries on the consistency over time between budget forecasts and outturns.