Conselho das Finanças Públicas
Portuguese Public Finance Council

Macroeconomic forecasts underlying the Draft Stability Programme 2015-2019

Opinion of the Portuguese Public Finance Council

21 April 2015

The Portuguese Public Finance Council is an independent body, set up by article 3 of Law no. 22/2011 of 20 May that introduced the 5th amendment to the Budgetary Framework Law (Law no. 22/2001 of 20 August, republished by Law no. 37/2013 of 14 June).

The decision to set up the Council was taken following the publishing of the final report of the Taskforce to the European Council on economic governance in Europe, and became a reality in October 2010 after agreement was reached between the Socialist Party (PS), in Government, and the Social Democratic Party (PSD). The final version of its Statutes was approved by Law no. 54/2011 of 19 October.

The Council began its work in February 2012 and its mission is to conduct an independent assessment of the consistency, compliance with the stated objectives and the sustainability of public finances, while promoting fiscal transparency, so as to contribute to the quality of democracy and of political economic decisions and so strengthen the State's financial credibility.

This Opinion uses the information available up to 17 April 2015.

I. Introduction

This Opinion examines the macroeconomic forecasts underlying the Draft Stability Programme 2015-2019 (SP/2015), and was issued according the joint terms of national and European legislation (Article 12-I (1) of the Budget Framework Law (Law no. 41/2014 of 10 July), Article 6 subparagraph (a) of the Portuguese Public Finance Council's statutes, approved by Law no. 54/2011 of 19 October, Article 4 (4) and Article 6 (3) (f) of Regulation (EU) no. 473/2013 of the European Parliament and of the Council of 21 May 2013). The drawing up of this Opinion is framed by the "*Memorandum of Understanding between the Ministry of Finance and the Portuguese Public Finance Council on the preparation of the Opinion on the macroeconomic forecasts underlying the Stability Program and the State Budget Proposal*", signed on 6 February 2015.[1]

II. Timeline, methodology and analysis

According to the aforementioned Memorandum of Understanding (MoU) the Government formally notified the CFP on 4 March that the Stability Programme would be published on 30 April ("D" Day for the purposes of the timeline included in section 5 of the MoU).

On 8 April the CFP learnt that the Stability Programme would be discussed in Parliament on 22 April. Although this was a change in the timeline laid down in the MoU, the CFP Senior Board decided that it should prepare its Opinion on the Draft published on 17 April. However the CFP may have to release another opinion on the final version of SP/2015, if the macroeconomic scenario it contains differs from the one under review.

On 8 April, the CFP received an early version of the no policy change macroeconomic forecasts which was revised and updated on 14 April. Lastly the version on which this Opinion is based was received on 17 April. The Opinion examines the external and technical assumptions, the point estimates and the sensitivity analyses included in the Programme. Tables 1 and 2 show the main indicators.

The methodology and analysis used are those described in the aforesaid MoU.

In order to conduct its analysis the CFP used the following sources of information:

a) Forecast analysis conducted by CFP staff;
b) Comparison with forecasts produced by reference institutions: European Commission (EC), Organisation for Economic Cooperation and Development (OECD), International Monetary Fund (IMF) and the Bank of Portugal (BoP);
c) Comparison with recent forecasts by other official and unofficial entities;
d) Coincident and leading indicators and the most recent statistical information available, produced by the national statistical authorities (Statistics Portugal (INE) and BoP);

[1] Available at CFP's site.

e) Technical clarifications provided by the Ministry of Finance (MF) in regard to the forecasting model and the forecasts produced.

It must be stressed that, according to the information supplied, the MF forecasts include the effects of the revision of the National Accounts statistical series published by INE on 26 March 2015, which gave rise to material changes in the estimated parameters of the forecasting model. This means that there may be relevant differences in comparison with forecasts and projections produced on the basis of earlier statistical series.

III. Macroeconomic scenario underlying SP/2015

The macroeconomic forecasts underlying the Draft SP/2015 point to a moderate acceleration of growth in Portuguese Gross Domestic Product (GDP) up to 2017 (1.6% in 2015, 2.0% in 2016 and 2,4% in 2017), which will level out up to 2019 at an annual rate of 2.4%. The forecast for the GDP deflator implies that nominal growth in output will rise from 2.9% in 2015 to 3.8% in 2017, and then remain at that level until the end of the forecasting period. The predicted behaviour of the national economy is the result of the positive contributions from both domestic and external demand.

The forecast for the nominal change in GDP is of special relevance to calculate the fiscal indicators expressed as a ratio of GDP, and to estimate tax revenue. The nominal change derives from the changes in volume and implicit prices. In the 2015 forecast, the rise in prices accounted for a little less than one half of the 2.9% change in nominal GDP, widely diverging from the inflation rate measured by the Harmonised Consumer Price Index (HCPI). For later years the forecast for price behaviour rapidly converges on levels closer to 2%, which is the benchmark for the price stability principle underlying European Central Bank (ECB) monetary policy.

Table 1 – Technical and external assumptions used in MF forecasts

	Source	2014	2015	2016	2017	2018	2019
Growth of relevant foreign demand (%) *	MF	3.3	4.5	5.2	5.2	5.2	5.2
Oil price (USD/bbl)	NYMEX	99.5	59.7	68.2	72.0	74.5	76.0
Short run interest rate (year average, %) **	EC	0.2	0.0	0.1	0.5	0.8	0.8
EUR/USD exchange rate (year average)	EC	1.33	1.17	1.17	1.17	1.17	1.17

Source: Ministry of Finance. Notes: * Calculated on the basis of ECB forecasts up to 2016; ** 3-month Euribor; EC - European Commission, *Economic Forecast*, February 2015 (data from 2015 and 2016); NYMEX - New York Mercantile Exchange

Table 2 – MF Macroeconomic forecasts for Portuguese economy

	INE	SP/2015				
	2014	2015	2016	2017	2018	2019
Real GDP and components (change, %)						
GDP	0.9	1.6	2.0	2.4	2.4	2.4
Private consumption	2.1	1.9	1.9	2.1	2.1	2.1
Public consumption	-0.3	-0.7	0.1	0.1	0.2	0.2
Gross Fixed Capital Formation (GFCF)	2.5	3.8	4.4	4.9	4.9	5.0
Exports	3.4	4.8	5.5	5.7	5.7	5.8
Imports	6.4	4.6	5.3	5.4	5.4	5.7
Contributions to real GDP growth (p.p.)						
Domestic demand	2.1	1.6	1.9	2.2	2.2	2.2
Net exports	-1.1	0.1	0.1	0.2	0.2	0.2
Prices (change, %)						
GDP deflator	1.2	1.3	1.4	1.4	1.4	1.4
HICP / ICP	-0.2	-0.2	1.3	1.4	1.4	1.4
Labour market (change, %)						
Unemployment rate (% active pop.)	13.9	13.2	12.7	12.1	11.6	11.1
Employment	1.4	0.6	0.8	0.9	0.9	1.0
Apparent labour productivity	-0.5	1.1	1.2	1.4	1.4	1.4
External sector (% GDP)						
Net lending	1.9	2.1	2.0	2.2	2.4	2.7
Current account	0.5	0.5	0.4	0.8	1.0	1.4
Balance of goods and services	0.5	1.5	1.7	2.0	2.3	2.5
Capital account	1.4	1.6	1.5	1.5	1.4	1.3

Source: Ministry of Finance.

As regards domestic demand, the MF forecasts an increase in private consumption at rates below those of GDP growth from 2016 onwards. Growth in Gross Fixed Capital Formation (GFCF) is expected to accelerate until 2017. Public consumption is expected to record real but modest growth over the period.

External demand is the result of strong, increasing and sustained growth in exports, where real annual change will go from 3.4% in 2014 to 5.8% in 2019. This performance is supported by the technical assumption of significant growth in relevant external demand at a steady rate of 5.2% from 2016 onwards. According to the Draft Stability Programme this in turn follows from the predicted "sharp increase from 2015 to 2016", based on the ECB projections, that the MF has assumed will continue at the 2016 growth rate over the remainder of the forecast horizon.

Thus exports are the aggregate demand component that makes the largest contribution to output growth rising from 1.9 p.p. in 2015 to 2.6 p.p. in 2019. It is a key assumption when interpreting and evaluating the macroeconomic scenario, to the extent that it implicitly supports the stimulus to growth in GFCF (which contributes 0.6 p.p. and 0.8 p.p., respectively, at the beginning and end of the forecasting period) and thus to employment and private consumption. Notwithstanding a growth rate lower than that foreseen for GDP, the latter makes a major contribution to economic growth (from 1.3 p.p. to 1.4 p.p.), which is due to its weight in expenditure.

Lastly, the high imported content of all expenditure items leads to an increase in imports, although the goods and services balance remains positive over the course of the projection period, rising from 0.5% in 2014 to 2.5% of GDP in 2019. Note should be taken of the historically high levels of the Portuguese economy's net foreign borrowing capacity forecasts included in the scenario.

The macroeconomic scenario includes a forecast for annual growth in employment (from 0.6% in 2015 to 1% in 2019) that implies an increase in productivity consistent with the assumptions made to investment and exports. However, at the same time, it assumes that unemployment will remain high over the forecast time horizon, although it provides for a sustained decrease of almost 3 p.p. by 2019, when compared to that recorded at the end of 2014.

IV. Analysis of forecasts

Error and uncertainty in forecasting exercises

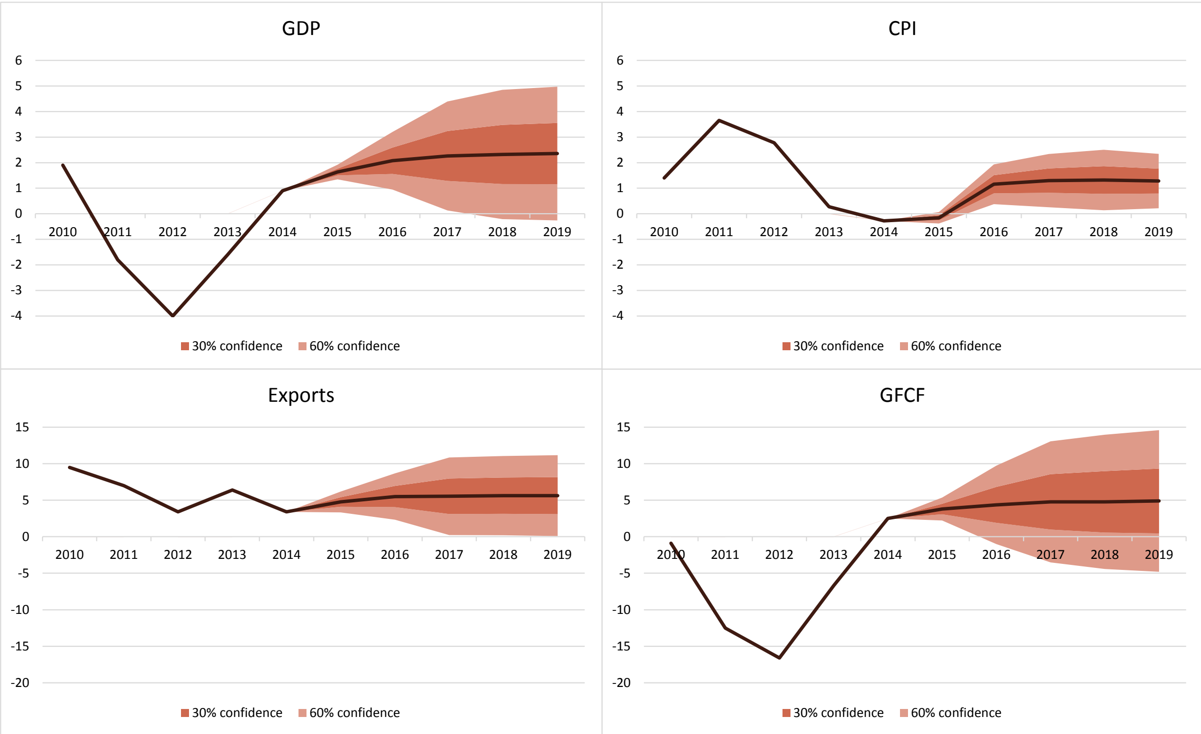
Error and uncertainty are inherent in any forecasting exercise and they increase significantly with the length of the time horizon involved. The macroeconomic scenario in SP/2015 is not immune to this empirical evidence, which is widely known and accepted, and which is particularly important when an economy is passing through a period of structural change.

The CFP's Opinion recognises this difficulty, but also wishes to stress that the construction of forecasting scenarios is essential to economic policy making and for fiscal policy in particular, since the latter calls for a lengthier planning horizon if it is to guide public and private economic agents' expectations.

One method of highlighting the uncertainty inherent to point estimates is to publish the forecast ranges for the main variables, calculated on the basis of the model's performance analysis, as well as on shock sensitivity analyses to external and internal shocks to key variables. The macroeconomic scenario published by the MF includes sensitivity analyses of some important variables but does not include the forecast ranges.

Having conducted an exercise based on Stability Programmes and Fiscal Strategy Documents published from 1999 to the present day, CFP presents the forecast ranges associated with the MF forecasts for some of the key variables in Chart 1. The bands shown are the result from a comparison of the forecasts made over time with their respective outcomes, assuming the MF forecasts are unbiased and forecasting errors are normally distributed. Note that their width is broaden by the inclusion of the period of unusual volatility experienced since the financial crisis of 2007-2008.

Chart 1 – Forecast ranges associated with MF forecasts



Source: CFP calculations based on Stability and Growth Programmes and Fiscal Strategy Documents published from 1998 to 2014.

The forecast ranges shown in the chart are symmetrical, which supposes outcomes above and below the point forecasts are equally probable. However, an *a posteriori* assessment of the MF forecasts' performance shows that over the period in question (1999-2014), this premise was far from being observed.

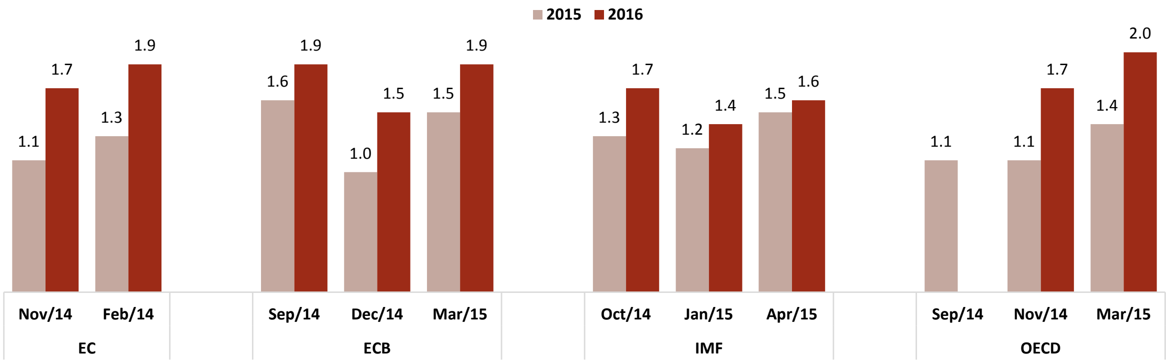
Considering the forecasts made over that period by the MF for the variables shown in the charts reveals that overall, and especially in relation to farthest time horizons, the outcomes fall short of the projection. In the cases of GDP and GFCF there are even horizons where the forecasts have always proved to be optimistic (in particular forecasts over 3 years).

In addition to reflecting negative shocks on the Portuguese economy unforeseen by the forecasters, the results may also reveal an optimistic tendency in the MF forecasting apparatus, either in the underlying model or in the technical assumptions. Whatever the case, past performance advises prudence in regard to medium-term forecasts, due to the possible perverse consequences of optimism in fiscal policy planning. However, it should not be forgotten that past forecasting errors do not imply forecasting errors in the future, just as past accuracy is no guarantee of future accuracy.

International context

The macroeconomic scenario underlying SP/2015 is presented at a time when there has been an improvement in the forecasts for growth in the Euro area economy (Chart 2).

Chart 2 – Recent developments in GDP growth forecasts in the Euro area



Sources: European Commission - *European Economic Forecast*; ECB – Macroeconomic projections by ECB experts and monthly Bulletins; IMF - *World Economic Outlook*; OECD - *Economic Outlook and Interim Economic Assessment*.

All entities that are usually considered as the benchmark for comparing economic forecasts have revised their forecasts for 2015 and 2016 upwards, this is especially noticeable for the ECB and the OECD. And most of them (the exception is the IMF April outlook) expect a period of real convergence between the Portuguese economy and the Euro area.

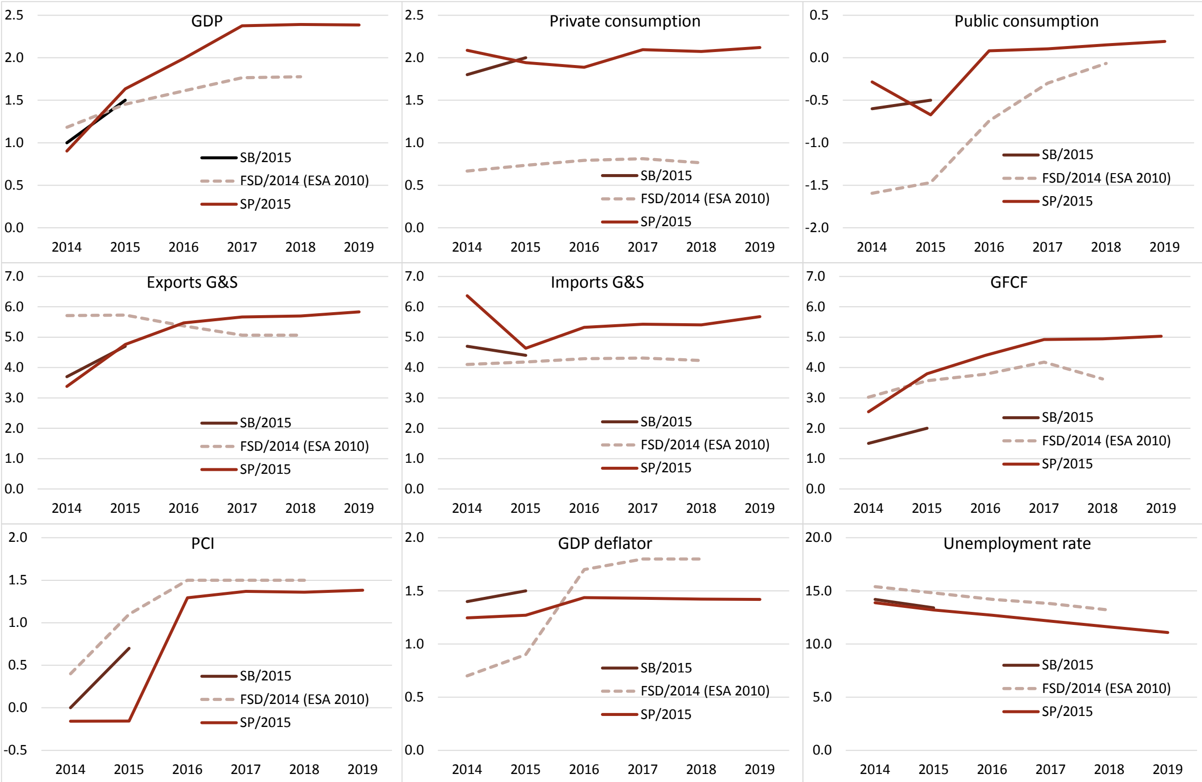
While risk and uncertainty remain strong, and the European Union and the Euro area continue to experience considerable difficulty in achieving robust levels of real and potential growth, the international environment shows signs that are positive growth factors for the Portuguese economy, and it is natural that they are reflected in the forecasts.

Reconciliation of FSD/2014 and SB/2015

What stands out when forecasts underlying the Draft Stability Programme 2015-2019 and those of the FSD 2014-2018[2] are compared is the increased role exports have to play in the improvement of GDP growth (Chart 3). Private consumption is expected to grow significantly but at a slower rate than GDP. At the same time public consumption will follow a different path, recording strong growth in 2016 followed by more moderate growth in later years. Overall, these changes contribute to the sustainability of economic growth and of national public finances. However, since such changes are contingent on external factors and subject to exogenous shocks, prudent forecasts and a close monitoring of the foreign environment are called for.

[2] The CFP analysed Fiscal Strategy Document/2014 in its Report no. 3/2014 which is available at www.cfp.pt. The figures shown for FSD/2014 correspond to those incorporated in the original forecasts (made in line with ESA95) following the revision of the National Accounts due to the adopting of ESA2010 and were published in Report no. 6/2014 on the Draft State Budget for 2015, also available on the CFP's website.

Chart 3 – Comparison of SP/2015 forecasts with FSD 2014 (under ESA2010) and SB/2015



Sources: Ministry of Finance - Fiscal Strategy Document 2014-2018, State Budget for 2015 Report and Stability Programme 2015-2019.

Changes in the trajectory are consistent with forecasts for the external environment. However, in practical terms it is still difficult to identify among the measures set out in SP/2015 and the National Reform Plan the analytical and policy-making items that may consistently support the point forecasts made, especially for the 2017-2019 period and to the performance of exports and investment.

Comparison with international organisations' forecasts

Comparing the 2015 scenario in the Draft Stability Programme for 2015-2019 with other available official forecasts it generically matches the latest ones (Table 3). The forecasts for 2016 are slightly above the known forecasts, although they fall within an acceptable range.

From 2017 onwards a very limited number of projections are available and those from the MF present a scenario that differs from the known ones, even if must be recognized that the IMF latest forecasts predict a path for the Portuguese economy that falls outside what appears to be the consensus of the forecasters, and which also constitute a sharp downward revision its previous forecasts.[3]

[3] In the October 2014 edition of the *World Economic Outlook* the IMF took into account real growth rates for Portuguese GDP of 1.74% in 2016 and 1.84% from 2017 to 2019, considering less favorable prospects for the European economies.

Table 3 – International institutions' forecasts for the Portuguese economy

Year	2014	2015				2016				2017		2018	2019
Institution	INE	OECD	EC	BoP	IMF	OECD	EC	BoP	IMF	BdP	IMF	IMF	IMF
Date		Nov14	Feb15	Mar15	Apr15	Nov14	Feb15	Mar15	Apr15	Mar15	Apr15	Apr15	Apr15
Real GDP and components (change, %)													
GDP	0.9	1.3	1.6	1.7	1.6	1.5	1.7	1.9	1.5	2.0	1.4	1.3	1.2
Private consumption	2.1	0.5	1.8	2.4	-	0.8	1.5	1.7	-	1.7	-	-	-
Public consumption	-0.3	-0.8	-0.3	0.5	-	-0.4	0.2	0.2	-	0.0	-	-	-
Gross Fixed Capital Formation (GFCF)	2.5	2.9	2.9	4.0	-	3.4	3.1	4.4	-	5.3	-	-	-
Exports	3.4	5.3	5.0	4.3	5.9	5.8	5.4	5.8	4.7	6.2	4.5	4.4	4.4
Imports	6.4	3.0	4.9	3.9	3.9	4.6	4.8	5.5	4.7	6.1	4.7	4.6	4.5
Contributions to real GDP growth (p.p.)													
Domestic demand	2.1	0.4	1.6	1.0	-	0.9	1.4	0.8	-	0.8	-	-	-
Net exports	-1.1	0.9	0.1	0.8	-	0.6	0.3	1.1	-	1.2	-	-	-
Prices (change, %)													
GDP deflator	1.2	0.7	1.0	-	1.0	0.9	1.4	-	1.3	-	1.3	1.4	1.5
HICP / ICP	-0.2	-	0.1	0.2	0.6	-	1.1	1.1	1.3	1.1	1.5	1.6	1.7
Labour market (change, %)													
Unemployment rate (% active pop.)	13.9	12.8	13.4	-	13.1	12.4	12.6	-	12.6	-	12.1	11.7	11.2
Employment	1.4	0.9	0.7	-	0.2	0.6	0.7	-	0.6	-	-	-	-
Apparent labour productivity	-0.5	1.0	-	-	-	1.8	-	-	-	-	-	-	-
External sector (% GDP)													
Net lending	1.9	-	2.0	3.3	-	-	2.2	3.3	-	3.5	-	-	-
Current account	0.5	0.4	0.4	-	1.4	0.9	0.6	-	1.0	-	0.7	0.4	0.2
Balance of goods and services	0.5	-	-	2.7	-	-	-	2.6	-	2.5	-	-	-
Capital account	1.4	-	-	-	-	-	-	-	-	-	-	-	-

Source: MF - Stability Programme 2015-2019, April 2015; OECD - *Economic Outlook No 96*, November 2014; European Commission - *European Economic Forecast Winter 2014*, February 2015; Bank of Portugal – Projections for the Portuguese economy: 2015-2017, March 2015; International Monetary Fund - *World Economic Outlook*, April 2015 | CFP calculations.

Major risks and uncertainties from the CFP's viewpoint

The CFP believes that two types of downside risks and uncertainties are relevant and even when they are expressly identified they are not sufficiently covered by upside risks:

- Those associated with uncertainties in the international environment and with changes in external demand;
- Those relating to policy measures – and their implementation – aimed at investment and productivity growth consistent with the economy's ability to respond to developments in the external environment.

International context

The CFP considers that the risks identified in the Stability Programme in regard to the macroeconomic scenario are the most serious, in particular those relating to negative impacts that may result from:

- A less positive economic performance than that forecasted for the Euro area;
- The effect of the drop in the oil prices on Angola economy, which in 2014 accounted for 6.6% of goods exported (being the 4th Portuguese largest trading partner and the largest trading partner outside of the EU).
- Growth in the global economy below forecasts, especially in the emerging economies;
- The consequences of the geopolitical tensions over Ukraine;
- The uncertainty over the outcome of the Greek situation.

The risk of deflation, which still needs to be noted, has different consequences than those usually associated with this expression. It is likely to have a greater impact on the expectations to the return on economic agents' investment decisions than on the risk of postponing decisions on the acquisition of durable consumer goods. In Portugal the indicators on the consumption of consumer durables and investments in housing suggest that such risk is not being materialized.

Another risk that must be taken into account is the possibility of new turmoil in the financial markets. Particularly those associated with recent developments in the European and US stock markets, which may trigger adjustments that may have an important impact on the international economy. While it is not possible to identify the temporal and material limits of this type of generic risk, it should be taken into account as a concern in relation to future developments over which Portugal has little influence but to which it is heavily exposed, not only through the financial markets but also due to the impact on the economies which are the country's main export markets.

In regard to external demand relevant to Portugal, it should be noted that its traditional volatility involves a risk to the growth forecast in the macroeconomic scenario underlying SP/2015, which is based on stable and sustained growth for that variable.

The sensitivity analysis presented in the published document suggests that expected accumulated real growth over the 2015-2019 period (11.2%) would be down 2.5 p.p. if the estimate for external demand was lowered by 2 p.p. (which would mean that real GDP growth would never exceed 2%), and the expected strong nominal growth over the same period (19.2%) would be down by 3.4 p.p. The data available for analysing the covariation of imports and exports show the former to be rigid, which would lead to net exports making a negative contribution in response to an external impact of that scale.

Domestic policy measures

Additional risks to the achievement of the scenario laid down in SP/2015 result from a series of factors that still shape the Portuguese economy and that suppose the implementation of economic policy measures to correct them. They include (i) the weakness of the national productive structure, reflected in the composition of exports, which consist of an expanding but nonetheless narrow portfolio of products: (ii) the problems resulting from the high degree of corporate indebtedness in Portugal and the difficulty in borrowing for new investments.

The quality and the implementation capacity of suitable measures are additional risks to the macroeconomic scenario. As stated above, this supposes a favourable evolution in external demand, plus the Portuguese economy's ability to meet it, which depends not only on cost containment but also on increases in productivity and more diversified output, implying companies with capacity to invest. The rigidity of imports, linked to the high import content of aggregate expenditure, stresses the need for suitable planning and the materialisation of this type of measures.

In the field of fiscal policy note should also be taken for the risk associated with not defining the measures needed to achieve the desired fiscal impact of around 600 million euros in the pensions system, which is an important factor in the scenario presented.

V. Conclusions

On the basis of the analysis of the macroeconomic projections underlying the Draft Stability Programme 2015-2019, the Portuguese Public Finance Council concludes that:

1. **Based on the information available up to mid-April 2015, the macroeconomic forecasts underlying the Draft Stability Programme 2015-2019 for the years 2015 and 2016 appear plausible.**
2. **With respect to the 2017-2019 period, besides the unavoidable increase in uncertainty associated with the longer forecast horizon there are specific risks to be pointed out in regard to:**
    a. **the external demand assumptions;**
    b. **the implementation of domestic policies consistent with the Portuguese economy's ability to respond to those developments.**

VI. Final Note

Current procedures in the context of the European Semester call for the timely provision of detailed and stable National Accounts statistics. The current statistical framework in this field suffers from inadequacies that make it difficult both to define policies and analyse them. In the specific case of the Stability Programme, to be presented to the European Commission by the end of April, along with the CFP's appraisal of the macroeconomic scenario on which it is based, and following parliamentary debate, the relevant National Accounts statistics are published by the INE on 26 March and, as seen this year, may introduce revisions to the time series relevant for the forecasting exercise. The revising of the public accounts system which feeds them and assigning to the INE the means needed to meet the increasing demands of the budget process must therefore be deemed an indispensable condition of compliance with European duties, in addition, obviously, to the quality of the definition of national policy.