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Report on the Kingdom of Spain's 2017-2020 Stability Programme Update

(Articles 14 and 16 of Organic Law 6/2013 on the establishment of an Independent Authority for Fiscal Responsibility)

The mission of AIReF, the Independent Authority for Fiscal Responsibility, is to ensure strict compliance with the principles of budgetary stability and financial sustainability contained in Article 135 of the Spanish Constitution.

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Executive summary

Under current regulations, macroeconomic forecasts in Stability Programme Updates (SPU) must include a report indicating whether they have been endorsed by AIReF (Article 14 of Organic Law 6/2013). Similarly, AIReF must report on the contents of SPUs, specifically assessing the commitments that have been undertaken to guarantee compliance with the budgetary stability target, the public debt limit and the expenditure rule (Article 16 of Organic Law 6/2013).

On April 28th, AIReF published its assessment of the macroeconomic forecasts on which the 2017-2020 SPU is founded, based on the information available at that time, limited to quantitative information on the macroeconomic and fiscal outlook. This assessment was submitted to the Government so that the conclusions and endorsement by AIReF could be incorporated in the SPU before it was sent to the European Commission.

Following the Council of Ministers' approval of the SPU and the submission of the latter's contents to AIReF, the present report is issued to meet the requirements of Articles 14 and 16 of Organic Law 6/2013 on the creation of AIReF.

Macroeconomic forecasts

Based on exogenous assumptions and defined policies, AIReF endorses the Government's forecast macroeconomic outlook contained in the 2017-2020 SPU. Overall, AIReF deems it to be likely.

The basic hypotheses underpinning the official macroeconomic outlook for the period from 2017 to 2020 are deemed to be feasible. These hypotheses are seen to be plausible, given the latest forecasts by international institutions and the latest trends in commodities and debt markets. Compared with the previous SPU, this macroeconomic outlook offers a picture of consolidated economic growth by the main trading partners very similar to last year's. As for oil prices, the forecast figures have been upwardly revised, bringing them in line with what is expected by futures markets. It should also be highlighted that the assumptions relating to the yield curve are prudent in the light of market expectations, incorporating a more dynamic outlook in terms of the economy's normalization, with a long-term segment that would double its cost by the end of the forecasting horizon.

The composition of growth is deemed likely, although, in the mid-term, there could be an increase in the level of external uncertainty and some latent risks could materialize. The domestic demand will consolidate its role as the main source of growth, with a mildly positive contribution by the external sector across the whole forecast horizon. This balanced picture of growth could be likely according to AIReF's forecasts but it is also prone to potential negative or downside risks in the mid-term owing to external demand. The main source of uncertainty, at a European level, is the makeup of the final agreement for the United Kingdom's exit from the European Union. At an international level, further sources are changes in US trade, fiscal and monetary policies, and their repercussions or spill-over effects in terms of commercial exchanges and exchange rates.

The (favourable or upside) short-term risks to economic growth seem to be just the opposite of the (moderately unfavourable or downside) mid-term ones. The growth rate has been

slightly upwardly revised in relation to the rate given in the draft General State Budget for 2017. However, there are still short-term risks of an upward deviation according to the latest current data and revised analysts' expectations, who point toward robust growth in 2017 in line with that observed in 2016. In the mid-term, however, there are moderate downside risks which increase as the forecast horizon progresses. These risks are linked to the disappearance of some of the external incentives that boosted the Spanish economy, headed by monetary stimuli from the European Central Bank. The Spanish economy's recent gains in competitiveness and productivity could have the opposite effect if their structural nature is confirmed and they contribute to its potential growth.

Assessment of commitments aimed at guaranteeing compliance with the fiscal rules

The SPU's envisaged path for the General Government (GG) sector involves a consolidation adjustment of 4% of GDP for the period from 2017 to 2020, a very stringent adjustment in a scenario almost devoid of measures after 2018. According to AIReF, the deficit envisaged in the SPU is unlikely to be achieved in 2017, feasible in 2018 and 2019, and again characterized by a risk of non-compliance at the end of the period.

The SPU's revenue forecasts for the period 2017-2020 can be regarded as optimistic, with the evolution of direct taxes being the main focus of deviations. The said forecasts may have a slight upward bias in comparison with AIReF's estimates. Despite the favourable macroeconomic cycle and trend in the labour market, there may be less revenue than the budget projections given in the SPU.

The downward path in non-financial expenditure foreseen in the SPU is deemed feasible albeit with a different composition in the main expenditure headings. In view of the modest cyclical increase in the main revenue (in line with the latest evidence and forecasts by AIReF), the convergence towards budgetary equilibrium proposed in the SPU is mainly based on restrained expenditure and the denominator effect afforded by higher growth. The expenditure path outlined in the SPU envisages a net adjustment of 3.2 percentage points of GDP, which is considered to be feasible despite differences in the forecasts by AIReF and the SPU regarding the evolution of the headings that make up public consumption and envisaged interest.

In the mid-term, there are some upside risks of a deviation in the growth of public consumption. The forecast trend in public consumption seems rather restrictive, as it entails a nominal evolution below the reference rate approved for the expenditure rule through to 2019, affecting all eligible expenditure. This limitation on public consumption is not coherent with AIReF's forecasts on the evolution of healthcare and education expenditure for the period from 2017 to 2020, despite the low mid-term demographic growth envisaged by the Spanish Statistical Office (INE). This deviation points to the existence of margins that could give rise to more expansionary public consumption or to a smaller increase in the GDP in the macroeconomic outlook, especially in the years 2019 and 2020.

The SPU envisages a reduction in interest of 0.2% of GDP during the period from 2017 to 2020. This is more conservative than AIReF's estimates in the context of a reduction in the deficit, taking into account current interest rates.

The SPU's envisaged distribution of targets among the different subsectors is not deemed to be realistic, as it requires all of them to participate in the adjustment regardless of their



financial situation, and once again it fails to reflect the foreseeable consolidation of the surplus achieved by LCs. Although the SPU indicates that LCs will most likely continue to register a surplus over the next few years, a budget equilibrium scenario is again envisaged for the subsector. In contrast, compliance is unlikely with the -0.5% target set for the Social Security Funds (SSF) in 2020, as the SSF deficit may well be greater than 1% of GDP by the end of the period. In this sense, AIReF has recommended in several of its reports that the actions already under way should be continued and the necessary decisions adopted to guarantee the financial equilibrium of the Social Security System within the framework of the Toledo Pact Commission. As indicated in the overall assessment of the budgetary stability target for the GG sector in 2017, drafted by AIReF on April 25th, distortions in the vertical distribution of fiscal targets have led to serious malfunctions within the fiscal discipline framework established in the Organic Law on Budgetary Stability and Financial Sustainability (LOEPSF). Failure to recognize local surpluses when the budgetary stability targets are set for different tiers of Government and the absence of a realistic assessment of the Social Security Fund's financial situation cause major difficulties when it comes to monitoring compliance with the budgetary stability target and in the possible adoption of measures in any specific subsector.

In matters concerning transparency, budgetary stability, the public debt and the implementation of the fiscal discipline framework, AIReF **recommends** that:

- 1. The SPU should include:
 - ✓ A "no policy change" macroeconomic outlook and the individual quantification of the impact of adopted or envisaged measures so as to ensure a better understanding of the forecasts and so as to make the connection between the macroeconomic outlook and the budget scenario explicit at all times.
 - ✓ Budget projections in a no-policy-change scenario with no measures, both for the GG sector and for each of the subsectors.
 - ✓ Budget projections including measures both for the GG sector and for each of the subsectors, thus offering an insight into which part of the consolidation adjustment would be achieved through the adoption of these measures.
 - ✓ Government debt targets by subsectors.
 - ✓ Detailed information relating to each subsector for the analysis of the expenditure rule: eligible expenditure, and the reference rates for calculating the expenditure rule for all the years encompassed by the SPU.
 - ✓ More information on the risks that might affect the budgetary stability or debt targets, were they to materialize.



- 2. Expenditure needs, revenue sufficiency and the expenditure rule should be incorporated in the budgetary stability target allocation process among different levels of Government, thus avoiding the inconsistencies between the LOEPSF's individual application to each Administration and the joint assessment of the GG sector. In particular, estimates of the local surplus should be taken into account when targets are set, without expecting the said surplus to offset deviations in other subsectors at the close of the year.
- The appropriate legal mechanisms should be used to revise the 1st Transitional Provision of the LOEPSF so that the forecast paths are stringent but realistic and lead to convergence with the reference levels established in Article 13 of the said law.
- 4. At the earliest opportunity, MINHAFP should publish its first report on the level of compliance with the stability and public debt targets and expenditure rule in 2016 (Article 17.3 of the LOEPSF).
- 5. The CDGAE's assessment of the level of compliance with the healthcare expenditure rule by ARs in 2016 should be published. Similarly, the percentage of the 2016 deficit overrun that, according to the CDGAE, should be offset in the budgets of subsequent years should be published, specifically indicating the years in which the ARs must compensate for this deviation.

AIReF also offers the Government two **suggestions on best practices in the field of** transparency:

- 1. To integrate the key elements of forecasts into a simplified national accounting framework, thus offering an insight into the links between economic activity, demand and employment, on the one hand, and income flows and borrowing requirements, on the other.
- To provide more information on the methodologies, assumptions and parameters on which the forecasts are based, in line with Directive 2011/85 on budget frameworks and Article 29 of the LOEPSF which defines the contents of the GG sector's mid-term budget programmes.



Table of Contents

| Exe | ecu | tive s | ummary | . 2 |
|-----|-----|--------|---|-----|
| 1. | Int | trodu | ction | 7 |
| 2. | Re | etrosp | ective analysis of previous SPUs forecasts | . 8 |
| 2. | 1. | Ex-po | ost analysis | . 8 |
| | 2.′ | 1.1. | Forecasts comparison criteria | . 8 |
| | 2.7 | 1.2. | Biases in the main macroeconomic variables forecasts | . 8 |
| | 2.′ | 1.3. | Analysis of mid-term forecasts | . 9 |
| 3. | Ma | acroe | conomic outlook of the 2017-2020 SPU | 12 |
| 3. | 1. | Gene | ral remarks | 12 |
| 3. | 2. | A no- | policy-change reference scenario | 13 |
| 3. | 3. | 2017 | -2020 SPU macroeconomic outlook analysis | 23 |
| | 3.3 | 3.1. | Assumptions | 23 |
| | 3.3 | 3.2. | The main macroeconomic aggregates | 25 |
| 3. | 4. | Sens | itivity analysis and main risks around the baseline forecasts | 35 |
| 3. | 5. | Endo | rsement of the forecasts | 36 |
| 4. | Fi | scal o | outlook of the 2017-2020 SPU | 38 |
| 4. | 1. | A no- | policy-change reference scenario | 38 |
| 4. | 2. | SPU | 2017-2020 fiscal outlook analysis | 40 |
| | 4.2 | 2.1. | Assessment of measures | 40 |
| | 4.2 | 2.2. | Analysis of revenue and expenditure evolution | 44 |
| | 4.2 | 2.2.1 | Revenue | 46 |
| | 4.2 | 2.2.2 | Expenditure | 49 |
| 4. | 3. | Com | bliance with the debt target | 55 |
| 5. | Re | ecom | nendations and best practice suggestions | 58 |
| 5. | 1. | Reco | mmendations | 58 |
| 5. | 2. | Best | practice suggestions | 61 |
| AP | PEI | NDIX: | TABLES AND CHARTS | 62 |



1. Introduction

Current regulations establish that the macroeconomic forecasts given in the Stability Programme Update (SPU) must count on a report by AIReF, indicating that they have been endorsed by this body (Article 14 of Organic Law 6/2013). On April 28th, AIReF published its assessment of the macroeconomic forecasts underpinning the 2017-2020 SPU, based on the information available at that time, which was limited to quantitative data on the macroeconomic and fiscal outlooks. This assessment was sent to the Government so that AIReF's conclusions and endorsement could be incorporated in the SPU before it was sent to EU institutions.

Similarly, AIReF must report on the contents of the SPU, making a specific assessment of the commitments that have been undertaken in order to guarantee compliance with the budgetary stability target, the public debt limit and expenditure rule (Article 16 of Organic Law 6/2013). To this end, AIReF must be provided, sufficiently in advance, with the text of the SPU, along with the corresponding mid-term budgetary forecasts and any other information or documents to support the forecasts and included data.¹

Following the approval of the SPU by the Council of Ministers and the submission of the latter's entire contents to AIReF, **this report is issued in accordance with Articles 14 and 16 of Organic Law 6/2013 on the creation of AIReF.** For this purpose, it is divided into four sections. Following this introduction to the report, section 1 makes an ex-post analysis of the forecasts contained in previous SPUs, section 2 analyses the macroeconomic outlook in the 2017-2020 SPU, with reference by AIReF to a no-policy-change scenario, and it discusses exogenous circumstances, the economy's cyclical position and its potential growth. It also individually considers the forecasts for the main macroeconomic variables, a sensitivity analysis of this base case, and the main risks to the forecasts. Section 3 of the report analyses the budget outlook, also with reference to a no-policy-change scenario, assessing the suitability of the measures specified in the budget outlook in terms of the achievement of fiscal consolidation objectives, bearing in mind their coherence with the forecast macroeconomic scenario. Lastly, section 4 offers a summary of the overall assessment of the adopted official line, with five recommendations and three suggestions in the field of best practice.

¹ Article 16 of Organic Law 6/2013 on the establishment of an Independent Authority for Fiscal Responsibility (AIReF) and Article 15 of Royal Decree 215/2014 of March 28th, approving AIReF's Statutes.





2. Retrospective analysis of previous SPUs forecasts

2.1. Ex-post analysis

2.1.1. Forecasts comparison criteria

Macroeconomic forecasts for previous years are scrutinized to assess whether past errors displayed a significant bias.² For this purpose, Government forecasts for the main macroeconomic variables are compared with those of other private and public independent institutions and also with the observed results. The bias or difference between the forecast macroeconomic variables and the mean forecast by the reference institutions is considered to be relevant if it is large, i.e. if the figure forecast by the Government lies outside the distribution's interquartile range of the independent forecasts; if it occurs systematically (repeated for two consecutive years); and if, in addition, it cannot be justified by the fact that it is closer to the observed results.

2.1.2. Biases in the main macroeconomic variables forecasts

Given the exceptional nature of the budgetary calendar for 2017, the retrospective assessment of the macroeconomic forecasts contained in the last four SPUs has already been made in a prior report. Last March, due to the extraordinary date on which the draft General State Budget (GSB) for 2017 was presented, AIReF decided to conduct its analysis of ex-post biases using previous forecasts made in spring as opposed to the autumn, as is usually the case for the GSB.³ An analysis was made of GDP, the macroeconomic outlook's main items, and the fiscal balance for the Public Administrations for both the year in course, t, and the following one, t+1.

No large biases were found in the forecasts contained in the last four SPUs for both, the current and the following year forecasts. From the analysis it can be concluded that, unlike the last 4 forecasts made in autumn, the macroeconomic scenarios envisaged in spring and included in the last four SPUs do not contain large unjustified biases in any of the items. However, in its report, AIReF also suggested that public consumption, deficit-to-GDP ratio and unemployment rate forecasts should be monitored with particular attention, due to the size and regularity of the biases observed in these variables.

² Under Article 14.4 of the Organic Law on the creation of AIReF, this report must include an assessment of whether the macroeconomic forecasts display any considerable bias over a period of four consecutive years, according to COUNCIL DIRECTIVE 2011/85/EU of November 8th 2011 on the requirements applicable to Member States' budget frameworks.

³<u>Report on the Macroeconomic Forecasts in the 2017 Draft General State Budget</u>, published in 31/03/2017.



2.1.3. Analysis of mid-term forecasts

Forecast error assessment is limited to periods t and t+1. However, since SPUs projection horizon covers several years, an assessment of official forecasts mid-term performance can be made up to t+3. When a panel of forecasts is used as a reference, this limits the appraisal of biases for periods t and t+1. As a novelty, AIReF has included in this report a mid-term assessment of Government forecasts, using the data contained in the SPUs published on a yearly basis, covering a period of several years. In this way, an evaluation is made of the performance of official forecasts by analysing forecast errors from t to t+3. For this purpose, a forecast error of a variable at time t is defined as the observed value minus the forecast value.⁴

Analysis of mid-term forecasts from last four SPUs shows that actual GDP data exceeded p, with larger errors as the time horizon increases. Official GDP forecasts have been upwardly revised in response to the positive surprises of the observed data, with growing errors being observed over the course of time. This behaviour is similar to the one observed during the previous growth period (1999-2007), when the forecasts were also prudent (that is, with forecast errors that were, on average, positive). In addition, the sign of the mean forecast error changed depending on the economic cycle, giving rise to ex-post over or under-projections (a prudent/optimistic cyclical bias). During the recession period or period of low growth, between 2008 and 2013, GDP was systematically over-estimated (with a negative mean forecast error). Envisagement of real growth rates of over 3% has led to the stabilization of forecasts as from the 2015 SPU, with a slight deceleration through to the end of the period, as shown in the graph in the appendix.

The noticeable drop in forecast accuracy for t+2 and t+3 and the prudent/optimistic cyclical bias can also be identified at a domestic demand sub-component. In the case of domestic demand, the mean forecast errors are low for t and t+1, with a marked increase as from t+2, implying an approximate one-p.p. over-projection of domestic demand's contribution to GDP growth. In addition, as with GDP, the cyclical pattern of mean positive errors (under-projection) and negative ones (over-projection) is repeated for growth and recession periods respectively. As for domestic demand components, the forecast errors for private consumption and gross fixed capital formation also follow a similar pattern to that of GDP, even though they are of a greater magnitude in the last case. Unlike the 2013 and 2014 SPUs, whose macroeconomic forecasts improved year by year, in 2015 and 2016 the forecasts for domestic demand components automatically imply the stabilization of rates of change, as shown in the graph in the appendix.

Despite all this, public consumption has been continually under-projected. A growing loss of accuracy as the forecast horizon increases is only clearly evident during the period from 2013 to 2016. Indeed, the mean forecast error during t+2 and t+3 is almost treble the observed error in t. This is partly due to the fact that the last four SPUs have envisaged relative stability in public consumption growth rate between t and t+3. Furthermore, between 1999 and 2016, mean forecast errors are positive (under-projection) and stable (within a

⁴ In comparison with an assessment based on real-time data, the latest available values for the ESA series for 1995 and 2010 were linked up to achieve the series of observed values, using the values from the former through to the end of 2013.



range of 1 or 2 percentage points) between t and t+3. Unlike other demand components, there is no evidence of a prudent/optimistic cyclical forecast pattern.

As for the foreign sector, Government's forecasts show no indication of over or under-projections. However there is an inconsistent pattern at a sub-component level, particularly for t+2 and t+3, if a longer-than-four-years period is considered. The forecast errors for exports and imports in the last four SPUs grow more negative as the forecast horizon increases, reaching an error of almost 3 percentage points in t+3 for each component (that is, the forecasts were higher than the observed value). Nonetheless, unlike domestic demand and its components, in the case of external demand, larger forecast errors can be observed in t and t+1, with a decrease in t+2 and t+3. These conclusions cannot be applied if the whole period from 1999 to 2016 is taken, since the mean forecast error in external demand's contribution to the GDP does not account in any large way to the size and temporal pattern of GDP forecast errors. Only a sub-period level assessment can find a cyclical pattern of under-projections during periods of economic growth (positive errors) which are offset by over-projections (negative errors) during recession periods, in particular t+2 and t+3. As with domestic demand, for most of the sub-periods under analysis, the difference in size is clearly visible when comparing first and last periods under analysis errors (see the graph in the appendix).

Worse forecast accuracy for t+2 and t+3 and a prudent/optimistic cyclical bias is also characteristic found for GDP deflator. When the projections of this variable is analysed, a somewhat similar pattern can be found to that of real GDP forecasts. The mean error of the forecasts in the last four SPUs shows a clear worsening pattern from t to t+3. Between 1999 and 2016, a high degree of accuracy can be seen for forecasts for t and t+1, with errors that are, on average, almost non-existent. However, for t+2 and t+3, the mean forecast error is negative and close to one percentage point each year, which implies an over-projection. Furthermore, on average, this contributes to the over-projection of the nominal GDP and under-projection of all ratios that use this variable as denominator (e.g. deficit /GDP, debt/GDP, etc.). At a sub-period level, two additional patterns can also be detected as regards forecast accuracy, clearly dependent on the cyclical position, with positive errors (under-projection of about 1.5 percentage points for t+1, t+2 and t+3) between 1999 and 2007 and negative errors (over-projection of about 2.5 percentage points for t+3) for the rest of the period. GDP deflator forecasts from 2008 also show that the loss of accuracy worsens steadily, the longer the forecast horizon. This can be concluded by observing that the mean error gets more negative from one period to the next by an approximate average of about 0.5 percentage points.

Lastly, the patterns of a decreasing accuracy of forecasts with a longer forecast horizon, and a prudent/optimistic cyclical bias also seem to be a feature of fiscal forecasts, particularly on the expenditure side. In the case of both, the last four SPUs and the whole period from 1999 to 2016, the mean deficit-to-GDP forecast error is always negative (i.e. the observed balances are lower than the forecast ones). As for the temporal pattern, the mean error increases by about one percentage point per year from -1 percentage points for forecasts for the current year to -4 percentage points for t+3. This is partly due to the nature of the forecasts in years under the Stability Programme, which have systematically entailed a swifter reduction in the fiscal deficit, as can be seen in the graph



below. However, as with some of the previously analysed items, the period of relative growth from 1999 to 2007 is characterized by negligible mean forecast errors (and even slightly positive ones in t+3). It is only from 2008 that the forecast errors become very negative, coinciding with the beginning of the economic contraction. Unlike GDP, during the period of economic recovery that begins in 2014, there are still over-projections. A breakdown by items shows that most of the projection errors occur in forecasts of primary expenditure components.









10 May 2017



3. Macroeconomic outlook of the 2017-2020 SPU

3.1. General remarks

Government forecasts in the 2017-2020 SPU's macroeconomic outlook are based on the most up-to-date available data. The most recent short-term indicators have been used, together with 2016 year-end data, which both exert a strong influence on immediate prospects and thus on the whole macroeconomic scenario for 2017-2020.

The 2017-2020 SPU includes a brief description of the methodologies and parameters on which the Government's forecasts are based.⁵ Although the methodology that is used in the formulation of the forecasts is a standard one, with models and equations widely used by analysists, the specific instruments that are used have not been published. For a better understanding of the macroeconomic outlook and an analysis of its coherence with budgetary forecasts, it would also be a good idea for all the information and forecasts to be integrated and published in a set of simplified national accounts that ensure the forecasts' internal unity and coherence, showing the links between economic activity, demand and employment, on the one hand, and revenue flows and net borrowing on the other.

AlReF has used its own analytical tools to overcome this lack of information and to assess the official forecasts, as legally required. To examine the coherence of the macroeconomic and budgetary forecasts, the figures shown in the macroeconomic outlook and GG accounts are tied in, in accounting terms, with those of other institutional sectors so that the accounts for the national economy can be taken within an international context. Thus, the response of families, firms and financial institutions to fiscal policy decisions implemented to achieve SPU targets (as long they can be quantified) was analysed using different models.

The aim of this detailed analysis is to assess whether Government's macroeconomic forecasts for 2017-2020 are realistic and whether they define the most likely scenario or one that is more prudent.⁶ First of all, therefore, the forecasts of the main variables are checked for any bias by comparing them with those of other institutions, as in previous years. The methods, parameters and assumptions underpinning the forecasts are verified, insofar as the available information allows this to be done, and a check is also made to determine whether the most up-to-date information was used for the forecasts.

The methodology for analysing the Government's forecasts begins with the projection of a no-policy-change macroeconomic and budgetary scenario. AIReF's methodology combines three types of instruments: macroeconomic models to analyse interaction between the macroeconomic and fiscal variables, satellite models to project public income and expenditure and debt dynamics, and accounting algorithms to ensure

⁵ Article 4.5 of Directive 2011/85/EU requires Member States to publish the relevant methodologies, assumptions and parameters underpinning their macroeconomic and budget forecasts.

⁶ Article 14.3 of the Organic Law by virtue of which AIReF was created requires this report to include an assessment of the forecasts' compliance with COUNCIL DIRECTIVE 2011/85/EU of November 8th 2011 on the requirements applicable to Member States' budget frameworks. In Article 4.1, this directive requires that budgetary planning is based on the most likely macro-budgeting scenario or a more prudent one.



coherence of separately projected figures. The final scenario, defined in this way, was used as a reference to assess the Government's envisaged macroeconomic outlook.⁷

3.2. A no-policy-change reference scenario

The Spanish economy underwent a period of solid growth in 2016 and the most recent current data confirms the maintenance of solid growth rates in early 2017. Real GDP grew at a rate of 3.2% in 2016, surpassing the 3% barrier for the second year running and recovering the historical maximums prior to the crisis. The latest current information, including the Spanish National Statistics Office (INE) estimate of an 0.8% q-o-q growth rate in the first quarter of 2017, confirms the strength of the Spanish economy in the short term. Other high-frequency indicators also point to the maintenance of the current rate of growth in coming quarters, as reflected in the real-time forecast model developed by AIReF (Figure 2), with a subsequent knock-on effect for the annual figure.



FIGURE 2. REAL-TIME FORECAST OF GDP. 2ND QUARTER 2017. INTER-QUARTERLY RATE

Growth composition differs from that observed during the last cycle, with an important contribution being made by the external sector and a relative drop in the contribution of income from labour. When demand components are analysed, growth composition seems *a priori* to be more balanced than the one observed during the last growth cycle. Growth in 2016 is mainly attributable to the positive contribution of domestic and external demand for the first time since the year 2000. Likewise, 2016 year-end data

⁷ Different macroeconomic models were used, depending on the time horizon of the analysis. For a short-term period of two or three quarters, the projections of GDP, demand components, employment etc. were heavily based on dynamic factor models that use the latest available data (the <u>MIPRED</u> model). For a longer timeframe, a Bayesian autoregressive vector model was preferred (see the working document by Ángel Cuevas and Enrique M. Quilis: <u>BVARX</u> modelling of the Spanish economy), which captures dynamic interactions between the main macroeconomic and fiscal variables (the real and deflator GDP, employment, credit and taxes plus net social contributions), together with equations with error correction mechanisms in order to estimate the adjustment path of the key variables (see examples of a simulation on the spreadsheets attached to this report). Satellite models are usually independent single-equation models, used to make separate projections of tax revenue (from income tax, corporate tax, VAT, special taxes etc.), contributions to the Social Security, the Public Administrations' consumption and investments, pensions, interest payments and the dynamics of the debt. Accounting algorithms allow data to be integrated from different sources, together with exogenous variables, projections of models and assessments by experts, forming a coherent set of accounts that presents a summary of the macroeconomic and fiscal outlooks.



heralds the fourth consecutive year with a current account surplus, confirming the trend that originally started with deficits of around 10% of GDP (Figure 3) at the beginning of the crisis. As for institutional sector income, a special mention must be made of household net lending, which remains high in comparison with similar stages during the last cycle. There have been large changes in the composition in terms of household savings and investment. On the one hand, the fall in earned income's contribution to the GDP has led to a decrease in the sustained saving rate to levels close to the 2007 minimum. However, the household situation is more comfortable than the beginning of the century, since households do not have to cope with pressure from high investment rates. Indeed, the huge drop in investment, tied in with the rationalization of the housing market, more than offsets the fall in the saving rate (Figure 4).



From 2012, coinciding with the last reforms, the adjustments to the labour market seem to have had a more balanced outcome, boosting the flexibility of prices and hours worked and reducing the destruction of jobs. The evolution of labour costs from 1999 to 2008 can almost entirely be explained by the evolution of the CPI, with an almost total pass-through effect from prices to wages and very moderate rates of change in real wages and output per worker. From 2008, the beginning of the recession period had a direct impact on the labour market, with a clear adjustment in unit costs, mainly through the net destruction of employment, with nominal wages that still evolved in line with inflation. However, the available evidence suggests that, as a result of the April 2012 labour reforms, the structure of the labour market changed both in terms of the wage formation mechanism and worker/company matching. From the end of the said year, unlike what had occurred since the beginning of the crisis, a large part of the drop in unit costs began to be attributable to variations in real wages. In addition, it can also be inferred that, after the labour reforms,



more firms chose to reduce the working week instead of laying off more staff, as shown in Figure 6 (see Box 1 for more details of the impact of the labour reforms on market flexibility and the cost of employment creation).



Source: Estimates by INE and AIReF

FIGURE 6. CONTRIBUTION TO TOTAL HOURS WORKED (%)





Box 1. Impact of the 2012 labour reform

From 2012, coinciding with the last reforms, the relationship between wage levels and their driving factors points to improved efficiency in the pass-through mechanism from inflation to labour costs. From 1995 to 2008, the reductions in the unemployment rate went hand in hand with real increases in private wage levels, as demonstrated by the wage curve for the Spanish economy in Figure 1. However, with the arrival of the crisis in 2008 through to mid 2012, the dramatic increase in the unemployment rate was not reflected by a loss in the purchasing power of private wages. Instead, a slightly positive rate of change in real wages could be seen in the private sector, even though there was an over 15 percentage point rise in the unemployment rate. Only after the introduction of the 2012 labour reforms did real wages drop in response to the rising unemployment rate. Surprisingly, in contrast with what had occurred during the period from 1996 to 1998 (with a similar trend in the unemployment rate), between 2014 and 2016 the sustained drop in the unemployment rate went hand in hand with the containment of the real wage rate. This can be confirmed by analysing the residuals of an equation that explains wage levels based on the price level, unemployment and changes in productivity, with evidence of a potential structural change as from mid 2012. After the labour reforms, a positive gap can be noted between forecast and observed wages, indicating that they have not raised as much as they would have done if the relationship with their determinants had remained stable.

However, the trend in mean wages conceals a very strong composition effect, with a divergent impact on wages. In contrast with adjustments that mainly occur in the extensive margin (e.g. the number of jobs), a higher adjustment of the labour market's intensive margin (real wages and the length of the working week) means that, in principle, increases in general price levels do not lead to a direct drop in productivity. From 2012 and, in particular in 2013 and 2014, it is possible to observe, on average, the adjustment in the labour market. However, a more granular analysis, by income deciles, shows that almost all the adjustment, both during the recession period beginning in 2008 and during the recovery from 2014 onward, occurs in the lowest wage brackets. In fact, even though there was practically no change in the average worker's wage between 2012 and 2014, workers in the lowest income decile saw an approximate 10% drop in their wages, while those at the highest income decile went up by the same amount.²

The cost of the reduction of unemployment, in terms of the growth of GDP, also seems to have dropped following the labour reforms. The relationship between variations in the unemployment rate and the GDP seems to have undergone a change as from 2012, as Figure 2 shows. During the period from 1995 to 2012, there was an almost 3% annual rate of change in the real GDP consistent with a drop in the unemployment rate. However, when the figure is estimated for the sub-period following the reforms, values close to an annual 1.7% are achieved (Cuerpo, Geli and Herrero).³



This result is consistent with the trend in the mean gap between the growth rate of GDP and private employment, which has narrowed after the reforms, even more so if it is calculated just using periods of relatively moderate growth (of under 3% in inter-annual terms). This could be due to the improved efficiency of matching mechanisms between workers and firms.



It must be noted that the above seems to have occurred at the expense of the contractual nature of employment, exacerbating the duality in the labour market. As also occurred during previous recovery periods, temporary employment has followed a very different trend from permanent employment, with the dynamics of temporary employment being the largest explanatory factor. Although one of the aims of the 2012 labour reforms was to reduce the duality present in the labour market, when the difference between the rate of change of temporary and permanent employment is analysed in inter-annual terms, in 2016 it was the biggest gap in the last 13 years, reaching a difference of 6.5 percentage points (as opposed to the maximum of 4.4 reached in 2006). This partly confirms the modest contribution of output per worker to economic growth during the last 3 years, largely explained by the continual integration into the labour market of people who actively seek work.

¹ The difference between the economy's total employment minus the public administration, healthcare and education sectors was used as a proxy (both for the case of the number of people and number of FTE work posts or hours worked).

² Figures calculated using the Continuous Sample of Working Life with fiscal data. The estimation of the variation in the highest income decile's mean wage might have a slight downward bias due to the application of a ceiling on the base salary for national insurance contributions, which is then rescaled to obtain the mean wage.

³ Cuerpo, C., Geli, F. & Herrero, C. (2017): "Some Unpleasant Labour Arithmetics: A Tale of the Spanish 2012 Labour Market Reform", Economic Crisis and Structural Reforms in Southern Europe: Policy Lessons (Routledge Studies in the European Economy).



This detailed examination of the current situation and analysis of structural aspects serve as the basis for a mid-term projection of sustained growth and progressive output gap closure. With AIReF's models, under exogenous circumstances in keeping with those envisaged by markets and leading international institutions, the structural changes to the Spanish economy are expected to pave the way for a solid growth rate, even though it slows down toward the end of the period. The economy's cyclical position might reach full potential as from 2018-2019, thus completing the cycle that began 20 years ago. Estimates of the output gap are subject to a high degree of uncertainty, particularly in terms of its level, as can be seen in Figure 5. This shows the estimates by leading international institutions and the confidence interval estimated by AIReF, associated with past revisions.⁸ There seems to be more agreement on the pace at which the gap will close, with a difference of between 1 and 1.5 percentage points being reached and a levelling out occurring at the end of the envisaged forecast horizon, in line with an acceleration in potential growth.



FIGURE 7. OUTPUT GAP. ESTIMATIONS BY LEADING INTERNATIONAL INSTITUTIONS

Sources: 2016-2019 SPU, OECD Economic Outlook November 2016, IMF WEO October 2016 and EC winter 2016

Note: The interval for AIReF's estimates is obtained by taking as the amplitude the mean of the absolute revisions from the concurrent (*one-sided*) and historical (*two-sided*) estimates provided by the Kalman filter.

⁸ For further details of the methodology, see Cuerpo, C., Cuevas, A. and Quilis, E-M. (forthcoming 2017) "Measuring the Output Gap of the Spanish Economy: Specification, Estimation and Diagnostics", AIReF Working Paper series.



In the mid-term, it is forecast a certain stability in the composition of growth, with domestic demand acting as the driving force behind the economy, although its components will tend to slow down toward the end of the period in line with the long-term equilibrium relations reflected in the behavioural models. The growth in private consumption stands out particularly, mainly bolstered by the positive trend in the labour market, the recovery of financial and real estate wealth, and improved consumer confidence. The maintenance of favourable credit terms might revitalize credit flows, which are currently at a historical low, and represent a source of mid-term additional growth in the absence of additional fiscal incentives. Meanwhile, construction investment is expected to follow a more stable pattern in the mid-term, but the dynamism of its recovery will mainly depend on the recovery of the housing market. In principle, a positive trend should be expected, characterized by a slow recovery in new-build and second-hand housing prices and housing transactions, given the low starting points after the recession and the sector's rationalization, together with the advanced point that has been reached in the absorption of surplus stocks. However, different factors must be noted that might act as structural constraints on the sector's evolution, preventing it from returning to levels prior to the crisis. Firstly, the trend in demographic growth is expected to be slower than in the previous cycle and, with it, the creation of households, a determining factor in housing demand (see Figure 8 for the latest trend). Secondly, the prudent trend in mortgage loans must be highlighted, despite particularly favourable mortgage conditions. As for productive investment, as Figure 9 shows, the post-crisis recovery has been a dynamic one and the gap in relation to its longterm level has gradually closed as the margins on loans to non-financial firms have normalized and their financial positions and share of the business sector's GOS in the generation of income have improved. However, investment into equipment has slowed down considerably over the last quarters, calling for a certain caution with regard to its midterm evolution and the need to monitor the situation carefully. For example, the contractionary effect of fiscal measures introduced in 2016 and forecast for 2017 has been confirmed, together with the possible materialization of uncertainties due to external scenarios.

A slight growth in the baseline mid-term trend in public consumption is expected, moving toward a mid-term sustainable equilibrium situation, albeit with lower growth rates than those of GDP, given the limit imposed by the expenditure rule. As foreseen in previous reports, public consumption depends fundamentally on the behaviour of Autonomous Regions (ARs) and Local Corporations (LCs). Thus, the actions of these subsectors and application of the expenditure rule will play a key role in maintaining this aggregate figure within envisaged levels. Pressure from highly inertial or structural expenditure, as in the education and healthcare sectors, will likewise be conditioned by pressure exerted by the growth in the population, with a moderate rise being expected owing to the Spanish National Statistics Office's forecast of sluggish mid-term demographic growth.

As for the baseline trend that has been forecast for the labour market, solid employment creation is expected, together with a growing albeit moderate rise in wages. A behavioural analysis of the labour market, using models by AIReF, points to solid employment creation with moderate output-per-worker figures, albeit in line with historical evidence and the rates observed at the beginning of the cycle (Figure 8). On the price side,



2017 seems to mark the end of a scenario characterized by an absence of inflation, with an acceleration in the underlying component and energy-related one. Wages will be affected by the pressure of inflation, although there might not be a total pass-through of prices to wages, leading to a scenario of a moderate growth in wage costs.



Source: INE and estimates by AIReF

Source: INE and estimates by AIReF

FIGURE 10. APPARENT LABOUR PRODUCTIVITY, GDP OVER NUMBER OF FULL-TIME EQUIVALENT WORKERS



Sources: INE



Lastly, the external sector's contribution to growth is expected to be positive, albeit at a declining rate across the forecast horizon. The no-policy-change scenario of AIReF's models and the analysis that was conducted point to a progressive increase in the potential growth of the Spanish economy, thanks to a change in the growth pattern, more oriented toward the external sector, with a more productive economy able to maintain solid growth rates in its exports. After over 16 quarters with a net lending capacity in relation to the rest of the world, Spain's growing competitiveness and improvements in the external sector can be regarded as permanent or structural, as reflected by the legally required or structural current account estimates (see Box 2). The dynamism of the export sector might be benefitted by lower labour costs in relative terms in comparison with our main partners and by the expansive picture that has been painted for international markets and for activity in the Euro area. In a context of stability, this would change. Meanwhile, there is expected to be a moderate growth in imports in line with the evolution of the final demand in our economy. Although this balanced growth is likely, according to AIReF's forecasts, there are certain mid-term unfavourable or downside risks in terms of external demand. The main source of uncertainty, at a European level, is the makeup of the final agreement for the United Kingdom's departure from the European Union. At an international level, further sources are changes in US trade, fiscal and monetary policies, and their repercussions or spill-over effects in terms of trade exchanges and exchange rates.



BOX 2: Structural changes in the Spanish economy's external relations

One of the new features of the Spanish economy's envisaged macroeconomic outlook is the maintenance of the external sector's positive contribution in a context of growth and cyclical recovery. This change can be accounted for by various different factors, including gains in price competitiveness associated with wage restraints, the reduction in domestic demand's contribution to the economy during the crisis, trade gains associated with the evolution of the price of crude oil or low interest rates in the Euro area, together with international investment's declining share of GDP. In addition, structural changes have occurred, such as an increase in the level of specialization of export firms (Correa and Doménech, 2012) or their geographical diversification and an increase in the number of regular exporter firms and their integration in the global value chain (González and Martín, 2015). These changes seem set to become permanent, as demonstrated by a higher growth in exports than what might be expected when their conventional determinants (external demand and prices) are taken into account. Thus, Prades and García (2015) and the IMF (2015) observe that although Spanish firms' internationalization during the crisis was benefitted by the weak internal demand, this process should not be expected to revert back, given the sunk costs incurred by firms during their expansion. Given that these advances are structural in nature, a permanent improvement in the current account balance must be expected. In this respect, estimates of the structural component of the current account balance by the European Commission in its winter forecast and those of AIReF, using a structural time series model (Cuerpo et al., 2017), offer a similar picture, as can be seen in the following graph:





Both estimates suggest that the structural improvement process began during the initial phase of the crisis in around 2009 and that it has been sustained, consistently improving until a positive scenario was reached between 2015 and 2016, a hitherto unseen situation since these estimates were first made (1993). Quantitative differences between both estimates are the combined result of differences in their methodologies and the central forecasts on which the calculations are based. In particular, the Commission's one can be considered to be relatively optimistic, since it is above the 68% confidence interval of AIReF's estimates.

References:

Correa, M. and Doménech, R. (2012) "The Internationalisation of Spanish Firms", BBVA Research WP n. 12/30.

Cuerpo, C., Cuevas, A. and Quilis, E-M. (2017) "Measuring the Output Gap of the Spanish Economy: Specification, Estimation and Diagnostics", presented at the Workshop on Structural Balance, National Audit Office of Finland.

FMI (2017), "2017 Article IV Selected Issues Paper", Assessing Spain's competitiveness, Country Report No. 17/24, January 2017.

González, M. J. and Martín, C. (2015), "La internacionalización de las PYMES españolas: principales desarrollos recientes y sus determinantes", Boletín Económico, December 2015.

Prades, E. and García, C. (2015), "Actualización de la función de las exportaciones españolas de bienes", Boletín Económico, Bank of Spain, April 2015.

3.3. 2017-2020 SPU macroeconomic outlook analysis

3.3.1. Assumptions

The basic 2017-2020 SPU macroeconomic outlook assumptions are deemed to be feasible. These assumptions are seen as plausible within the context of the latest forecasts by international institutions and recent developments in commodities and debt markets (see the tables in the appendix). In comparison with the previous update, this macroeconomic scenario envisages an economic growth pattern by the main trading partners similar to last year's. As for oil prices, these have been upwardly revised in relation to previous forecasts, bringing them in line with the trend envisaged by futures markets. Lastly, it must be noted that the assumptions associated with the yield curve have been upwardly revised in the short term and downwardly revised in the long term, thus leading to expectations of a certain levelling out process.

It is commonly agreed that world economic activity seems to be rallying and investments, manufacturing and international trade are undergoing a long-awaited cyclical recovery. Nonetheless, this positive trend is not exempt from certain risks that continue to point to a downward trend, particularly in the mid-term. In its last projections in April 2017, the IMF slightly improved the growth forecasts for the Euro area



and for the world GDP. This recovery has been bolstered by several favourable factors, such as relatively low oil prices, the depreciation of the euro in the past, accommodating monetary policies and a broadly neutral fiscal policy. In comparison, there are also various uncertainties. A shift toward isolationist policies would endanger economic integration and world economic cooperation, with a drop in world trade. On the other hand, swifter than expected increases in US interest rates could accelerate the contraction of international financial conditions and lead to a strong appreciation of the dollar, with negative consequences for more vulnerable economies. Likewise, less restrictive financial regulations could stimulate short-term growth but endanger world financial stability and bring about a risk of costly financial crises in the future.

The assumptions concerning the performance of Government debt securities are prudent, in line with short-term market expectations, although they are deemed to be slightly excessive in the longer term. The 10-year trend in the government debt interest rate in the SPU's envisaged macroeconomic scenario situates it at 1.7 percentage points in 2017, rising at a pace of three-quarters of a tenth per year to 2.8 percentage points in 2020. With the exception of this year, these forecasts are considerably higher than the returns implicit in futures markets (2.5 percentage points for 2020) and they would entail an increase in the risk premium in relation to Germany's 10-year benchmark. This hypothesis might be too strict, since although it assumes that the Spanish economy's monetary conditions will steadily be normalized in line with the recovering trend in prices, the magnitude does a priori seem to be excessive.

Trends in oil prices coincide with those of futures markets and forecasts by leading international institutions. Oil prices have been upwardly revised in relation to the 2016-2019 SPU. This is in keeping with the repercussions of the latest OPEC agreement to reduce production at the end of last year. Although the latter led to a steady increase in oil prices, reaching a figure of \$55 per barrel, in the last month oil prices have slowed down, dropping to around \$53 per barrel, indicating a return to normal limits and their possible future stabilisation around this figure.

Despite the reasonable external picture painted in the SPU's macroeconomic outlook, it must be noted that there are still future risks. As pointed out by the OECD in its latest forecast report (see the OECD Interim Economic Outlook, March 2017), a series of possible risk factors –should they materialise– could negatively affect world economic growth. To begin with, given the change of cycle in interest rates as from mid 2016 and the widening gap in leading economies' interest rates, there might be an increased risk of exchange rate volatility. Some leading economies also continue to experience vulnerabilities due to the rapid increase in property prices. For their part, economies in emerging markets face considerable risks, including an increase in the corporate debt. Lastly, the possibility of 'non-inclusive' growth - leading to greater inequalities, not only among countries but also within them - is viewed as a threat to developed and emerging countries alike, and to international trade operations.



3.3.2. The main macroeconomic aggregates

The 2017-2020 SPU's forecasts for the real GDP show steadily declining growth rates during the first two years of the programme, which stabilize at 2.4% during the last two years. This sustained growth in the real GDP is conditioned by domestic demand's more moderate contribution than its 2016 share, although this will become more stable across the forecast horizon, levelling out at 2.1%, while a continued positive contribution by the net external demand is expected of no less than three tenths per year. These forecasts are focused on the first two years of the programme in relation to other available public and private forecasts, although, during the last two years, they will be about half a point higher than the IMF forecast, the only body that projects the growth of GDP for these four years. However, in the light of AIREF's models, these forecasts are deemed to be perfectly plausible.

The growth in domestic demand will be similar to that of GDP. The trend will be influenced by a gradual slow-down in private consumption, while there will be an increasingly vigorous rise in investments, particularly during the last two years. This last behaviour is coherent with a cyclical boom stage when the real GDP might grow more than the potential GDP. If the composition of domestic demand is broken down, the Government's forecasts show more dynamic private expenditure on consumption and investments, while a decline can be noted in the growth of public consumption, which is expected to undergo a lower rise in 2017 and 2018 than the consensus on the mean growth, maintaining the same trend through to the end of the forecast horizon, with less likelihood of expectations being achieved.

If this budgetary policy is strictly applied, it will not involve a lower growth in the forecast real GDP in 2017 and 2018. However, a note of caution must be made on this persistently restrictive policy in terms of public consumption, together with possible difficulties in its implementation, bearing in mind the experience of past years. The contractionary bias that can be inferred from its comparison with forecasts by independent institutions points to a big risk of its non-materialization, also highlighted by the statistical forecast models used by AIReF. If this contractionary bias is confirmed, with it becoming more accentuated at the end of the forecast horizon, the growth of GDP by 2020 could be a few tenths less than the Government predicts.



FIGURE 11. REAL GDP GROWTH (%)



Source: Ministry for the Economy, Industry & Competitiveness (broken line) and estimates by AIReF

As for private consumption, its growth forecast shows a certain upward bias in relation to the agreed consensus by private institutions, particularly in 2018, when it is also higher than forecasts by the Banco de España and international institutions. However, bearing in mind the uncertainty interval generated by AIReF's forecast models, the Government's expected figures are plausible, since they are situated close to the centre of the projection's confidence interval, merely showing a slight downward bias in the short term.

The 2017-2020 SPU's forecast for public consumption is slightly biased downwards when compared with other forecasts, and close to the lower limit of the interquartile range of the distribution of forecasts by private institutions for both 2017 and 2018. This is a key variable in relating the macroeconomic outlook to the budget scenario, which in previous programme updates always tended to be forecast with the ambitious aim of limiting upward pressures on public expenditure. In the 2017-2020 SPU, this restrictive approach to public consumption continues to prevail, demonstrating it to be one of the key factors in fiscal consolidation strategies.

Information has been made available on the three main items that make up public consumption (compensation of employees, intermediate consumption and social transfers – purchased market production), in line with the SPU's forecast trend in nominal public consumption (see Figure 14). However, information has not been made available on the other components that make up this aggregate, such as so-called Sales,⁹ which are subtracted from the three above concepts, or the consumption of fixed capital. The evolution

⁹ So-called Sales are made up of the sum of output for own final use, payments for non-market output and market output.



of the public consumption deflator shows a lower rise than the trend in the GDP deflator and compensation of employees for the whole of the national economy, and so presumably both employment and compensation of employees in the GG sector is forecast as rising at a far lower rate than forecasts for the rest of the economy.

Public consumption accounts for close to 20% of GDP and so it is an essential part of the macroeconomic outlook envisaged in the SPU. Within the components that make up the demand side of the macroeconomic outlook, it is the one for which the Public Administrations have most scope of action.¹⁰ Its expected trend in the SPU 2017-2020 is broken down into its nominal and real component (see Figure 15).



FIGURE 12. REAL PRIVATE CONSUMPTION GROWTH (%)

Source: Ministry for the Economy, Industry & Competitiveness (broken line) and estimates by AIReF

¹⁰ The meaning of public consumption and its appraisal are outlined in greater depth in Technical Document 2/2017 <u>documento de-trabajo-2- 2017</u>



FIGURE 13. REAL PUBLIC CONSUMPTION GROWTH (%)



Source: Ministry for the Economy, Industry & Competitiveness (broken line) and estimates by AIReF

FIGURE 14. NOMINAL PUBLIC CONSUMPTION GROWTH & ITS MAIN COMPONENTS (%)











FIGURE 15. NOMINAL & REAL PUBLIC CONSUMPTION GROWTH 2017-2020 SPU

In nominal terms, there will be a restrained trend in public consumption, even more rigorous than the expenditure rule. This will play a key role in compliance with the budgetary stability target, providing that the other revenue and expenditure items included in the Government's fiscal outlook evolve as expected (see section 4.2.2. for further details).

The trend in real terms in the 2017-2020 SPU is characterized by well sustained positive rates across the whole forecast horizon. The feasibility of this path will mainly depend on two contrasting factors.¹¹ The first factor is demographic behaviour. According to forecasts by the Spanish National Statistics Office (INE),¹² the population is expected to drop slightly across the period, which will help to keep public consumption down due to the lower need for public services in general. Secondly, in contrast, the positive pace of the economy will lead to opposite pressures, which might contribute to a recovery in the coverage of public services (see Figure 2). There is therefore an upside risk if social pressure exceeds the downside demographic effect.

As for the evolution of public consumption's implicit prices, these are historically strongly related to the GDP deflator (see Figure 3) and to public wages.¹³ The trend reflected in the 2017-2020 SPU, with a half-a-point gap between the rate of change of GDP deflator and public consumption, responds to a behaviour pattern similar to that observed at the beginning of the previous period's recovery cycle (with yearly budgetary laws that set an increase in public sector compensation of 2%, a figure below the inflation rate). It is the evolution of public wages that determines the plausibility of the path described in the SPU,

 ¹¹ An error correction model was developed that relates public consumption in real terms to the GDP and population.
¹² The total population is expected to grow by 0.01% in 2017 and to fall by 0.01%, 0.03% and 0.04% in 2018,

¹² The total population is expected to grow by 0.01% in 2017 and to fall by 0.01%, 0.03% and 0.04% in 2018, 2019 and 2020, respectively.

¹³ The link with public-sector wages explains the outliers of the relationship between the evolution of GDP and public consumption deflators: 1997 (wage freeze), 2010 (drop in civil servant wages of 5%), 2012 (elimination of additional wage payment), 2015 (return of first instalment of 2012 wage payment).



with these wages needing to evolve at a lower pace than inflation. This means that there is an upside risk if public employees regain their purchasing power¹⁴.



Source: INE & estimates by AIReF

Government forecasts of real gross fixed capital formation growth show a downward bias at the beginning of the forecast horizon which will gradually lessen. These discrepancies are mainly influenced by construction investment, the variable for which the Government's forecast is the most restrictive. The projections of AIReF's models point to a stronger acceleration in construction investment during the said year, although in the long-term it will tend to converge with the central path envisaged by the Government, with a growth of over 3%. In contrast, in the case of investment into equipment, in the short-term, it is expected to have somewhat lower growth rates than those forecast by the Government, levelling out at around 4% during the following years.

The expected path for exports, characterized by strong stable growth, is thought to be feasible. Spanish export markets' improved vigour, stabilized growth for the Euro area, and a similarly stable pattern in the nominal exchange rate mean that the Government's envisaged economic scenario in the years covered by the programme update is very close to the centre of the forecast interval. Although, in the short-term, there might be a somewhat lower increase in exports than expected, on average their forecast growth during the period from 2018 to 2020 is very close to AIReF's no-policy-change scenario or that of the IMF.

The situation is similar for imports, with a fairly plausible growth pattern. There is no noticeable bias for any of the years covered by the programme, because the growth in imports forecast by the Government coincides with the other institutions' forecasts for 2016 and 2017. Although AIReF's short-term models show greater dynamism than the Government's expectations, the mid-term models do coincide, with growth levels close to 4%, highly conditioned by the final import demand.

¹⁴ A corrective model was developed that relates the public consumption deflator with GDP implicit prices and public-sector wages.



FIGURE 18. REAL GFCF GROWTH, EQUIPMENT & CULTIVATED ASSETS (%)



Source: Ministry for the Economy, Industry & Competitiveness (broken line) & estimates by AIReF

FIGURE 19. REAL GFCF GROWTH, CONSTRUCTION & INTELLECTUAL PROPERTY (%)



Source: Ministry for the Economy, Industry & Competitiveness (broken line) & estimates by AIReF



FIGURE 20. REAL EXPORTS GROWTH (%)



Source: Ministry for the Economy, Industry & Competitiveness (broken line) & estimates by AIReF

FIGURE 21. REAL IMPORTS GROWTH (%)



Source: Ministry for the Economy, Industry & Competitiveness (broken line) & estimates by AIReF

The forecast for the growth in total FTE employment is an expected rise in line with the growth in the real GDP, with rates about two or three tenth less, which would indicate an increase in apparent productivity. In the short-term, these forecasts coincide with the other available forecasts and they imply a maintained growth in productivity. This is



compatible with the unit labour cost growing around two tenths of a percentage point below compensation of employees. The reduction in the unemployment rate forecast by the Government is, however bigger than that of other forecasts as the forecast horizon progresses.



FIGURE 22. EMPLOYMENT GROWTH (%)

Source: Ministry for the Economy, Industry & Competitiveness (broken line) & estimates by AIReF

As for prices, the macroeconomic outlook in the 2017-2020 SPU envisages a progressive increase in the pressure of inflation. Both the GDP and private consumption deflators accelerate across the forecast horizon, falling in line with the Central European Bank's inflation target at around 1.7% to 1.8% in 2020. Although the inflation forecasts are just below the consensus on the figures for this year, the path followed by the GDP deflator is totally coherent with AIREF's forecast models. As for the envisaged growth in compensation of employees in the Government's macroeconomic outlook, a gradual steady rise is expected, in parallel with the evolution of prices, but with marginally lower growth rates than those of the private consumption and GDP deflators.



FIGURE 23. THE GDP DEFLATOR GROWTH (%)



Source: Ministry for the Economy, Industry & Competitiveness (broken line) & estimates by AIReF

Overall, the macroeconomic outlook outlined in the 2017-2020 SPU is possible, with some minor reservations regarding its coherence with the SPU's budget forecasts, mainly for the last two periods. Firstly, from the projected potential growth of the Spanish economy reflected in the SPU, the output gap is expected to narrow in the mid-term, within the programme's forecast horizon, with a cyclical recovery of some 5.5 percentage points, leading to a reduction in the deficit of around 3 percentage points of GDP through an automatic stabilizer effect. These dynamics coincide with the estimates by AIReF and other institutions. More specifically, in AIReF's previously outlined no-policy-change scenario, the growth in the real GDP is slightly higher at the beginning of the period, with the output gap narrowing just before it would under the scenario outlined in the 2017-2020 SPU. The cyclical gains from automatic stabilizer effects in AIReF's outlook are slightly lower than those envisaged in the SPU. The residual component of the deficit, observed as from the narrowing of the output gap, can be deemed to be structural and its adjustment would require long-term measures. This balance stands at around 2 to 2.5% of GDP if the estimates by different international institutions and by AIReF are taken into account. Secondly, the dynamics of baseline public consumption are stronger than the dynamics in the Government's outlook, particularly at the end of the time horizon, as analysed previously. This suggests the existence of margins that may allow for more expansionary public consumption or for a smaller rise in the GDP in the macroeconomic outlook, especially during the years 2019 and 2020.



3.4. Sensitivity analysis and main risks around the baseline forecasts

The 2017-2020 SPU features a section with a sensitivity analysis, thus fulfilling the recommendation on the contents of stability programmes in the European Commission code of conduct. The sensitivity analysis of the main variables, in the event of changes in the determinants included in the models, offers an insight into the impact of alternative scenarios involving the said determinants and it helps to define the level of uncertainty of these different factors in risk terms. The 2017-2020 SPU presents the results of three simulations (higher interest rates, a lower growth by Spanish export markets, and an increase in the price of crude oil), using a dynamic general equilibrium model (REMS). In this section, an assessment is made of these risks and the implications of their occurrence is studied.

The sensitivity of the macroeconomic and budget outlooks to changes in hypotheses on interest rates coincides with AIReF's internal estimates. In the simulation presented in the 2017-2020 SPU, an interest rate path 1.2 percentage points above that of the base case scenario would entail a one percentage point lower real GDP at the end of the forecast horizon. The collateral effects on public accounts would also be noticeable, with deficit/GDP and debt/GDP ratios half a percentage point and two-and-a-half percentage points higher respectively. AIReF's simulations show there to be a lower impact on employment and economic activity, with similar results for the budget scenario.

The effect of a lower growth in exports on economic activity and employment simulated in the 2017-2020 SPU seems to have been under-estimated. If a growth in Spanish exports four percentage points lower than the 2017 forecast is assumed, maintaining the growth rates from the base case scenario in successive years, the impact simulated by the 2017-2020 SPU leads to a drop in the growth of that year's GDP by some six tenths of a percentage point, while in AIReF's simulations of the base case scenario, this effect would be bigger. In successive years, the path followed by the GDP would remain between three and four tenths of a percentage point below that of the base case scenario in the 2017-2020 SPU, while in AIReF's simulation, this discrepancy would be more than a percentage point, with equally significant differences in the other main variables of the macroeconomic and budgetary outlooks.

Variations in assumed oil prices have significant effects on the growth of GDP, which might be considered to be prudent in the light of AlReF's internal estimates. According to the simulations in the 2017-2020 SPU, if the price of oil goes up by eleven percent in relation to the central path, the impact on the real GDP, employment and public deficit series (all negative) is a cumulative deviation of between two and five tenths of a percentage point. The cumulative effect on the public debt/GDP ratio would amount to over one percentage point at the end of the horizon. The quantification of the sensitivity of AlReF's no-policy-change scenario is substantially lower.

One of the downside risks, that has been repeatedly indicated, is the one associated with a less expansive trend in the Spanish export demand, associated with the Brexit process and the application of protectionist measures by the USA. Although this is still a



risk, its occurrence is doubly uncertain, both in terms of when it might happen and what form it would take. The other big downside risk, the increase in energy prices, is also still a possibility although its more recent impact seems to be conditioned by the high volatility of the growth rates of energy prices. In addition to the geopolitical risks still present at an international level, whose likelihood it is very hard to quantify, downside risks should be mentioned associated with the swifter normalization of financial conditions.

With regard to budgetary issues, there is an upside risk of a deviation in the mid-term growth of public consumption, although this item is likewise conditioned by demographic developments and the population's expenditure needs. In view of the modest cyclical gains in the main revenue (in line with the latest evidence and forecasts by AIReF), the convergence path towards budgetary equilibrium, as proposed in the SPU, is mainly based on restrained expenditure and the denominator effect afforded by higher growth. The forecast trend in public consumption seems to be rather restrictive, as it assumes a nominal trend below the reference rate approved up until 2019 for the expenditure rule and this affects all eligible expenditure by different subsectors, given that there is a certain margin in compliance with the expenditure rule, and these risks would also be reflected in forecasts of the budget balance and by an additional boost to the growth of GDP. Upward pressures on expenditure would also be conditioned by pressure associated with the increase in the population, which is expected to be moderate owing to the mid-term forecast of sluggish population growth by the Spanish National Statistics Office (INE).

In summary, the risks for the growth of the real GDP and employment seem to take an opposite sign in the short-term (with a slight upside risk) when compared with the mid-term (with a downside risk). In the short-term, the dynamism shown by the domestic demand for private and public consumption and by exports could continue throughout 2017, implying a growth in economic activity slightly higher than the Government forecast. In the mid-term, however, downside risks prevail, mainly derived from the possibility of a less favourable trend than the assumed external scenario.

3.5. Endorsement of the forecasts

Based on exogenous assumptions and defined policies, AIReF endorses the Government's forecast macroeconomic outlook in the SPU 2017-2020. AIReF deems the Government's macroeconomic outlook in the SPU 2017-2020 to be generally likely. The basic hypotheses underpinning the official macroeconomic outlook for 2017-2020 are considered to be feasible, taking the latest forecasts by international institutions and the latest trend in the commodities and debt markets. The composition of growth is deemed likely, although, in the mid-term, the degree of external uncertainty could increase and some latent risks could materialise.

The short-term (favourable or upside) risks to economic growth seem to contradict the mid-term (moderately unfavourable or downside) ones. The growth rate has been slightly upwardly revised in relation to the rate given in the draft version of the General State Budget for 2017. However, there are still short-term upside risks of a deviation according to



the latest short-term information and examination of analysts' expectations, which point to robust growth in 2017, in line with that observed in 2016. In the mid-term, however, there are moderate downside risks, which grow stronger as the forecast horizon progresses. These risks are linked to the disappearance of some of the external incentives that have boosted the Spanish economy, with monetary stimuli from the European Central Bank leading the field. In contrast with this, the Spanish economy's recent gains in competitiveness and productivity could counteract this if their structural nature is confirmed and they help to boost the economy's potential growth.



4. Fiscal outlook of the 2017-2020 SPU

4.1. A no-policy-change reference scenario

The sensitivity of budgetary items more closely related to the evolution of the economic cycle has decreased significantly in the last 15 years. The reference macroeconomic scenario outlined in the previous section involves sustained growth rates above the potential GDP, with the subsequent automatic cyclical adjustment of the imbalance in the public accounts. Bearing in mind the evolution of the main unemployment revenue and expenditure, the adjustment of the budget balance as a result of the economic cycle is estimated as representing 4 to 5 tenths of a percentage point of GDP in each of the years of the SPU, due to the slightly higher elasticity of one of the public revenue in relation to the nominal GDP and the lower expenditure on unemployment benefit. This elasticity has dropped significantly in recent years, representing a hindrance for the adjustment of budgetary imbalances.

In terms of revenue, three explanations must be highlighted for its decreased sensitivity to economic growth: (i) absence of inflation; (ii) growth composition more oriented toward the external sector; and (iii) impact of taxation as a mechanism for raising money. In the first case, the lack of wage-inflation has acted as a hindrance in recent times for the raising of income tax (IRPF) and social security contributions. In particular, as observed in Figure 24, the nominal component (the fiscal drag) disappeared during the last boom in income tax revenue, which was bolstered by the real component (employment creation). Secondly, the economy's orientation toward the external sector implies less structural revenue from VAT, whose revenue is negatively correlated with the current account deficit, linked to net inflows of capital that finance a higher level of domestic expenditure. Thirdly, due to the mechanics of corporate tax for raising revenue, a breach has opened up between the evolution of the tax's macroeconomic bases and its accounting bases (Figure 25), thus reducing the increase in tax revenue that might be expected as a result of the economic cycle.

FIGURE 25. CORPORATE TAX (M€) & LACK OF



14

8

6

-6

-8

FIGURE 24. REVENUE FROM INCOME TAX (CONTRIBUTION TO GROWTH)



Source: AEAT and estimates by AIReF

Note: revenue from income tax is adjusted by the impact of regulatory changes.

In expenditure terms, the economic improvement implies significant savings in the two main items across the forecast horizon: i.e. in unemployment benefit and interest expenditure. In 2015, the European Central Bank (ECB) decided to aid recovery through a large-scale asset purchase programme, given the very low margin for reducing interest rates. Two years afterwards, the ECB continues to maintain its expansive policy, given the lethargic state of the Euro area's leading economies and lack of any sign of a growth in inflation. This continued initiative has resulted in a significant drop in sovereign debt interest rate curves and in a drop in spreads or risk premiums for the Spanish debt. Savings in interest expenses are making themselves felt as the Public Treasury renews its public debt portfolio and issues made during the crisis are replaced with others with lower marginal interest rates. As Figure 26 shows, expenditure in relation to the GDP are clearly below those of the beginning of the previous cycle, converging to figures close to 2% of GDP at the end of the period. As for unemployment expenditure, one extenuating factor that should be noted is the dynamic job creation process that the Spanish economy is undergoing. In addition, the impact of the crisis on the increase in the number of long-term unemployed and the end to their right to unemployment benefit has also led to a downward bias in unemployment expenditure. At the end of the period, this will register levels equivalent to the minimum levels of the previous cycle, close to 1% of GDP. As for remaining types of expenditure of a more inertial type or with a structural component, any adjustment during the forecast horizon will be brought about by the denominator effect of the growth in the nominal GDP in a scenario of compliance with the expenditure rule.

Lastly, the evolution of the different budgetary expenditure and revenue items will lead to a moderately neutral fiscal policy in the mid-term. After a period characterized by a generally contractionary fiscal policy (with the exception of 2016), the "no-policy change" scenario envisaged in the 2017-2020 SPU, in terms of its main revenue and expenditure, entails a moderately neutral fiscal approach in a no-policy-change scenario



(see the evolution of the fiscal effort in terms of the expected change in the primary structural balance in Figure 27). The absence of a mid-term forecast fiscal effort is a hindrance for the adjustment of the high level of government debt, standing at around 100% of GDP.



Source: AEAT & estimates by AIReF

Note: The confidence interval for 2017-2020 reflects the uncertainty in the estimation of the output gap. More specifically, it takes into account one of the main methodological criticisms of this kind of tool: the degree to which the estimates can be revised ex-post in relation to concurrent ones.

4.2. SPU 2017-2020 fiscal outlook analysis

4.2.1. Assessment of measures

The section of the SPU on fiscal projections shows the planned consolidation path for the GG sector for the period 2017-2020. The fiscal expenditure and revenue outlook contained in the SPU is defined solely for the GG sector as a whole. In previous reports, AIReF has already indicated the need for greater detail on the main expenditure and revenue items, together with a breakdown by subsectors.

In order to assess the likelihood of the 2017-2020 SPU fiscal consolidation path, it is important to ascertain whether the envisaged measures suffice to guarantee compliance with the budgetary stability targets. The 2017-2020 SPU contains hardly any measures for the years 2018 to 2020. Those measures that are included are similar to the ones contemplated in the 2017 Budget Programme, previously analysed in the reports on the draft and initial budgets for the different subsectors (See Table 1). The carry-over of the 2016 General State Budget and presentation of the draft version of the 2017 General State Budget in April of the same year have delayed the publication of the report on the draft and initial budgets, bringing them closer in time to the SPU.



| MEASURES | 2016 | 2017 | 2018 | 2019 |
|------------------------|-----------|-----------|-----------|-----------|
| REVENUE | 0.1 | 0.5 | 0.0 | 0.1 |
| Central Administration | -0.1 | 0.4 | 0.0 | |
| Social Security | 0.0 | 0.1 | | |
| Autonomous Regions* | 0.1 | 0.0 | | |
| Local Corporations | 0.0 | 0.0 | 0.0 | 0.1 |
| EXPENDITURE | 0.5 | 0.4 | 0.2 | 0.0 |
| Central Administration | 0.2 | 0.1 | 0.2 | 0.0 |
| Social Security | 0.1 | 0.1 | | |
| Autonomous Regions* | 0.1 | 0.1 | | |
| Local Corporations | 0.1 | 0.1 | 0.0 | 0.0 |
| TOTAL MEASURES | 0.6 | 0.9 | 0.3 | 0.1 |
| GDP SPU | 1,113,851 | 1,163,971 | 1,214,787 | 1,266,488 |

TABLE 1. MEASURES IN THE 2017-2020 SPU. GG SECTOR (% GDP)

(*) The SPU does not include data for 2018 or 2019 in Table A.3 on measures concerning ARs.

The revenue-related measures for the Central Government (CG) mainly have an impact on 2017 with minor effects on later years. These measures are shown in Table 2 and, on the revenue side, they are mainly the result of Royal Decree-Law 3/2016, which includes measures for an envisaged amount equivalent to 0.52 percentage points of GDP in 2017. In this law, various reforms were approved that affect corporate tax, an amendment to the tax levied on tobacco and alcohol, and a limitation on the deferral of outstanding tax payments. The latter mainly affects VAT and it forms part of a package of measures aimed at combatting fraud. It must be noted that, within this last package of measures, the new system for the immediate supply of information has not yet entered into effect and updates to the list of debtors is still pending certain legal formalities (the envisaged impact of both measures will account for 0.04 percentage points of GDP). In addition, the SPU also quantifies environmental tax reforms as accounting for 0.05 tenths of GDP, only to be activated, according to the programme, if there is a deviation in the deficit. These measures will be incorporated in AIReF's forecast the moment they enter into effect. Likewise, the SPU includes measures for the conversion of deferred tax assets (DTA) and a plan to combat fraud for which no further information is available and so they have not been taken into account by AIReF.

Expenditure-related measures in 2018 are limited to the implementation of a still-tobe-developed strategic plan to boost and transform the Public Administrations, with an impact of 0.07 tenths of GDP. This measure, which would mainly affect public consumption, has not been considered by AIReF, given that it is has not been developed yet. Furthermore, the SPU envisages lower expenditure due to the impact of the extra wage payment's return and updating of civil servants' wages (0.13 tenths). This has not been included in AIReF's estimates, since there are discrepancies in its quantification and effect on this subsector.



| AUTONOMOUS REGION MEASURES % GDP | 2016 | 2017 | 2018 | 2019 |
|--|-------|-------|-------|------|
| Autonomous Region Revenue | -0.07 | 0.41 | 0.00 | |
| Income tax | -0.37 | -0.04 | 0.00 | |
| Corporate tax | 0.09 | 0.13 | -0.03 | |
| Others (Environmental taxes & non-resident income tax) | -0.01 | 0.00 | | |
| VAT | 0.11 | 0.00 | 0.00 | |
| Special taxes | 0.04 | 0.01 | 0.00 | |
| Other indirect taxes | 0.00 | 0.05 | 0.00 | |
| Fees and others | -0.03 | 0.03 | | |
| Fight to combat fraud | 0.09 | 0.24 | 0.03 | |
| Autonomous Region Expenditure | 0.23 | 0.13 | 0.20 | 0.03 |
| Non-availability | 0.27 | | | |
| Force majeure | 0.01 | | | |
| 2012 extra wage payment to public sector employees and 1% increase | -0.13 | 0.13 | 0.13 | 0.03 |
| Public employment sector (Replacement rate) | 0.02 | | | |
| CORA (Commission for Reforms to the Public Administration) | 0.07 | | | |
| Strategic Plan for Reforms to the Public Administration | | | 0.07 | |

TABLE 2. MEASURES RELATING TO THE CENTRAL GOVERNMENT (% GDP)

In the case of the SSF, the SPU does not contain any measures after 2018. The measures in the SPU show an impact in 2017 but none are included from then on. Thus, it seems that any adjustment will be the result of the economic cycle and due to the impact of previous reforms and measures.

| | 2016 | 2017 | 2018 | 2019 |
|---|-------|-------|------|------|
| Social Security Revenue | 0.03 | 0.06 | | |
| Flat rate and exempt minimum | 0.04 | 0.02 | | |
| Increase to highest contribution bases | | 0.03 | | |
| Employment Activation Programme | -0.01 | 0.00 | | |
| Direct contribution payment system and Mutual Societies Act | 0.01 | 0.01 | | |
| Social Security Expenditure | 0.14 | 0.09 | | |
| Pensions | 0.10 | 0.10 | | |
| Labour market policies | 0.04 | -0.02 | | |

TABLE 3. MEASURES RELATING TO THE SSF (% GDP)

The measures contained in the SPU for the Ars as a whole envisage impacts of around one tenth of a percentage point of GDP in 2017, the only year when these measures, which focus on expenditure, are assessed in a full detailed way. The main measures that make an additional impact are expenditure related ones, more specifically relating to staff, due to the lower impact of the return of the 2012 additional wage payment compared with previous years, and to pharmacy costs, associated with compliance with obligations undertaken in accordance with the Pharmaceutical Procedure and to control the growth of healthcare expenditure. What is more, savings on expenditure in 2016 of some 1500 million euros, due to non-availability agreements, closing operations and budgetary restrictions, are envisaged to continue in 2017. The SPU also contains details of revenue-



related measures that make a lesser impact, in particular fiscal ones (property transfer tax and environmental taxes). It must be noted that there are discrepancies and uncertainties which MINHAFP needs to clarify in the information on measures relating to the ARs. The data in Table 4 on some measures for 2017, which can be compared with previous years, does not coincide with the text describing them. Furthermore, for 2018 and 2019, although some measures are mentioned and assessed, they are not reflected in the table (to remain consistent with the data for previous years). No measures are assessed for 2020.

| | 2016 | 2017 (*) |
|---|-------|----------|
| Autonomous Region Revenue | 0.06 | 0.01 |
| Taxes | 0.01 | 0.00 |
| Fees | 0.01 | 0.00 |
| Other taxes | 0.02 | 0.01 |
| Non-fiscal revenue | 0.02 | 0.00 |
| Autonomous Region Expenditure | 0.07 | 0.06 |
| 2012 extra wage payment to public employees | -0.01 | 0.04 |
| Public-sector employment (general staff-related measures) | 0.01 | -0.01 |
| Non-availability agreement | 0.13 | |
| Pharmaceutical expenditure | 0.01 | 0.02 |
| Interest payments | -0.07 | |
| Other current expenditure measures | 0.00 | 0.01 |

TABLE 4. ARS EXPENDITURE MEASURES (% GDP)

(*) Maintaining the savings of 1500 million (0.13% of GDP) in 2017 due to non-availability agreements, closing operations and budget restrictions on expenditure measures.

AlReF considers that the impact of ARs expenditure measures will be lower than the SPU anticipates, taking into account that in 2017 this higher level of expenditure might be accompanied by higher revenue as a result of EU funds. In the SPU, the effect of the 1500-million-euro savings brought about, in 2016, by non-availability agreements, closing operations and credit restrictions continues in 2017. In 2016, a drop in investment financed with EU funds, as a result of delays in the implementation of expenditure certification procedures for the current 2014-2020 programme, led to the non-implementation of capital expenditure (in conjunction, to a lesser extent, with non-availability agreements and other closing operations). AlReF believes that the 2016 situation will not be maintained, but that instead, in 2017, a growth in investment expenditure can be expected once the problem of certifying co-financed expenditure has been overcome, in accordance with regional forecasts. This, however, will imply a parallel growth in revenue from EU funds. As for ensuing years, given that information relating to the measures has not been fully outlined in the SPU in a comparable way to previous years, a suitable analysis cannot be made by AIReF until this data has been completed and clarified.



Local Corporation measures envisaged for 2018 and the following ones relate to minor savings in staff and current expenditure and, on the revenue side, increases in taxes are forecast, together with the elimination of allowances and exemptions, with a maximum impact of 800 M \in in 2019.

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|------|------|------|------|-------|
| Local Corporation revenue-related measures | 0.04 | 0.03 | 0.04 | 0.07 | 0.01 |
| Tax increases, elimination of exemptions and rebates | 0.04 | 0.03 | 0.04 | 0.06 | 0.02 |
| on voluntary taxes | 0101 | 0100 | 0101 | 0100 | 0102 |
| Fees and public prices | | | 0.00 | 0.01 | -0.01 |
| Local Corporation expenditure measures | 0.10 | 0.08 | 0.02 | 0.00 | 0.00 |
| Reduction staff costs and non-replacement | 0.00 | 0.05 | 0.01 | 0.00 | 0.00 |
| Reduction current expenditure | 0.02 | 0.01 | 0.01 | | |
| Public business sector | 0.05 | 0.03 | | | |
| Elimination of services not under local scope of | 0.01 | | | | |
| authority and disappearance of minor local entities | 0.01 | | | | |
| Integrated management of public services and mergers | 0.02 | 0.01 | 0.00 | | |
| of municipalities | 0.02 | 0.01 | 0.00 | | |

TABLE 5. LOCAL CORPORATION MEASURES (% GDP)

Local Corporation measures include the effects of Law 27/2013 of December 23rd on the Rationalization and Sustainability of Local Administrations, whose quantification has been revised in relation to the previous SPU. The SPU re-quantifies the effects of Law 27/2013 relating to the years 2015 to 2018, mainly due to the lower impact of the elimination and integration of services when there is no surplus and due to the elimination, in 2016, of savings derived from the devolution to the ARs of powers in the fields of healthcare, education and the social services as a result of a ruling by the Constitutional Court of March 3rd 2016, which declared the provisions on which these devolved powers were based as unconstitutional. The new quantification, however, is not reflected in Table A.4 of the current SPU - which summarizes all the measures and shows, in Table 5, the value as a percentage of GDP -, since the values for the years 2015 to 2017 in the 2016-2019 SPU have not been amended.

4.2.2. Analysis of revenue and expenditure evolution

Compliance with deficit targets is deemed unlikely in 2017 and feasible in 2018 and 2019. Moreover, AIReF foresees an increase in non-compliance risk in 2020. The path envisaged in the SPU for the GG sector involves a consolidation adjustment of 4% of GDP during the period 2017-2020, an adjustment deemed very hard to achieve in a scenario with virtually no measures. Figure 28 shows the deficit path envisaged in the SPU for the GG sector (Table 4.3.1.1 of the SPU), together with AIReF's projections, in a scenario with a virtual absence of measures from 2018 onward where revenue and expenditure evolve in accordance with the available budget information, the results of our own projection models and by applying the reference rate approved for the expenditure rule¹⁵ in cases in which

¹⁵ Approved reference rate for 2018 and 2019 and estimate by AIReF for 2020



there is no information or specific models. From the information contained in the SPU, it can be inferred that the adjustment of 4% of GDP will largely be achieved by a reduction in expenditure of 3.2% of GDP (from 42.4% to 39.2%) and by an increase in revenue of 0.8% of GDP (from 37.9% to 38.7 %).



FIGURE 28. NET LENDING/BORROWING 2017-2020

Source: 2017-2020 SPU, IGAE and estimates by AIReF

The SPU includes the possible impact, in 2017, of 0.3% of GDP as a result of financial liability for toll roads and financial aid associated with the restructuring of the banking system. If this were to materialize, it would turn unlikely the GG sector's compliance with the target for this year. In the appraisal made by AIReF on April 25th of the GG sector's compliance with the 2017 stability target, it stated that this was considered feasible but tough, providing that the probable deviation from the target by CG and the SSF could be offset by the surplus achieved by the local subsector. In those estimates by AIReF, the impact of financial liability for toll roads, the aforementioned financial aid or the possible impact of liability for the tax levied on fuel to finance the healthcare sector was not included, since the 2017 draft General State Budget did not contain any such information and it was not provided by MINHAFP. If these certainties were to materialize, compliance with the target in 2017 as reflected in the projected expenditure shown in the SPU would be unlikely.

The SPU section on contingent liabilities only includes guarantees by the GG granted as bonds. It does not contain information on potential liabilities for the GG sector deriving from court rulings, information relating to public-private partnerships or other types of risks that may affect Public Administrations' budgetary stability and financial sustainability targets arising, for example, from non-performing loans. In this respect, it is important to highlight that, over the last few years, both CG and the ARs subsector and even some City Councils have seen a significant rise in their deficit as a result of the execution of legal rulings or the reclassification of contracts stemming from public-private partnerships, and the possible impact in 2017 and 2018 of financial liability for toll roads could be significant. It is advisable



to extend the information included on contingent liabilities, rather than just limiting it to guarantees granted as bonds.

The distribution of targets by subsectors foreseen in the SPU is not realistic since all the subsectors are required to participate in the necessary adjustments and once again it does not reflect the foreseeable consolidation of the Local Corporation surplus. LCs have been registering a surplus of around half a percentage point of GDP due to the stability of their revenue and the application of the expenditure rule, hence maintaining this subsector's non-financial expenditure below its revenue. In the SPU, LCs are expected to continue registering a surplus in coming years, while still maintaining as a target the budget balance established in previous years. Meanwhile, the SPU sets a target of -0.5% for the SSF in 2017; one which it is unlikely to meet, bearing in mind AIReF's estimates of the evolution of social security contributions and pensions. In addition, when the envisaged revenue from the Regional Administrations' financing system is taken into account, there could be risk of non-compliance with a 2020 target of a balance for the ARs.

4.2.2.1 Revenue

The SPU's revenue forecast for the period 2017-2020 may be deemed to be optimistic, since deviations are mainly expected in the trend in direct taxes. The SPU's revenue forecasts may be slightly upwardly biased in relation to AIReF's estimates. It is deemed likely that, despite the favourable macroeconomic cycle and trend in the labour market, less revenue will be achieved than the budget projections given in the SPU, as shown in Figure 29. The total envisaged revenue for 2020, as a percentage of GDP, is expected to equal the mean value of the revenue achieved between the years 1999 and 2002, the previous economic cycle which has been taken as a reference, but with a different composition since social contributions and EU funds will account for a lesser share and tax revenue for a higher share.



FIGURE 29. NON-FINANCIAL REVENUE PATH 2017-2020

Source: 2017-2020 SPU, IGAE & estimates by AIReF



The revenue from direct taxation envisaged in the SPU shows a cyclical gain of 1.4 percentage points of GDP between 2016 and 2020, reaching a figure of 11.6% of GDP. The projected revenue from direct taxes (income tax, corporate tax, non-resident income tax, wealth tax etc.) shown in the SPU is expected to undergo a sustained cyclical rise of three or four tenths per year through to the end of the period. Thus in 2020, a level of revenue would be reached close to the historical maximum (2006-2007), with lower effective tax rates and a lower level of employment. In AIReF's forecasts, there could be a slight improvement in revenue from direct taxes from 2017, once the effect of tax reforms (which had a negative effect in 2015 and 2016) have been overcome, although the increase is far below the SPU's forecast. According to AIReF, the macroeconomic variables (employment, the GOS, and wages) and projections of effective tax rates both yield lower figures for income and corporate tax, and so it is very unlikely that the SPU's forecasts for all the years will be complied with (see Figure 30).



FIGURE 30. DIRECT TAXATION PATH 2017-2020. GG SECTOR AS % GDP.

Source: 2017-2020 SPU, IGAE & estimates by AIReF

The estimated revenue from indirect taxes in the SPU is slightly biased upwards in 2017 and downwards for the rest of the period. Although in 2017, the forecast in the SPU is slightly above AIReF's central one, from that year on, there would be a certain leeway in those taxes, given the positive trend in the macroeconomic variables, mainly in private consumption and the housing market. For this reason, there might be a margin for an increase in the SPU's estimated path, mainly for 2018 and 2019 (see Figure 31).



FIGURE 31. INDIRECT TAXATION PATH 2017-2020



Source: 2017-2020 SPU, IGAE & estimates by AIReF

The forecast for social security contributions accounts for a stable GDP share of about 12% throughout the period. This trend is considered to be coherent in historical terms with the trend in the labour market reflected in the SPU's macroeconomic outlook and with the adoption of measures entailing an increase in the social security contribution thresholds, as observed in Figure 32. The trend in employment, the compensation of employees and measures adopted in 2017 aimed at increasing social security contributions in the top bracket by 3% and in the lowest one by 8% facilitate a growth in contributions in line with the growth in the nominal GDP throughout the whole period. The last national accounting data published in March on the trend in contributions shows substantial dynamism during the first months of the year, particularly in the case of the State Public Employment Service.



FIGURE 32. SOCIAL SECURITY CONTRIBUTIONS 2017-2020

Source: 2017-2020 SPU, IGAE & estimates by AIReF



4.2.2.2 Expenditure

The SPU's downward path foreseen in non-financial expenditure is deemed feasible, albeit with a different composition in the main expenditure items. The expenditure path outlined in the SPU foresees a net adjustment of 3.2 percentage points of GDP, which, as shown in Figure 33, is considered to be possible despite differences between AIReF and SPU's forecasts in the evolution of the headings relating to public consumption and interest.



FIGURE 33. NON-FINANCIAL EXPENDITURE PATH 2017-2020

Source: 2017-2020 SPU, IGAE & estimates by AIReF

The net adjustment of 3.2% of GDP in non-financial expenditure foreseen in the 2017-2020 SPU is based on four main factors, analysed below:

- ✓ An adjustment in the main expenditure items that make up public consumption of 1.7% of GDP. In the absence of any measures, this could be too restrictive and not coincide with estimates by AIReF on the trend in healthcare and education expenditure.
- ✓ An adjustment of 0.9 percentage points of GDP as a result of the evolution of social cash transfers, which AIReF deems feasible.
- ✓ A reduction in interest of 0.2% of GDP during the period, a trend that might be too conservative in a scenario of a reduction in the deficit and also bearing in mind current interest rates.
- ✓ A slight uptrend in the contribution of gross fixed capital formation to the GDP.



Public consumption

In accordance with the information in the SPU, the main expenditure items that make up public consumption (compensation of employees, intermediate consumption and social benefits in kind) would undergo an adjustment of 1.7% of GDP. This 1.7 percentage point adjustment of GDP is based on a growth trend in public consumption below the nominal growth of the economy in order to guarantee compliance with the expenditure rule. Although there are still problems in assessing the value of the expenditure rule, due to difficulties in its interpretation and a lack of information to calculate it, AIReF has made an approximate estimate of eligible expenditure during the period 2017-2020, based on information from the SPU. As Figure 34 shows, eligible expenditure and its main component (public consumption) would follow a trend far below what the reference rate for those years would allow.



FIGURE 34. TRENDS IN PUBLIC CONSUMPTION, ELIGIBLE EXPENDITURE & REFERENCE RATE.

Source: 2017-2020 SPU, MINHAFP reference rate for 2017-2019 MINHAFP & estimates by AIReF for 2020

This restriction on public consumption items is not coherent with AlReF's forecasts of the evolution of expenditure on healthcare and education for the period 2017-2020, policies that account for 50% of public consumption's main items. Figures 35 and 36 show the expected trend in expenditure on healthcare and education respectively as a percentage of GDP and in relation to the population, comparing the results of AlReF's forecast model, whose methodology was published in the May 10th 2016 report on the 2016-2019 SPU,¹⁶ with the forecasts contained in the SPU for this kind of expenditure. It must be noted that the SPU's forecast trends are below the lowest band of AlReF's forecasts, above all in the case of healthcare expenditure.

¹⁶ Report on 2016-2019 SPU





FIGURE 35. TREND IN HEALTHCARE EXPENDITURE. AIREF-SPU FORECASTS (% GDP)

FIGURE 36. TREND IN EXPENDITURE ON EDUCATION. AIREF-SPU FORECASTS (% GDP)



The SPU mentions that, in 2017, for the first time an analysis will be made of the level of compliance with the 2016 healthcare expenditure rule in the case of those ARs adhering to the use of this instrument. It should be remembered that, in 2015, the General Healthcare Act was amended to create an instrument aimed at fostering the sustainability of pharmaceutical and healthcare expenditure by the ARs. For those regions voluntarily adhering to it, this instrument limits the growth in expenditure on pharmaceutical goods and healthcare products to the same reference rate as that of the expenditure rule regulated in the LOEPSF. The said instrument is compulsory for all ARs benefitting from the 2016 ARs Liquidity Fund since adherence to the healthcare expenditure rule is part of



the reinforced fiscal conditionality of the 2016 ARs Liquidity Fund.¹⁷ The growth in expenditure on pharmaceutical and healthcare products in 2016 was limited to 1.8% of the 2015 level in the case of those ARs adhering to the 2016 healthcare expenditure rule.

The consequences of failing to comply with the healthcare expenditure rule are those established in Article 115 of the General Healthcare Act: (i) The ARs cannot approve a portfolio of complementary services in accordance with Law 16/2003 and it may not provide services other than the common portfolio of National Health System services; (ii) The ARs' access to the distribution of healthcare-related economic revenue shared out by the General State Administration is subject to a favourable prior report under Article 20.3 of the Organic Law on Budgetary stability & Financial Sustainability and (iii) The ARs must apply measures to improve the efficiency and sustainability of the health system agreed by the Government's Delegated Commission for Economic Affairs (CDGAE according to its Spanish acronym).

It is not known whether, to date, the CDGAE has assessed compliance with this rule and, if applicable, what the results are.¹⁸

Social transfers in cash

Social transfers in cash foreseen in the SPU entail a reduction of 0.9 percentage points of GDP. This path is considered to be reasonable when compared with AIReF's forecasts for pensions and unemployment expenditure, although it may be slightly conservative at the end of the period:

- ✓ There will be sustained growth in expenditure on pensions of around 3%, which represents a 0.25% annual revaluation in application of the Pension Revaluation Index minimum. In 2019, the application of the Sustainability Factor will come into effect for new recipients of retirement pensions. This factor reduces the initial pension in accordance with the 2012-2017 life expectancy trend for 67 year olds, adjusting the sums that new pensioners will receive under similar conditions at different moments. Some 310,000 people start receiving a pension per year out of a total of 5 million, and the initial adjustment will represent a reduction of around 0.5% and 1% in 2019 and 2020 respectively, and so the impact on expenditure for those years will not be very significant. As for other benefits, it must be noted that the SPU does not contain details of the extension of paternity leave from 2 to 4 weeks, which will make an estimated impact in 2017 of around 200 M €, or the maternity supplement to the pensions of mothers of two children or more, approved in 2016, which could account for an amount of 400 M € in 2020.
- ✓ The cost of unemployment benefit will continue to drop and level out at the end of the period. Given the expected reduction in the payment of unemployment

¹⁷ The reinforced conditionality of the 2016 ARs Liquidity Fund has also been extended to the 2017 one. ¹⁸ In accordance with information published by MINHAFP on the Pharmaceutical and Healthcare Expenditure Indicators, which serves as a basis for calculating compliance with the rule (6th Additional Provision of the General Healthcare Act), the 2016 inter-annual variation in total expenditure on pharmaceutical and healthcare products was over 1.8% in the Aragón, Castilla-La Mancha, Catalonia, Extremadura, Murcia and Valencia Regions. <u>Pharmaceutical and healthcare expenditure indexes</u>



benefit, the SPU envisages that by 2019 the State Public Employment Service will no longer require the injection of revenue from the State to balance its budget. According to forecasts by AIReF, the transfer of these revenue will no longer be necessary in 2018.

Interest payments

As for interest for the period 2017-2020, the SPU forecasts a drop of 0.2% of GDP. This is more conservative than AlReF's estimates in a scenario characterized by a reduction in the deficit and taking into account current interest rates. AlReF's estimates are based on its own forecast of each subsector's primary balance, the stock-flow adjustment, individual composition of the ARs' debts, forward rate curve, and maturity structure of the initial State debt portfolio with an associated mean internal rate of return (IRR). This IRR is estimated using individual data on State bonds and debentures and it incorporates treasury bills and loans in accordance with the information published by the Secretariat General for the Treasury & Financial Policy and information regarding Regional Administrations supplied by MINHAFP. The possible savings that could be made from the trend in interest might offset deviations in the items that make up public consumption.

Gross fixed capital formation

Gross fixed capital formation will see an increase of 0.2% of GDP by 2020 compared with 2016, mainly due to the impact of financial liability for toll roads, which in 2017 and 2018 will account for an increase of 0.3% of GDP. This heading could also be affected by the recovery of investments co-financed with European Union Funds as from 2016, the year when there was a big drop in EU co-funding as a result of the end of the 2007-2013 framework and delays in the new 2014-2020 one. Despite the slight recovery in investments envisaged in the SPU, gross fixed capital formation continues to remain at a historical low, mainly due to the years of fiscal consolidation and the need to re-programme investments for the future. This level of investment and the need to reinstate and maintain existing investments could generate tensions in the evolution of this expenditure item in coming years.



BOX 3. Is there a margin for a further reduction in public investment?

Public investment in Spain during the period from 2013 to 2015 was not enough to maintain the stock of public capital. Using data in constant dollars for 2011 from the IMF, it can be seen that the gross investment/GDP ratio has halved since its 6% peak in 2009, while the increase in public sector assets has led to growing levels of depreciation. In consequence, there have been negative levels of net investment in recent years.



PUBLIC INVESTMENT (% GDP)

Since its peak in 2012 through to 2015, the wealth of the Spanish public sector, measured in 2011 constant dollars, has fallen by 3% in comparison with the mean 1% growth seen by our main European partners during the same period. Even so, the stock of public capital continues to be 8 percentage points of GDP higher in Spain's case (68% versus 60% of GDP).





Gross public investment, as a percentage of the capital stock continues to be low in comparison with historical levels and with the European average.



GROSS PUBLIC INVESTMENT (% Capital stock)



4.3. Compliance with the debt target

The 2017-2020 SPU shows a downward path for public debt in relation to GDP across the whole period, with a cumulative adjustment of 6.9% of GDP, a higher figure than AIReF's neutral forecasts. The forecasts included in the 2017-2020 SPU show a reduction in the debt-to-GDP ratio that will accelerate across the period, with a cumulative adjustment of 6.9 percentage points of GDP by the end of the period, as opposed to the 4.6 percentage points envisaged by AIReF. This path situates the debt-to-GDP ratio at 92.5% in 2020, a percentage below AIReF's neutral forecast. The difference between both forecasts cannot be explained by the trend in the deficit or GDP. At the same time, the interest burden foreseen in the SPU is 15% higher than that contemplated by AIReF.

The debt path shown in the SPU is consistent with the debt targets approved for the period from 2017 to 2019. The debt targets approved in December are slightly higher than the forecasts in the SPU for 2017 and 2018 and they coincide with the forecast for 2019. However, according to AIReF's projections, in 2019 debt could be slightly higher than the target set in December, although an analysis of debt should contemplate a longer time horizon.

Even though the SPU forecasts a debt that follows a sustainable downward path, this does not lead to compliance with the First Transitional Provision of the LOEPSF. In accordance with this provision, by 2020 the level of Government debt should stand at 60% of GDP. To achieve this, as soon as the Spanish economy reaches a real annual growth or employment rate of at least 2%, the public debt ratio should be reduced by at least 2% percentage points per year. However, the debt-to-GDP ratio is expected to register a cumulative drop across the whole period of around 4.6 percentage points of GDP, situating the debt-to-GDP in 2020 at 94.8%. First, this path does not allow the target to be achieved within the established deadline (2020), given the 60% distance from the target (still over 36 p.p. of GDP at the close of 2019). In addition, the adjustment pace is slower than the one legally required, as the average real GDP growth of 2.5% envisaged in the SPU from 2017 to 2020 would require at least an 8 p.p. debt-to-GDP reduction.

The path of debt-to-GDP envisaged under the neutral scenario simulated by AIReF confirms that only the LCs subsector will achieve the reference value foreseen in the 1st Transitional Provision of the LOEPSF, while the other subsectors and GG sector are not expected to do so for another 20 years. In view of the current debt stock and forecasts for coming years of the main determinants of debt, the only subsector likely to comply with the provision by 2020 is the Local Corporation subsector (since it did so in 2016). For the GG as a whole, under a neutral risk scenario, 60% of GDP would not be reached until the year 2037. As for the ARs, those in the best position are Madrid, Navarre and the Basque Country, set to reach levels close to the reference value stated in the LOEPSF by 2020. In contrast, the ARs likely to see the biggest deviation from the reference level by 2020 are Catalonia, Valencia, Murcia and Castilla-La Mancha. Given the confirmed unlikely compliance with the 1st Transitional Provision, it should be reviewed so that it sets



paths that are tough but realistic for convergence with the reference levels, in line with paragraph 4 of the 1st Transitional Provision.



FIGURE 37. TREND IN DEBT/GDP RATIO FOR THE PERIOD 2017 - 2020

AlReF's sensitivity analysis highlights the importance of maintaining both a scenario of robust mid-term nominal growth and a primary balance improvement. As shown in Figure 37, AlReF's projection points to a nominal improvement in the economy (the recovery of GDP and inflation) and to the progressive adjustment of the primary balance through compliance with the fiscal rules currently in force in Spain and the European Union, as the main determinants of the shrinkage of debt. Any change in these assumptions would have big implications on debt sustainability.

Assumptions regarding the evolution of the primary balance are key factors in sustainability for the future. As long as macro-financial shocks do not change the dynamics in the long-term reduction of debt but just make it slower, assumptions on the evolution of the primary balance will play a fundamental role in future sustainability. A temporary reduction in the growth of the economy over a period of 3 years (1 percentage point less real growth and 0.5 percentage points less inflation than the base case) would imply an increase in the debt-to-GDP ratio in the mid-term, reaching a peak toward the end of the forecast horizon envisaged in the SPU. However, this would not represent a qualitative change in considerations regarding sustainability and neither would it alter the long-term drop in debt. A permanent increase in interest rates applied to Administrations that borrow through the financial market (+0.5%) and those that receive finance through special mechanisms (+1%) would have a somewhat higher effect, but as with the situation of a temporary decline in economic growth, it would not alter debt's long-term reduction. It is in a scenario of "no policy change" where there is an increased risk to sustainability. If the primary balance is maintained from 2018, the debt-to-GDP ratio will stabilize during the first years and then begin to increase across the whole forecast horizon.



On the other hand, the maintenance of a primary balance equivalent to the best mean figure from three consecutive years (as from the year 2000) would speed up the reduction in debtto-GDP so that the 60% would be reached in around 2025.

National and EU fiscal rules are essential in keeping a decreasing debt-to-GDP ratio. In a hypothetical scenario of low nominal growth rates, given the high level of government debt and burden of interest payments, it is essential for there to be binding fiscal rules that guarantee the sustainability of debt.



FIGURE 38. DEBT-TO-GDP RATIO EVOLUTION FOR THE 2017-2030 PERIOD. SENSITIVITY ANALYSIS

Within the framework of a stochastic analysis, the debt path outlined in the SPU is within the estimated intervals (although the path is slightly optimistic in 2020). The nature of the aforementioned sensitivity exercises fails to capture the uncertainty around economic forecasts. To round off the analysis, a stochastic modelling approach is performed to capture a myriad of shocks which jointly affect the nominal growth of GDP, interest on debt and the primary balance (assessing whether the fiscal response function coincides with historical experience).¹⁹ According to this stochastic analysis, the likelihood of a debt-to-GDP ratio exceeding the SPU's forecasts is more than 35% in 2017 and, as the forecast



horizon increases, it doubles to 70% by 2020, as shown in Figure 39.



Source: AIReF and MINHAFP

¹⁹ Details of the model can be found in Cuerpo, C. (2014). "<u>Spanish Public Debt Sustainability Analysis</u>" Working Documents series, DT/2014/2, AIReF.



5. Recommendations and best practice suggestions

5.1. Recommendations

Fiscal rules transparency and assessment

Since its creation, AIReF has emphasized the importance of coordinating the SPU's fiscal outlook and the compliance of an established path implied in the different Public Administrations annual budgets, taken as a whole. The SPU, which is submitted to the European Commission, contemplates a multiannual scenario into which annual budgets must fit that delimit the actions of the GG sector by legislating how much, when and on what monies can be spent, bearing in mind envisaged funding.

The SPU is a mid-term national fiscal plan, in accordance with Article 4 of (EU) Regulation 473/2013, and so it has to comply with the requirements established for multi-annual frameworks under Article 29 of the LOEPSF and Directive 2011/85/EU of the European Council of November 8th 2011 on the requirements applicable to the budgetary frameworks of Member States.

As a result, in matters concerning transparency, the recommendations made in previous reports are reiterated on the need for both the SPU and the individual budgets of each Public Administration to include all necessary data in order to corroborate the coherence of the macroeconomic outlook with the budgetary scenario; to assess coherence with the budgetary stability and debt targets and expenditure rule; and to assess the sufficiency of the commitments undertaken by each Public Administration.

In particular, **AIReF recommends that:**

1. The SPU should include:

- ✓ A "no-policy-change" macroeconomic outlook and the individual quantification of the impact of adopted or envisaged measures so as to ensure a better understanding of the forecasts and so as to establish the explicit link between the macroeconomic outlook and the budgetary scenario at all times.
- Budgetary projections in a no-policy-change scenario with no measures, both for the GG sector and for each of the subsectors.
- ✓ Budgetary projections including measures both for the GG sector and for each of the subsectors, thus offering an insight into what share of the fiscal adjustment would be achieved through the adoption of these measures.
- ✓ Government debt targets by subsectors.
- ✓ Detailed information relating to each subsector for the analysis of the expenditure rule: eligible expenditure, and the reference rates for calculating the expenditure rule for all the years encompassed by the SPU.
- ✓ More information on the risks that might affect the budgetary stability or debt targets, were they to materialize.



Budgetary Stability

The consolidation path shown in the 2017-2020 SPU implies a fiscal adjustment of 4 p.p. of GDP to reach the target of -0.5% of GDP by 2020. AIReF considers that a) there are risks that might hinder the achievement of this path by the GG sector and b) the target distribution among subsectors is not realistic.

Although the SPU states that LCs will, most likely, continue to run a fiscal surplus over the next few years, the forecast for this subsector again envisages a budget equilibrium scenario. In contrast, AIReF believes that it is unlikely for the SSF to achieve its set target by 2020. Thus, although revenue and expenditure are not detailed by subsectors, given the nature of the Social Security's revenue and expenditure (social security contributions and benefits or pensions), it is possible to gain an idea of the budgetary situation of the SSF, observing that the deficit path for this subsector entails a yearly adjustment of 0.2 tenths of a percentage point of GDP in 2018 and 2019, and a particularly demanding adjustment in 2020, the year when over half the adjustment for the whole period is concentrated without any measures being contemplated to guarantee this result.

Once again, the distortion in the vertical distribution of the fiscal targets should be highlighted, leading to serious malfunctions in terms of the fiscal discipline framework established in the LOEPSF. As indicated in the joint assessment of the GG sector's budgetary stability target for 2017, drawn up by AIReF last April 25th, failure to recognize the local surplus in the establishment of budgetary stability targets for different levels of government, and failure to consider the relative position of each subsector in terms of expenditure and revenue lead to serious malfunctions in the application of the said law.

Therefore, AIReF recommends once more that:

2. Expenditure needs, revenue sufficiency and the expenditure rule should be incorporated in the budgetary stability target allocation process among different levels of Government, thus avoiding the inconsistencies noted in the LOEPSF's individual application to each Administration and the joint assessment of the GG sector. In particular, estimates of the LCs surplus should be taken into account when targets are set, without expecting the said surplus to offset deviations in other subsectors at the close of the year.

Debt target

The SPU debt forecast is coherent with the targets set in December but it does not allow for compliance with the 1st Transitional Provision of the LOEPSF. In accordance with this provision, by 2020 the level of Government debt should stand at 60% of GDP. To achieve this, as soon as the Spanish economy reaches a real annual growth rate of at least 2%, the debt-to-GDP ratio should be reduced by a minimum yearly rate of 2% of GDP. The SPU's forecasts for debt envisage a cumulative reduction across the whole period of less than the 8 percentage points of GDP required to comply with the 1st Transitional Provision. This path will therefore not achieve the said target by the established deadline (2020).



As a result, *AIReF once again recommends that:*

3. The appropriate legal mechanisms should be used to revise the 1st Transitional Provision of the LOEPSF so that the forecast paths are stringent but realistic and lead to convergence with the reference levels established in Article 13 of the said law.

Application of the fiscal discipline framework

Article 17.3 of the LOEPSF establishes that by the 15th of April of each year, MINHAFP should issue the Government with an initial report on the level of compliance with the stability and public debt targets and expenditure rule during the previous fiscal year. Based on the publication of this report, the different Public Administrations that have failed to comply with one of the fiscal rules then have a deadline of one month to draw up and submit an Economic & Financial Plan (EFP) for 2017-2018 that would rectify the deviations. The SPU alludes on several occasions to the rigorous application of the LOEPSF and improved transparency, a context in which the early application of corrective measures plays a key role, with confirmation of non-compliance of the fiscal rules being necessary for these measures to be put into practice.

To achieve this *AIReF recommends the following:*

4. That MINHAFP should publish, at the earliest opportunity, its first report on the level of compliance with the stability and public debt targets and expenditure rule in 2016 (Article 17.3 of the LOEPSF).

At the same time, in different parts of the SPU, mention is made of the additional fiscal conditions demanded of the ARs in exchange for benefitting from the 2016 ARs Liquidity Fund. In particular, it refers to compulsory adherence to the healthcare expenditure rule or to the need to offset part of the deviation from the 2016 deficit target in later budgets. The Government Delegated Commission for Economic Affairs (CDGAE) must assess compliance with the healthcare expenditure rule in 2016 and determine the percentage of any deviation in 2016 that must be offset in later years. Failure to comply with the healthcare expenditure rule has a big impact in fiscal and budgetary terms for the ARs and so *AIReF recommends that*.

5. The CDGAE's assessment of the ARs' level of compliance with the 2016 healthcare expenditure rule should be published. Similarly, the percentage overrun of the 2016 target that must be offset in subsequent budgets should be published, specifically indicating the years when this deviation must be offset.



5.2. Best practice suggestions

AIReF also offers the Government two suggestions regarding best practices in matters concerning transparency:

- 1. To integrate the key elements of forecasts into a simplified national accounting framework, thus offering an insight into the links between economic activity, demand and employment, on the one hand, and income flows and borrowing requirements, on the other.
- 2. To provide more information on the methodologies, assumptions and parameters on which the forecasts are based, in line with Directive 2011/85 on budgetary frameworks, and Article 29 of the LOEPSF which defines the contents of the GG sector's mid-term budget programmes.
- 3. To incorporate the latest available data into the analysis of the ARs' budgets, such as budget frameworks, the main aspects of ARs' budgets or draft budgets, and not to limit the analysis to just approved budgets, to make a more comprehensive accurate appraisal of the subsector.



APPENDIX: TABLES AND CHARTS

Basic Hypotheses of 2017-2020 SPU's Macroeconomic Outlook

| Annual change in % | , unless otherwise indicated |
|--------------------|------------------------------|
|--------------------|------------------------------|

| | 2016 | ∆ SPU 16-19 | 2017 | ∆ SPU 16-19 | 2018 | ∆ SPU 16-19 | 2019 | ∆ SPU 16-19 | 2020 |
|--|------|----------------|------|----------------|------|----------------|------|----------------|------|
| Short-term interest rates (3-month Euribor) | -0.3 | 0.0 | -0.3 | 0.0 | -0.1 | -0.2 | 0.0 | 0.0 | 0.1 |
| Long-term interest rates (10-year Government debt, Spain) | 1.4 | -0.3 | 1.7 | -0.2 | 2.1 | -0.4 | 2.5 | 0.0 | 2.8 |
| Exchange rate (dollar/euro) | 1.11 | 0.0 | 1.07 | 0.0 | 1.08 | 0.0 | 1.07 | 0.0 | 1.07 |
| Nominal effective exchange rate Euro Area (% change) | 2.7 | 1.5 | 0.5 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Growth of world GDP, excluding EU | 3.2 | -0.2 | 3.7 | 0.0 | 3.9 | 0.0 | 4.0 | 0.1 | 4.1 |
| Growth of GDP in Euro Area | 1.8 | 0.4 | 1.7 | 0.0 | 1.8 | -0.1 | 1.8 | -0.1 | 1.8 |
| Volume of world imports excluding EU | 0.9 | -1.3 | 3.0 | -0.5 | 3.8 | -0.7 | 3.8 | -0.7 | 3.7 |
| Spanish export markets | 2.9 | -1.2 | 3.6 | -1.3 | 3.9 | -1.2 | 3.7 | -1.4 | 3.8 |
| Price of crude oil (Brent, dollars/barrel) | 44.8 | 5.1 | 53.5 | 8.2 | 53.2 | 7.9 | 53.2 | 7.9 | 53.2 |
| 2017-2020 Forecast. | | | | | | | | | |
| Source: Furonean Commission & Ministry for the Economy, Industry & Competitiveness | | | | | | | | | |

Forecasts by International Bodies

| | (% change in relation to previous je | un, unicas ou | ici mise indice | //// | | | | | | |
|----------------------------|--|---------------|-----------------|------|-------|------|-------|------|-------|------|
| | | 2016 | ∆ SPU | 2017 | ∆ SPU | 2018 | ∆ SPU | 2019 | ∆ SPU | |
| | | | 16-19 | | 16-19 | | 16-19 | | 16-19 | 2020 |
| | World GDP (except Euro Area) | 3.1 | -0.1 | 3.5 | -0.3 | 3.8 | -0.1 | 3.8 | - | - |
| | GDP of Euro Area | 1.7 | 0.3 | 1.8 | 0.1 | 1.7 | -0.1 | 1.6 | - | - |
| | Imports of goods and services (except Euro Area) | 1.2 | -1.0 | 3.4 | -0.4 | 3.7 | -0.4 | 3.8 | - | - |
| ECB | Prices Brent-type crude oil (USD per barrel) | 44.0 | 9.1 | 56.4 | 15.2 | 56.5 | 11.6 | 55.9 | - | - |
| (March 2017) | 3-month Euribor (%) | -0.3 | 0.0 | -0.3 | 0.0 | -0.2 | 0.0 | 0.0 | - | - |
| | Interest rates of 10-year Government debt in Euro Area (%) | 0.8 | -0.4 | 1.3 | -0.1 | 1.6 | -0.1 | 1.9 | - | - |
| | Exchange rate USD/EUR (level) | 1.11 | 0.00 | 1.07 | -0.05 | 1.07 | -0.05 | 1.07 | - | - |
| | Effective exchange rate of euro | 3.7 | -1.1 | -1.0 | -1.2 | 0.0 | 0.0 | 0.0 | - | - |
| | World GDP | 3.1 | -0.1 | 3.5 | -0.1 | 3.6 | 0.0 | 3.7 | -0.1 | 3.7 |
| | GDP of Euro Area | 1.7 | 0.2 | 1.7 | 0.0 | 1.6 | 0.1 | 1.6 | 0.0 | 1.5 |
| IMF | GDP of EU | 1.9 | 0.1 | 2.0 | 0.0 | 1.8 | -0.1 | 1.8 | -0.1 | 1.8 |
| (WEO April 2017) | Trade of goods and services | 1.9 | -1.2 | 3.8 | 0.0 | 3.9 | -0.2 | 4.0 | -0.3 | 4.0 |
| | Prices Brent-type crude oil (USD per barrel) | 42.7 | 6.6 | 55.2 | 13.0 | 55.1 | 9.7 | 54.1 | 6.3 | 54.0 |
| | 3-month Libor (%) | -0.3 | 0.0 | -0.3 | 0.1 | -0.2 | - | - | - | - |
| | World GDP | 3.0 | -0.3 | 3.4 | -0.1 | 3.6 | - | - | - | - |
| European Commission | GDP of Euro Area | 1.7 | 0.0 | 1.6 | -0.3 | 1.8 | - | - | - | - |
| (February 2017) | GDP of EU | 1.9 | 0.0 | 1.8 | -0.2 | 1.8 | - | - | - | - |
| | World imports of goods and services | 1.7 | -1.9 | 3.3 | -1.0 | 3.8 | - | - | - | - |
| OFCD | OECD GDP | 1.7 | -0.5 | 2.0 | -0.3 | 2.3 | - | - | - | - |
| (November 2016) | GDP of Euro Area | 1.7 | -0.1 | 1.6 | -0.3 | 1.6 | - | - | - | - |
| (14076111061 2010) | Trade of goods and services | 1.9 | -1.7 | 2.9 | -1.9 | 3.2 | - | - | - | - |
| Market expectations (April | Long-term interest rates (10-year Government debt, Spain) | 1.4 | -0.2 | 1.7 | -0.2 | 1.9 | -0.3 | 2.2 | -0.3 | 2.5 |
| 2017) | Prices of Brent-type crude oil (USD per barrel) | 43.3 | -1.2 | 53.5 | 6.6 | 53.6 | 4.8 | 53.4 | 3.2 | 53.8 |
| 2017-2020. forecast | | | | • | | - | | • | | |



Macroeconomic Outlook of 2017-2020 SPU

| | | ∆ SPU | | ∆ SPU | | ∆ SPU | | ∆ SPU | |
|---|---------|---|---------|-------|---------|-------|---------|-------|---------|
| | 2016 | 16-19 | 2017 | 16-19 | 2018 | 16-19 | 2019 | 16-19 | 2020 |
| GDP | 3.2 | 1 | 2.7 | 10-17 | 2.5 | 10-17 | 2.4 | 10-17 | 2.4 |
| GDP at current prices: thousands of millions of euros | 1,113.9 | _ | 1,161.1 | | 1,209.1 | | 1,259.9 | | 1,312.7 |
| GDP at current prices: % change | 3.6 | - I | 4.2 | | 4.1 | 1 | 4.2 | 0 | 4.2 |
| | | | | | | | | | |
| DEM AND COM PONENTS (% real change) | | | | | | 1 | | 1 | |
| Final domestic consumption expenditure | 2.6 | | 2.1 | | 2.0 | | 1.9 | | 1.8 |
| - Private final domestic consumption expenditure (a) | 3.2 | | 2.6 | _ | 2.4 | | 2.3 | | 2.2 |
| - Final consumption expenditure by Public Administrations | 0.8 | | 0.8 | | 0.7 | | 0.7 | | 0.7 |
| Gross fixed capital formation | 3.8 | | 2.8 | | 2.6 | | 3.2 | | 3.4 |
| - Gross fixed capital formation | 3.1 | | 2.8 | | 2.6 | | 3.3 | | 3.5 |
| Tangible fixed assets | 3.1 | | 2.9 | | 2.7 | | 3.4 | | 3.6 |
| Construction | 1.9 | the second se | 2.1 | 4 | 2.2 | | 3.0 | | 3.4 |
| Equipment and cultivated assets | 5.0 | | 4.0 | | 3.3 | | 4.0 | | 4.0 |
| - Changes in stock (contribution in p.p.) | 0.1 | | 0.0 | | 0.0 | | 0.0 | | 0.0 |
| Domestic demand (contribution to growth of GDP) | 2.8 | 0 | 2.2 | | 2.1 | | 2.1 | | 2.1 |
| Exports of goods and services | 4.4 | | 5.5 | L | 4.9 | | 4.7 | | 4.5 |
| Imports of goods and services | 3.3 | | 4.3 | | 4.1 | | 4.2 | | 4.1 |
| External balance (contribution to growth of GDP) | 0.5 | | 0.5 | | 0.4 | | 0.3 | | 0.3 |
| PRICES (% change) | | | | | | | | | |
| GDP deflator | 0.3 | | 15 | П | 16 | 1 | 17 | | 17 |
| Private final consumption expenditure deflator | -0.2 | | 1.5 | Ĩ | 1.6 | Ò | 1.7 | | 1.8 |
| LABOUR& EMPLOYMENT COSTS (% change) | | | | | | | | | |
| Compensation (labour cost) per employee | 0.0 | | 13 | | 15 | | 16 | П | 17 |
| Total compensation (labour cost) | 3.1 | _ | 3.8 | • | 4.0 | | 4 1 | | 4 1 |
| Total employment (b) | 2.0 | П | 2.5 | П | 21 | 1 | 23 | | 2.3 |
| Salaried employment (b) | 2.5 | | 2.5 | ň | 2.4 | I | 2.5 | | 2.0 |
| Output per worker (b) | 0.4 | | 2.0 | U | 2.5 | | 2.4 | 1 | 2.4 |
| Unit labour cost (ULC) | 0.4 | | 0.5 | | 0.1 | U II | 1.5 | | 0.2 |
| Unit labour cost (ULC) | -0.4 | | 1.0 | • | 1.4 | U | 1.5 | · · | 6.1 |
| Pro momoria (data Working Population Survey) | | | | | | | | | |
| Employment: % working population | 19.6 | 0 | 17.5 | | 15.6 | 0 | 13.7 | | 11.9 |
| | | | | | | | | | |
| PUBLIC SECTOR | | | | п | | | | m | |
| Public Administration net lending (+) / borrowing (-) (Stab. Prog | -4.5 | | -3.1 | U | -2.1 | | -1.8 | | -1.4 |
| EXTERNAL SECTOR (% GDP) | | | | | | | | | |
| Trade balance (fob-fob) | -1.6 | | -1.4 | | -1.1 | | -1.1 | | 0.0 |
| External trade balance on goods and services | 2.9 | | 3.2 | _ | 3.5 | _ | 3.6 | _ | 0.0 |
| Current account balance | 1.9 | | 1.9 | | 1.8 | _0 | 1.6 | | 1.6 |
| Net lending (+) / borrowing (-) in relation to rest of world | 2.0 | 0 | 2.0 | 0 | 1.9 | | 1.8 | | 1.7 |
| 2017-2020 Forecast | | | | | | | | | |

(a) Households & NPISHs (b) FTE employment SOURCE: INE & Ministry for the Economy & Competitiveness

Gross Domestic Product









Government Budget

0.0

Gross Fixed Capital Formation



Employment







Source: INE, MINECO y AIReF own estimates.

OFFICIAL SPU FORECASTS AND ASSOCIATED ERRORS (%)





(% var) 4.0 3.0 2.0 1.0 0.0 -1.0 -2.0 -3.0 -4.0 -5.0 2013 2014 2015 2016 2017 2018 2019 - SPU 2015 -SPU 2016

Public Consumption







Source: Ministry for the Economy and Competitiveness

OFFICIAL SPU FORECASTS AND ASSOCIATED ERRORS (%)













Source: Ministry for the Economy and Competitiveness