Independent Authority for Fiscal Responsibility

Study

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Budgetary and macroeconomic scenario under a no-policy-change assumption for 2018 and 2019

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Executive summary

The Government has required the Independent Authority for Fiscal Responsibility (AIReF) to prepare a study presenting its budgetary and macroeconomic scenario for 2018 and 2019, under a no-policy-change assumption. Article 5 of Organic Law 6/2013, 14th November, which created AIReF, establishes that this institution can carry out studies at the behest of, among others, the Central Government. With the legal authority thus established, the Government has requested AIReF to prepare a no-policy-change budgetary scenario for 2018 and 2019, i.e., based on a no-policy-change macroeconomic outlook and revenue and expenditure dynamics within the current fiscal and budgetary provisions.

AIReF has projected six quarters (the last two quarters of 2018 and 2019 in full) for its macroeconomic outlook under a no-policy-change assumption. Firstly, AIReF has set the expected international context, based on technical assumptions taken from the main international organizations forecasts. Then, the forecast of the main macroeconomic variables was conducted using short- and long-term empirical models developed by AIReF. This projection exercise was concluded by conducting a consistency check looking at the deviations with respect to long-term economic trends and digging into different sectoral accounts within a simplified framework of national accounts.

The budgetary prospects were prepared following a *bottom-up* approach, using available data from different units comprising the subsectors of the General Government Sector. **The forecast methodology differs between the year 2018 and 2019.** AIReF's budgetary prospects are prepared by subsectors. In the case of the Autonomous Regions, figures at the subsector level have been obtained by aggregating each individual Region. Likewise, the Social Security Funds forecast aggregate was obtained by aggregating the Social Security System, the Public State Employment Service (SEPE, by its Spanish acronym) and the Wage Guarantee Fund (FOGASA). AIReF used budgetary execution information from the first half of 2018, basing its estimates on observed data up to the month of April and, for some variables, May.

The consistency between the budgetary and the macroeconomic outlook is ensured through two main channels: public consumption and tax revenue. The forecast for public consumption is prepared iteratively, using a two-fold perspective. The starting point is a *top-down* macroeconomic forecast, used as reference point. This initial forecast is then adjusted using the disaggregated estimate from the *bottom-up* approach. Second, the forecast for the main tax figures is linked to the macroeconomic scenario, which is provided with a high level of detail, using a

simplified system of National Accounts. Third, revenue figures are projected using structural models, which include long-term equilibrium relationships. This forecast approach ensures consistency between the net borrowing figures at a sectoral level and aggregate demand components.

AIReF forecasts a General Government deficit of 2.7% of GDP for 2018 and of 2.2% of GDP for 2019 under the no-policy-change assumption. This forecast entails a deficit reduction of 0.4% of GDP in 2018 and 0.5% in 2019, based on a 0.5 percentage points (pp.) increase in 2018 in the non-financial resources ratio to GDP, and a 0.4 pp. reduction in the expenditure to GDP ratio, mainly in 2019. The bulk of this adjustment is expected to materialize within the Central Government subsector. For the remaining General Government subsectors, the projected deficit-to-GDP ratio does not show sizeable changes until the end of 2019 (See table and charts below).

This expected reduction in the government deficit under the no-policy-change assumption is consistent with a macroeconomic outlook defined by relatively strong growth rates, coupled with more dynamic prices and wages. The expected pace of GDP growth for 2018 (2.8%) and 2019 (2.6%) under the no-policy-change assumption continues to be robust, albeit less than in previous years. The main driver is domestic demand, with a slight positive contribution from external demand. In line with the performance of economic activity, job creation is expected to continue throughout the forecast horizon, with productivity growth in line with its historical pattern. The scenario under the no-policy-change assumption foresees a recovery in compensation per employee growth in 2018 (1.5%) and 2019 (2%), in line with inflation. This can be seen in the chart below, which provides key figures for the macroeconomic outlook. Dynamic job creation along with a recovery of prices and wages and an upturn in real-estate activity ultimately lead to relatively high rates of growth for the main fiscal revenue items, thereby facilitating deficit correction within the no-policy-change scenario.

AIReF forecasts a reduction in the General Government deficit in the second half of 2018, in line with the one recorded in the first half of the year. According to the latest available information, AIReF estimates that during the first half of the year the General Government deficit fell by two tenths of a percentage of GDP, reaching 2.9% of GDP. AIReF projects that in the second half of 2018 there will be a further deficit correction of two-tenths of a percentage point of GDP, based mainly on an increase in the share of revenue of 0.4% of GDP, partially offset by a 0.2% of GDP increase in the expenditure to GDP ratio.

Under the no-policy-change assumption, the budgetary prospects for 2018 envisage that the revenue-to-GDP ratio reaches 38.4% while expenditure keeps its weight in terms of GDP. The latest available data on excise duties receipts and the first instalment of corporate income tax payments happened to be worse than initially expected. However, this negative performance was offset by other revenue

items, especially income tax. In the second half of 2018, a substantial increase in revenue is expected, mainly those related to EU funds. On the other hand, it is expected that the personal income tax reform will ballast the buoyant performance observed so far. On the expenditure side, the reduction on their ratio to GDP recorded in the first half of 2018 is expected to revert, with spending growing at a faster pace as the General State Budget Law for 2018 comes into force. Measures to boost public employees' wages and pensions have a retroactive impact since the beginning of 2018 and will be cashed out during the second half of the year. Consequently, the downward trend in expenditure will not continue in the second half and it is projected to stay at around 41.1% of GDP by end of the year.

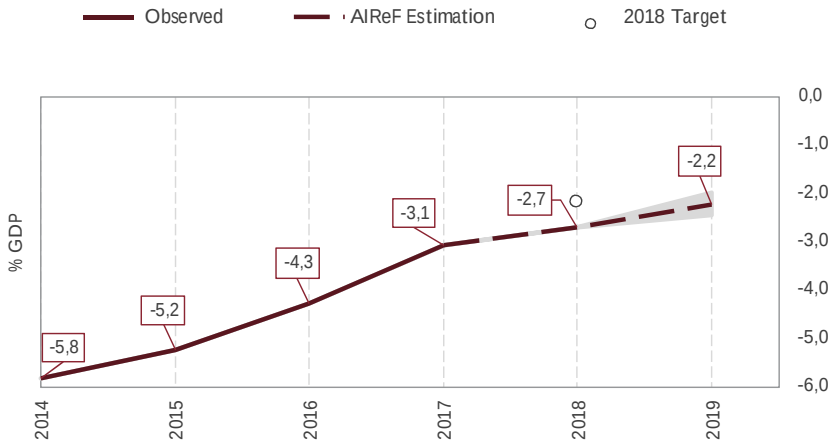
The no-policy-change budgetary scenario for 2019 forecasts revenue growth in line with nominal GDP and a five-tenths reduction in the expenditure-to-GDP ratio. The negative effect of the personal income tax reform, together with lower growth of tax bases will foreseeably lead to lower growth in revenue in 2019, in comparison to 2018. Tax collection is expected to grow at around 5% while property income and other revenue will go down slightly with respect to 2018. The overall impact of these developments suggests revenue will remain at 38.4% of GDP. The share of expenditure in GDP will continue to go down, albeit at a slower pace than in previous years, reaching 40.6% of GDP. Social transfers (mainly pensions) are expected to growth at approximately 4.8%. Compensation of employees will grow faster than in 2018, owing to the agreement with trade unions. In the opposite direction, public investment decrease, as compared to the 2018 forecast, due to the non-recurring nature of the State's liability stemming from the reversion of the concessions on certain toll roads that was booked in 2018 and the estimated impact of the possible call for tenders to operate these roads in 2019. Likewise, the ratio of interest payments on public debt is expected to decrease as in previous years.

BUDGETARY AND MACROEOCNOMIC PROSPECTS FOR 2018 AND 2019 UNDER THE NO-POLICY-CHANGE ASSUMPTION

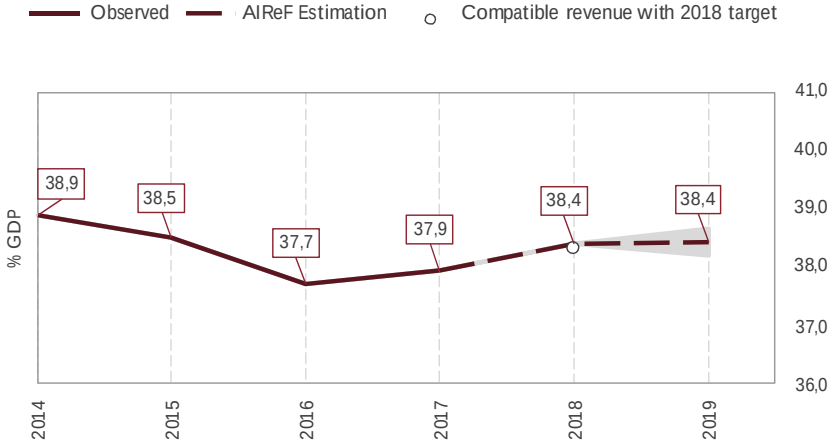
TOTAL GENERAL GOVERNMENT	97-2001	2002	2014	2015	2016	2017	2018	2019	17/16	18/17	19/18
A. TOTAL GENERAL GOV. REVENUE	**38,1**	**38,2**	**38,9**	**38,5**	**37,7**	**37,9**	**38,4**	**38,4**	**4,6**	**5,7**	**4,4**
1. Total taxes	21,4	21,7	22,3	22,5	22,0	22,3	**22,6**	**22,8**	**5,2**	**6,1**	**5,3**
1.1. Taxes on production and imports	*11,2*	*11,1*	*11,5*	*11,8*	*11,6*	*11,6*	***11,8***	***11,9***	***4,3***	***6,3***	***5,6***
1.2. Current taxes on income and wealth	*9,9*	*10,3*	*10,2*	*10,1*	*9,9*	*10,2*	***10,4***	***10,4***	***7,3***	***5,9***	***5,1***
1.3. Taxes on capital	*0,4*	*0,4*	*0,5*	*0,6*	*0,6*	*0,5*	***0,5***	***0,5***	***-11,4***	***2,8***	***2,9***
2. Social contributions	12,6	12,7	12,5	12,3	12,2	12,3	**12,3**	**12,3**	**4,9**	**4,7**	**4,2**
3. Property income and other	4,1	3,8	4,1	3,7	3,5	3,3	**3,4**	**3,3**	**-0,4**	**7,6**	**-0,6**
B. TOTAL GENERAL GOV. EXPENDITURE	**40,0**	**38,6**	**44,8**	**43,8**	**42,2**	**41,0**	**41,1**	**40,6**	**1,1**	**4,6**	**3,2**
1. Compensation of employees	10,2	9,7	11,1	11,1	10,8	10,6	**10,4**	**10,4**	**1,2**	**3,1**	**3,7**
2. Intermediate consumption	4,0	4,2	5,3	5,3	5,1	5,0	**4,9**	**4,8**	**2,1**	**2,5**	**2,8**
3. Social transfers in kind	2,2	2,4	2,7	2,6	2,6	2,6	**2,5**	**2,5**	**2,4**	**2,4**	**2,6**
4. Social transfers other than in kind	12,0	11,6	16,5	15,8	15,5	15,3	**15,3**	**15,4**	**2,4**	**4,7**	**4,8**
5. Interest	3,6	2,6	3,5	3,1	2,8	2,6	**2,4**	**2,3**	**-5,0**	**-4,1**	**0,8**
6. Gross fixed capital formation	3,7	4,0	2,1	2,5	1,9	2,0	**2,3**	**2,1**	**8,4**	**20,0**	**-2,2**
7. Subsidies and other	4,2	4,1	3,7	3,4	3,4	3,1	**3,3**	**3,2**	**-6,4**	**11,6**	**0,8**
Net lending (+)/Borrowing (-)	**-2,0**	**-0,4**	**-6,0**	**-5,3**	**-4,5**	**-3,1**	**-2,7**	**-2,2**			
CENTRAL GOVERNMENT	**-1,7**	**-0,6**	**-3,7**	**-2,8**	**-2,7**	**-1,9**	**-1,4**	**-0,8**			
SOCIAL SECURITY FUNDS	**0,1**	**0,8**	**-1,0**	**-1,2**	**-1,6**	**-1,5**	**-1,5**	**-1,6**			
REGIONAL GOVERNMENTS	**-0,4**	**-0,5**	**-1,8**	**-1,7**	**-0,8**	**-0,3**	**-0,3**	**-0,3**			
LOCAL GOVERNMENTS	**0,0**	**-0,1**	**0,5**	**0,4**	**0,6**	**0,6**	**0,6**	**0,5**			
Pro memoria											
GDP Volume[a]	**4,4**	**2,9**	**1,4**	**3,4**	**3,3**	**3,1**	**2,8**	**2,6**			
Contribution to GDP growth											
Domestic Demand	**4,9**	**3,6**	**1,9**	**3,9**	**2,5**	**2,8**	**2,7**	**2,5**			
Net exports	**-0,5**	**-0,7**	**-0,5**	**-0,4**	**0,7**	**0,3**	**0,2**	**0,1**			
GDP Deflator[a]	**3,0**	**4,1**	**-0,2**	**0,6**	**0,3**	**1,0**	**1,6**	**1,7**			
GDP Nominal[a]	**7,5**	**7,1**	**1,2**	**4,1**	**3,6**	**4,0**	**4,4**	**4,4**			
GDP Nominal *(Thousands of millions €)*	**602,4**	**749,3**	**1037,8**	**1080,0**	**1118,5**	**1163,7**	**1215,0**	**1268,2**			
Employment FTE[a] Unemployment	**4,2**	**2,49975**	**1,0**	**3,2**	**3,0**	**2,8**	**2,5**	**2,2**			
rate[b] Compensation per	**14,1**	**11,4259**	**24,4**	**22,1**	**19,6**	**17,2**	**15,2**	**13,4**			
employee FTE[a] General	**2,6**	**3,51906**	**0,1**	**1,6**	**-0,3**	**0,1**	**1,5**	**2,0**			
Government Debt	**60,0**	**51,3**	**100,4**	**99,4**	**99,2**	**98,3**	**97,0**	**95,3**			

Figures in GDP percentage unless otherwise stated, (a) annual percentage change; (b) percentage of labour force

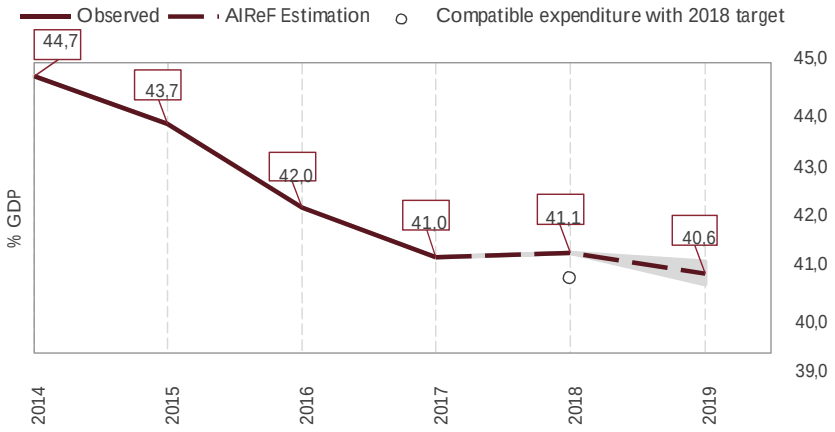
GENERAL GOVERNMENT NET LENDING (+) / BORROWING (-) CAPACITY



GENERAL GOVERNMENT. TOTAL REVENUE 2018-2019



GENERAL GOVERNMENT. TOTAL EXPENDITURE 2018-2019



ANNEX: TABLES AND CHARTS

TABLE I. MACROECONOMIC SCENARIO: DEMAND AND INCOME COMPONENTS

REAL	2014	2015	2016	2017	2018	2019
GDP *(% var unless otherwise stated)*	**1.4**	**3.4**	**3.3**	**3.1**	**2.8**	**2.6**
Total Consumption *(GDP growth contribution)*	*0.8*	*2.2*	*1.9*	*1.7*	*1.6*	*1.5*
Private Consumption	*1.5*	*3.0*	*3.0*	*2.4*	*2.3*	*2.2*
Public Consumption	*-0.3*	*2.1*	*0.8*	*1.6*	*1.3*	*1.4*
GFCF - Equipment & Biological Resources	*6.0*	*11.6*	*4.9*	*6.1*	*4.8*	*4.2*
GFCF - Housing & Intellectual Property	*4.0*	*4.0*	*2.5*	*4.4*	*5.4*	*5.1*
Domestic Demand *(GDP growth contribution)*	*1.9*	*3.9*	*2.5*	*2.8*	*2.7*	*2.5*
Exports	*4.3*	*4.2*	*4.8*	*5.0*	*5.0*	*4.5*
Imports	*6.6*	*5.9*	*2.7*	*4.7*	*4.9*	*4.5*
Foreign Demand *(GDP growth contribution)*	*-0.5*	*-0.4*	*0.7*	*0.3*	*0.2*	*0.1*
Output gap *(% Potential GDP)*	**-5.7**	**-4.5**	**-3.1**	**-1.9**	**-0.7**	**0.4**
PRICES	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
GDP Deflator (% var unless otherwise stated)	**-0.2**	**0.6**	**0.3**	**1.0**	**1.6**	**1.7**
Private Consumption	*0.2*	*-0.1*	*-0.1*	*1.8*	*1.6*	*1.5*
Public Consumption	*0.4*	*1.3*	*0.1*	*0.3*	*1.4*	*2.0*
GFCF - Equipment & Biological Resources	*-0.8*	*0.3*	*1.3*	*0.1*	*1.4*	*1.3*
GFCF - Housing & Intellectual Property	*-0.4*	*0.5*	*0.9*	*2.8*	*3.8*	*3.4*
Exports	*-1.5*	*0.6*	*-1.1*	*2.5*	*1.6*	*1.3*
Imports	*-0.7*	*-0.5*	*-1.6*	*4.4*	*2.3*	*1.5*
NOMINAL	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
GDP *(% var unless otherwise stated)*	**1.2**	**4.1**	**3.6**	**4.0**	**4.4**	**4.4**
Private Consumption	*1.7*	*2.9*	*2.9*	*4.2*	*3.9*	*3.7*
Public Consumption	*0.1*	*3.4*	*0.9*	*1.9*	*2.7*	*3.4*
GFCF - Equipment & Biological Resources	*5.2*	*12.0*	*6.3*	*6.2*	*6.2*	*5.5*
GFCF - Housing & Intellectual Property	*3.6*	*4.5*	*3.4*	*7.4*	*9.2*	*8.5*
Change in inventories	*-458.4*	*272.7*	*-8.2*	*24.7*	*6.6*	*0.0*
Exports	*2.7*	*4.8*	*3.6*	*7.7*	*6.6*	*5.8*
Imports	*5.8*	*5.4*	*1.1*	*9.2*	*7.2*	*6.0*
GDP in levels *(Thousands of million €)*	*1,038*	*1,080*	*1,119*	*1,164*	*1,215*	*1,268*
Income Approach						
GDP	***1.2***	***4.1***	***3.6***	***4.0***	***4.4***	***4.4***
Compensation of Employees	*1.3*	*5.3*	*2.9*	*3.3*	*4.1*	*4.2*
Gross Operating Surplus	*0.3*	*1.7*	*4.9*	*4.8*	*4.2*	*4.1*
Taxes on prod. and imports less subsidies on prod.	*4.3*	*8.4*	*1.4*	*4.5*	*6.8*	*5.9*
Households savings rate *(% Gross Disposable Income)*	***9.4***	***8.4***	***6.8***	***5.7***	***6.5***	***7.4***

TABLE 2. EMPLOYMENT AND POPULATION

	2014	2015	2016	2017	2018	2019
Employment (% var unless otherwise stated)						
Employment FTE	**1.0**	**3.2**	**3.0**	**2.8**	**2.5**	**2.2**
Private Sector	*1.0*	*3.7*	*3.2*	*3.2*	*2.9*	*2.5*
Public Sector	*1.3*	*1.3*	*2.2*	*1.4*	*1.0*	*1.0*
Compensation per employee FTE	**0.1**	**1.6**	**-0.3**	**0.1**	**1.5**	**2.0**
Private Sector	*0.1*	*1.4*	*-0.4*	*0.3*	*1.4*	*1.8*
Public Sector	*0.0*	*2.6*	*-0.1*	*0.0*	*2.1*	*2.7*
Productivity per worker	*0.3*	*0.3*	*0.3*	*0.2*	*0.3*	*0.5*
Unit labor Cost	*-0.2*	*1.4*	*-0.6*	*0.2*	*1.2*	*1.6*
Population						
Total Population	-0.3	-0.1	0.1	0.2	0.0	0.0
Labour Force	-1.0	-0.1	-0.4	-0.4	0.0	0.1
Unemployment rate *(% Labour Force)*	24.4	22.1	19.6	17.2	15.2	13.4

Note: Public Sector refers to General Government, Defence, Mandatory Social Security, Education, Health and Social Services.

TABLE 3. EXTERNAL ASSUMPTIONS

	2014	2015	2016	2017	2018	2019
European Union GDP growth	1.8	2.2	1.9	2.6	2.3	2.0
Nominal effective exchange rate *(ESP/OECD)*	*0.0*	*-3.0*	*0.8*	*1.2*	*1.3*	*0.0*
Short-term interest rate (Spanish Government T-bills) *(%)*	0.4	0.1	-0.1	-0.3	-0.3	0.0
Long-term interest rate (Spanish Government bonds) *(%)*	*2.7*	*1.7*	*1.4*	*1.6*	*1.4*	*1.6*
Interest rate private sector *(NFC < 1 M € new op) (%)*	*4.9*	*3.8*	*3.2*	*2.9*	*2.7*	*2.5*
Crude Oil ($/barrel) *(average)*	*99.4*	*52.2*	*43.3*	*54.3*	*72.7*	*72.2*

TABLE 4. COMPARISON WITH NATIONAL FORECASTERS

	FUNCAS Consensus		BdE		AIReF	
	20	2019	2018	2019	2018	2019
Last update	*Jul-18*		*Jun-18*		*Jul-18*	
GDP	2	2.4	2.7	2.4	2.8	2.6
Private Consumption	*2*	*2.0*	*2.4*	*1.8*	*2.3*	*2.2*
Public Consumption	*1*	*1.5*	*1.5*	*1.3*	*1.3*	*1.4*
GFCF	*4*	*4.1*	*4.2*	*4.2*	*5.2*	*4.8*
GFCF - Equipment	*3*	*4.0*	*2.5*	*4.2*	*4.8*	*4.2*
GFCF - Housing	*4*	*4.5*	*5.7*	*4.5*	*5.4*	*5.1*
Domestic Demand	*2*	*2.3*	*2.5*	*2.2*	*2.7*	*2.5*
Exports	*4*	*4.1*	*4.6*	*4.8*	*5.0*	*4.5*
Imports	*3*	*4.2*	*4.5*	*4.6*	*4.9*	*4.5*
CPI (annual average) (1)	*1*	*1.6*	*1.9*	*1.7*	*1.6*	*1.5*
ULCs	*1*	*1.5*	-	-	*1.2*	*1.6*
Employment	*2*	*2.0*	*2.4*	*2.0*	*2.5*	*2.2*
Unemployment Rate	*15.*	*13.6*	*15.2*	*13.4*	*15.2*	*13.4*
BoP CA (% GDP)	*1*	*1.4*	*1,6 (2)*	*1,6 (2)*	*1.4*	*1.0*
Output gap (%pot GDP)	-	-	-	-	*-0.7*	*0.4*
Budget Balance (% GDP)	-	*-2.0*	*-2.7*	*-2.3*	*-2.7*	*-2.2*

(1) AIReF projection refers to Private Consumption Deflator forecast

(2) Net lending capacity with RoW

TABLE 5. COMPARISON WITH INTERNATIONAL FORECASTERS

	IMF		OECD		EC		AIReF	
	2018	2019	2020	2021	2020	2021	2018	2019
Last update	*Apr-18*		*May-18*		*May-18*		*Jul-18*	
GDP	2.8	2.2	2.8	2.4	2.9	2.4	2.8	2.6
Private Consumption	*2.3*	*2.0*	*2.3*	*1.8*	*2.3*	*1.9*	*2.3*	*2.2*
Public Consumption	*1.0*	*0.7*	*1.2*	*1.1*	*1.9*	*1.3*	*1.3*	*1.4*
GFCF	*4.5*	*3.6*	*4.4*	*4.3*	*4.6*	*3.9*	*5.2*	*4.8*
GFCF - Equipment	-	-	-	-	*5.0*	*4.3*	*4.8*	*4.2*
GFCF - Housing	-	-	-	-	*4.8*	*4.1*	*5.4*	*5.1*
Domestic Demand	*2.5*	*2.1*	*2.6*	*2.2*	*2.7*	*2.2*	*2.7*	*2.5*
Exports	*4.7*	*4.2*	*4.6*	*4.5*	*5.0*	*4.7*	*5.0*	*4.5*
Imports	*4.3*	*4.1*	*4.2*	*4.2*	*4.7*	*4.5*	*4.9*	*4.5*
CPI (annual average) (1)	*1.7*	*1.6*	*1.6*	*1.5*	*1.4*	*1.4*	*1.6*	*1.5*
ULCs	-	-	*1.3*	*1.6*	*1.1*	*1.6*	*1.2*	*1.6*
Employment	*2.0*	*0.8*	*2.2*	*2.0*	*2.6*	*2.3*	*2.5*	*2.2*
Unemployment rate	*15.5*	*14.8*	*15.5*	*13.8*	*15.3*	*13.8*	*15.2*	*13.4*
BoP CA (% GDP)	*1.6*	*1.7*	*1.7*	*1.7*	*1.5*	*1.6*	*1.4*	*1.0*
Output gap (%pot GDP)	*0.2*	*0.7*	*-1.1*	*0.3*	*1.4*	*2.3*	*-0.7*	*0.4*
Budget Balance (% GDP)	*-2.5*	*-2.1*	*-2.4*	*-1.5*	*-2.6*	*-1.9*	*-2.7*	*-2.2*

(1) AIReF projection refers to Private Consumption Deflator forecast

TABLE 6. CENTRAL GOVERNMENT SUBSECTOR. BUDGETARY PROSPECTS 2018-2019

% GDP AND GROWTH RATES

CENTRAL GOVERNMENT	2002	2014	2015	2016	2017	2018	2019	17/16	18/17	19/18
A. TOTAL CENTRAL GOV. REVENUE	**17,9**	**18,1**	**17,9**	**17,0**	**16,9**	**17,3**	**17,7**	**3,4**	**7,3**	**6,5**
1. Total taxes	15,0	14,3	14,4	13,8	13,9	**14,2**	**14,4**	**4,1**	**7,0**	**6,0**
1.1. Taxes on production and imports	*7,3*	*8,0*	*8,3*	*8,1*	*8,1*	***8,2***	***8,4***	***4,0***	***6,5***	***6,6***
1.2. Current taxes on income and wealth	*7,7*	*6,1*	*6,0*	*5,7*	*5,7*	***5,9***	***6,0***	***5,4***	***7,7***	***5,2***
1.3. Taxes on capital	*0,0*	*0,1*	*0,1*	*0,1*	*0,0*	***0,0***	***0,0***	***-66,1***	***4,4***	***4,4***
2. Social contributions	1,1	1,0	1,0	0,9	0,9	**0,8**	**0,8**	**-2,1**	**-0,6**	**0,0**
3. Property income and other	1,8	2,8	2,5	2,2	2,1	**2,3**	**2,4**	**1,3**	**12,5**	**11,4**
B. TOTAL CENTRAL GOV. EXPENDITURE	**18,5**	**21,7**	**20,6**	**19,7**	**18,8**	**18,8**	**18,4**	**-0,7**	**4,5**	**2,5**
1. Compensation of employees	2,1	2,2	2,2	2,1	2,0	**2,0**	**2,0**	**-1,4**	**3,1**	**4,6**
2. Intermediate consumption	0,8	0,8	0,8	0,8	0,7	**0,7**	**0,7**	**0,9**	**2,4**	**4,3**
3. Social transfers in kind	0,1	0,1	0,1	0,1	0,1	**0,1**	**0,1**	**-2,1**	**6,4**	**2,7**
4. Social transfers other than in kind	1,1	1,5	1,5	1,6	1,6	**1,6**	**1,6**	**4,6**	**6,3**	**5,8**
5. Interest	2,3	3,1	2,8	2,5	2,3	**2,0**	**2,0**	**-5,7**	**-6,4**	**2,2**
6. Transfers	8,8	11,0	10,4	9,8	9,6	**9,5**	**9,4**	**1,9**	**2,6**	**3,6**
7. Grossed fixed capital formation	1,1	0,7	0,7	0,6	0,6	**0,8**	**0,7**	**7,2**	**40,7**	**-15,2**
8. Subsidies and other	2,1	2,3	2,1	2,2	1,8	**2,0**	**1,9**	**-12,8**	**16,3**	**0,1**
Net lending (+)/Borrowing (-)	**-0,6**	**-3,7**	**-2,8**	**-2,7**	**-1,9**	**-1,4**	**-0,8**			

TABLE 7. CENTRAL GOVERMENT. MAIN TAX FIGURES 2018-2019

% GDP AND GROWTH RATES

	2014	2015	2016	2017	2018	2019	17/16	18/17	19/18
Personal income tax	7,0	6,6	6,4	6,6	6,8	6,8	7,2	6,6	4,9
Corporate income tax[a]	1,8	1,9	1,9	2,0	1,9	2,0	6,8	1,1	7,0
Non-resident income tax	0,1	0,2	0,2	0,2	0,2	0,2	16,0	17,8	8,9
Value added tax	5,4	5,6	5,6	5,5	5,9	6,0	1,3	12,1	6,0
Excise duties	1,8	1,8	1,8	1,7	1,7	1,8	2,2	1,0	9,4

(a) Deferred tax assets' refund estimation is not included

TABLE 8. SOCIAL SECURITY FUNDS SUBSECTOR. BUDGETARY PROSPECTS 2018-2019

% GDP AND GROWTH RATES

SOCIAL SECURITY FUNDS	2002	2014	2015	2016	2017	2018	2019	17/16	18/17	19/18
A. TOTAL SOCIAL SECURITY REVENUE	**12,7**	**14,4**	**13,6**	**12,9**	**12,7**	**12,7**	**12,7**	**2,8**	**4,5**	**4,0**
2. Social contributions	11,6	11,5	11,2	11,2	11,4	**11,4**	**11,5**	**5,6**	**5,1**	**4,5**
3. Property income and other	1,2	2,9	2,3	1,7	1,4	**1,3**	**1,2**	***-15,2***	***-0,8***	***-0,5***
B. TOTAL SOCIAL SECURITY EXPENDITURE	**11,9**	**15,4**	**14,8**	**14,5**	**14,2**	**14,3**	**14,3**	**2,2**	**4,8**	**4,7**
1. Compensation of employees	0,5	0,2	0,2	0,2	0,2	**0,2**	**0,2**	**-2,1**	**1,8**	**3,3**
2. Intermediate consumption	0,2	0,1	0,1	0,1	0,1	**0,1**	**0,1**	**1,8**	**4,7**	**2,7**
3. Social transfers in kind	0,2	0,0	0,0	0,0	0,0	**0,0**	**0,0**	**3,0**	**2,4**	**2,7**
4. Social transfers other than in kind	10,3	14,5	13,9	13,6	13,3	**13,3**	**13,4**	**2,0**	**4,6**	**4,7**
Pensions	*7,8*	*11,0*	*10,9*	*10,9*	*10,7*	***10,8***	***10,9***	**3,0**	**5,3**	**5,2**
Unemployment benefits	*1,4*	*2,4*	*1,9*	*1,7*	*1,5*	***1,4***	***1,4***	**-6,5**	**0,0**	**1,0**
Other	*1,0*	*1,1*	*1,0*	*1,1*	*1,1*	***1,1***	***1,1***	**5,2**	**3,5**	**4,8**
7. Subsidies and other	0,8	0,5	0,5	0,5	0,5	**0,6**	**0,6**	**8,5**	**13,3**	**4,7**
Net lending (+)/Borrowing (-)	**0,8**	**-1,0**	**-1,2**	**-1,6**	**-1,5**	**-1,5**	**-1,6**			

TABLE 9. AUTONOMOUS REGIONS SUBSECTOR. BUDGETARY PROSPECTS 2018-2019

% GDP AND GROWTH RATES

REGIONAL GOVERNMENTS+UA54:W60	2002	2014	2015	2016	2017	2018	2019	17/16	18/17	19/18
A. TOTAL REGIONAL GOV. REVENUE	**12,8**	**14,1**	**14,1**	**14,2**	**14,5**	**14,5**	**14,4**	**6,6**	**4,5**	**3,6**
1. Total taxes	3,9	4,6	4,7	4,9	5,2	**5,2**	**5,2**	**9,9**	**5,0**	**4,4**
1.1. Taxes on production and imports	*1,8*	*1,2*	*1,2*	*1,2*	*1,3*	***1,3***	***1,3***	**9,8**	**9,9**	**3,4**
1.2. Current taxes on income and wealth	*1,9*	*3,2*	*3,3*	*3,5*	*3,7*	***3,7***	***3,7***	**10,4**	**3,7**	**5,1**
1.3. Taxes on capital	*0,2*	*0,2*	*0,2*	*0,2*	*0,2*	***0,2***	***0,2***	**1,4**	**-2,2**	**-1,9**
3. Property income and other	8,9	*9,4*	*9,3*	*9,2*	*9,3*	***9,3***	***9,2***	**4,9**	**4,2**	**3,2**
B. TOTAL REGIONAL GOV. EXPENDITURE	**13,3**	**15,9**	**15,8**	**15,0**	**14,8**	**14,8**	**14,7**	**2,9**	**4,4**	**3,7**
1. Compensation of employees	5,5	6,6	6,6	6,6	6,4	**6,4**	**6,4**	**2,0**	**3,2**	**3,8**
2. Intermediate consumption	1,7	2,5	2,6	2,4	2,4	**2,4**	**2,3**	**2,3**	**2,7**	**2,7**
3. Social transfers in kind	2,0	2,4	2,4	2,4	2,3	**2,3**	**2,3**	**2,6**	**2,2**	**2,6**
4. Social transfers other than in kind	0,2	0,4	0,3	0,3	0,3	**0,3**	**0,3**	**7,2**	**4,2**	**4,1**
5. Interest	0,3	0,8	0,4	0,4	0,4	**0,3**	**0,3**	**-3,0**	**-2,3**	**5,5**
6. Gross fixed capital formation	1,7	0,9	1,2	0,8	0,9	**0,9**	**0,9**	**8,8**	**12,5**	**2,2**
7. Subsidies and other	1,9	2,2	2,3	2,0	2,1	**2,2**	**2,2**	**4,8**	**10,2**	**5,9**
Net lending (+)/Borrowing (-)	**-0,5**	**-1,8**	**-1,7**	**-0,8**	**-0,3**	**-0,3**	**-0,3**			

TABLE 10. LOCAL GOVERNMENT SUBSECTOR. BUDGETARY PROSPECTS 2018-2019

% GDP AND GROWTH RATES

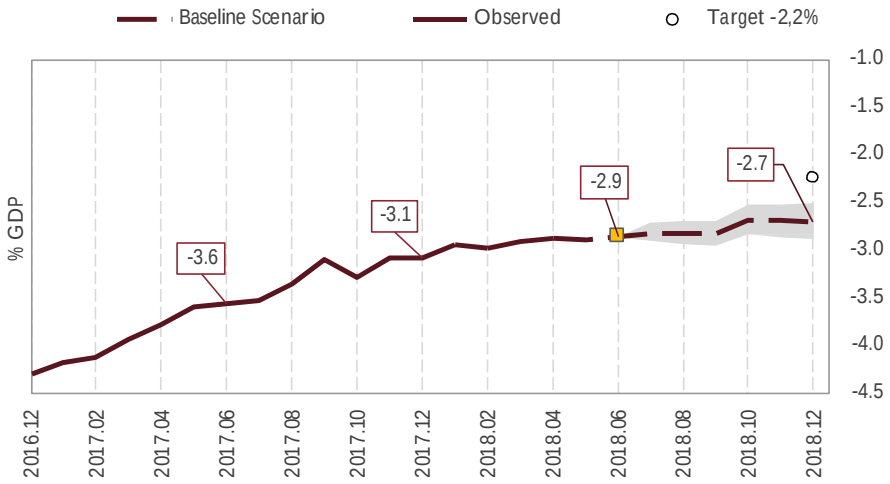
LOCAL GOVERNMENTS	2002	2014	2015	2016	2017	2018	2019	17/16	18/17	19/18
A. TOTAL LOCAL GOV. REVENUE	**5,8**	**6,6**	**6,5**	**6,4**	**6,4**	**6,2**	**6,0**	**3,7**	**1,4**	**1,2**
1. Total taxes	2,9	3,4	3,3	3,3	3,3	**3,2**	**3,2**	**3,0**	**3,8**	**3,3**
1.1. Taxes on production and imports	*1,9*	*2,3*	*2,3*	*2,3*	*2,2*	***2,2***	***2,2***	**2,4**	**3,6**	**2,9**
1.2. Current taxes on income and wealth	*0,7*	*0,8*	*0,8*	*0,8*	*0,8*	***0,8***	***0,8***	**6,4**	**3,4**	**3,4**
1.3. Taxes on capital	*0,2*	*0,2*	*0,3*	*0,3*	*0,2*	***0,3***	***0,3***	**-1,8**	**7,0**	**6,6**
3. Property income and other	2,9	3,2	3,1	3,1	3,1	**2,9**	**2,8**	**4,4**	**-1,0**	**-1,1**
B. TOTAL LOCAL GOV. EXPENDITURE	**5,9**	**6,1**	**6,0**	**5,8**	**5,8**	**5,6**	**5,5**	**4,1**	**1,2**	**3,2**
1. Compensation of employees	1,7	2,0	2,0	2,0	1,9	**1,9**	**1,9**	**1,7**	**2,8**	**2,7**
2. Intermediate consumption	1,5	1,9	1,8	1,8	1,8	**1,7**	**1,7**	**2,4**	**2,1**	**2,4**
3. Social transfers in kind	0,0	0,1	0,1	0,1	0,1	**0,1**	**0,1**	**1,2**	**2,4**	**2,7**
4. Social transfers other than in kind	0,1	0,0	0,0	0,0	0,0	**0,0**	**0,0**	**-1,2**	**1,2**	**0,0**
5. Interest	0,1	0,1	0,1	0,1	0,1	**0,0**	**0,1**	**-6,2**	**-6,7**	**9,7**
6. Gross fixed capital formation	1,2	0,5	0,6	0,4	0,5	**0,5**	**0,5**	**9,5**	**6,9**	**12,0**
7. Subsidies and other	1,4	1,4	1,4	1,4	1,5	**1,4**	**1,3**	**8,7**	**-3,7**	**1,7**
Net lending (+)/Borrowing (-)	**-0,1**	**0,5**	**0,4**	**0,6**	**0,6**	**0,6**	**0,5**			

TABLE 11. GENERAL GOVERNMENT SECTOR. BUDGETARY PROSPECTS 2018-2019

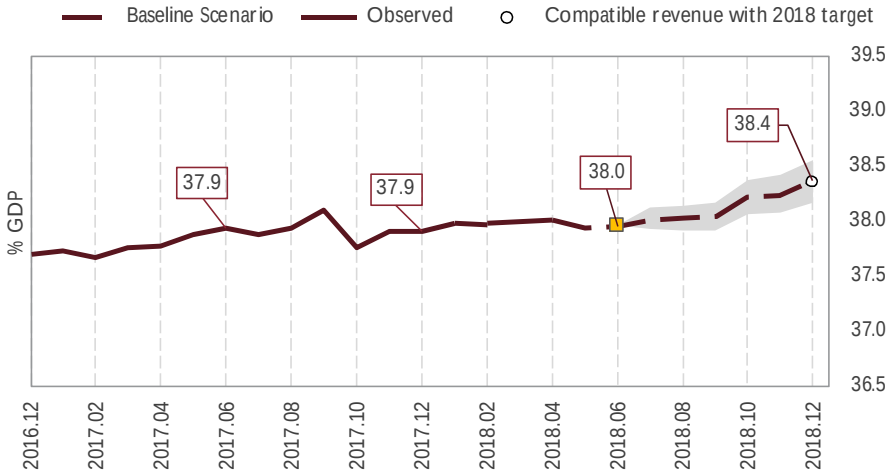
% GDP AND GROWTH RATES

TOTAL GENERAL GOVERNMENT	2002	2014	2015	2016	2017	2018	2019	17/16	18/17	19/18
A. TOTAL GENERAL GOV. REVENUE	**38,2**	**38,9**	**38,5**	**37,7**	**37,9**	**38,4**	**38,4**	**4,6**	**5,7**	**4,4**
1. Total taxes	21,7	22,3	22,5	22,0	22,3	**22,6**	**22,8**	**5,2**	**6,1**	**5,3**
1.1. Taxes on production and imports	*11,1*	*11,5*	*11,8*	*11,6*	*11,6*	***11,8***	***11,9***	***4,3***	***6,3***	***5,6***
1.2. Current taxes on income and wealth	*10,3*	*10,2*	*10,1*	*9,9*	*10,2*	***10,4***	***10,4***	***7,3***	***5,9***	***5,1***
1.3. Taxes on capital	*0,4*	*0,5*	*0,6*	*0,6*	*0,5*	***0,5***	***0,5***	***-11,4***	***2,8***	***2,9***
2. Social contributions	12,7	12,5	12,3	12,2	12,3	**12,3**	**12,3**	**4,9**	**4,7**	**4,2**
3. Property income and other	3,8	4,1	3,7	3,5	3,3	**3,4**	**3,3**	**-0,4**	**7,6**	**-0,6**
B. TOTAL GENERAL GOV. EXPENDITURE	**38,6**	**44,8**	**43,8**	**42,2**	**41,0**	**41,1**	**40,6**	**1,1**	**4,6**	**3,2**
1. Compensation of employees	9,7	11,1	11,1	10,8	10,6	**10,4**	**10,4**	**1,2**	**3,1**	**3,7**
2. Intermediate consumption	4,2	5,3	5,3	5,1	5,0	**4,9**	**4,8**	**2,1**	**2,5**	**2,8**
3. Social transfers in kind	2,4	2,7	2,6	2,6	2,6	**2,5**	**2,5**	**2,4**	**2,4**	**2,6**
4. Social transfers other than in kind	11,6	16,5	15,8	15,5	15,3	**15,3**	**15,4**	**2,4**	**4,7**	**4,8**
5. Interest	2,6	3,5	3,1	2,8	2,6	**2,4**	**2,3**	**-5,0**	**-4,1**	**0,8**
6. Gross fixed capital formation	4,0	2,1	2,5	1,9	2,0	**2,3**	**2,1**	**8,4**	**20,0**	**-2,2**
7. Subsidies and other	4,1	3,7	3,4	3,4	3,1	**3,3**	**3,2**	**-6,4**	**11,6**	**0,8**
Net lending (+)/Borrowing (-)	**-0,4**	**-6,0**	**-5,3**	**-4,5**	**-3,1**	**-2,7**	**-2,2**			

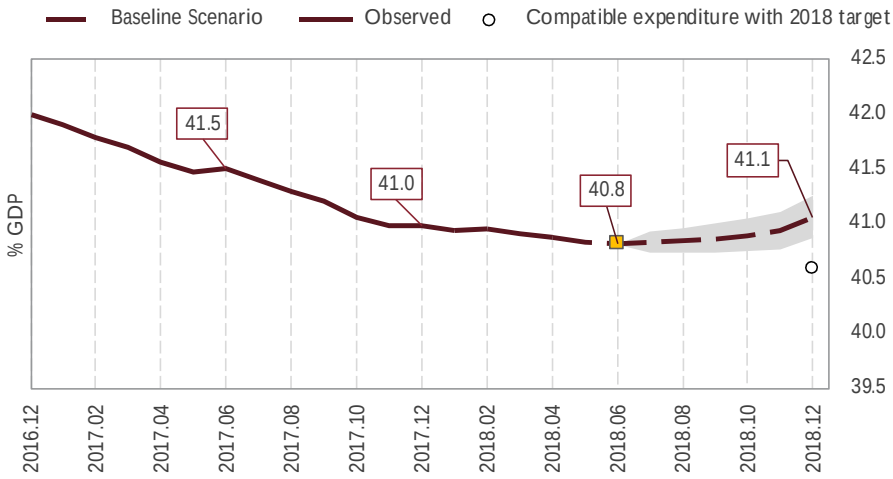
GENERAL GOVERMENT. NET LENDING (+) / BORROWING (-) CAPACITY 2018



GENERAL GOVERNMENT. TOTAL REVENUE 2018

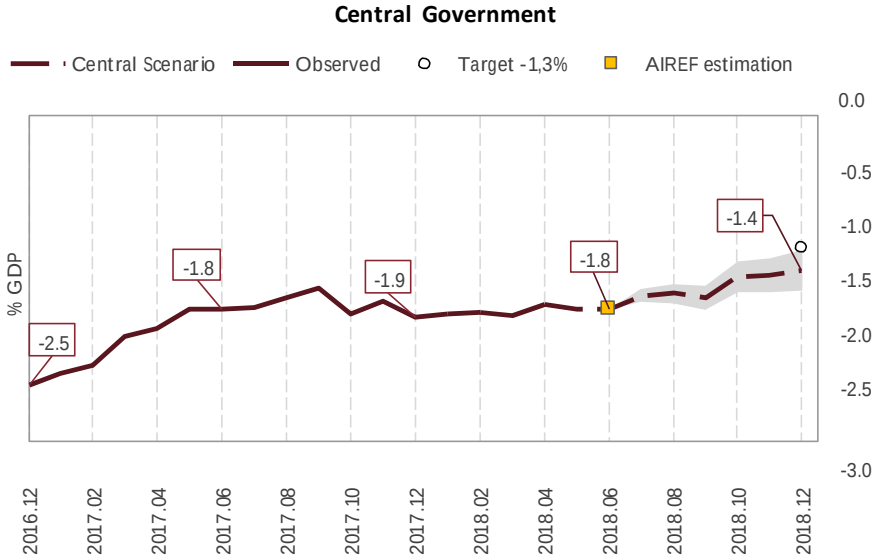


GENERAL GOVERNMENT. TOTAL EXPENDITURE 2018

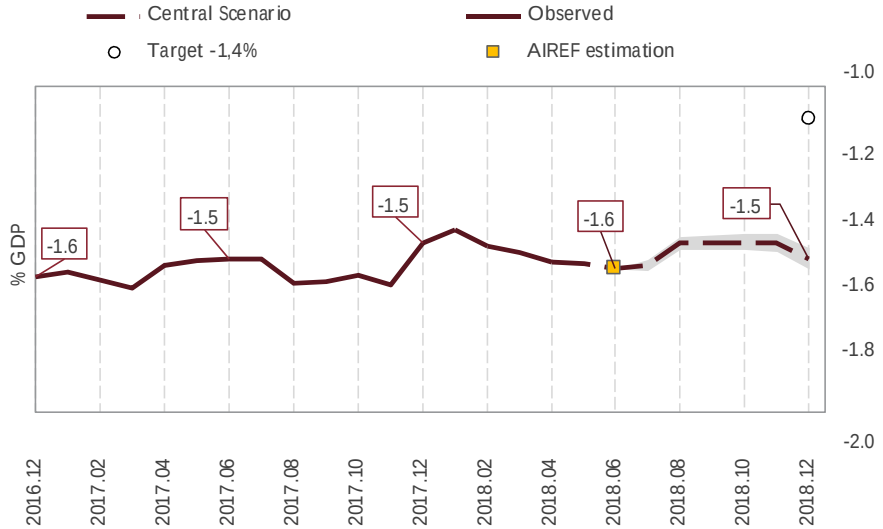


GENERAL GOVERNMENT SUBSECTORS: NET LENDING (+) / BORROWING (-) CAPACITY 2018

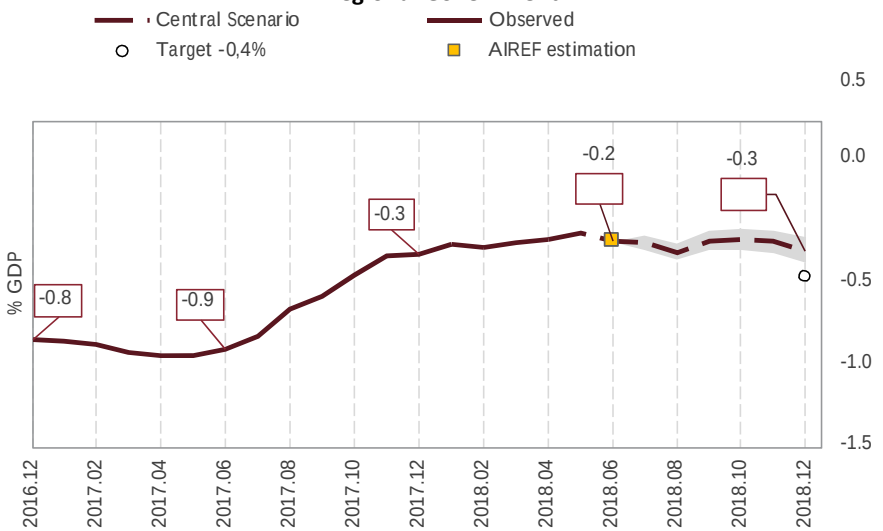
Central Government



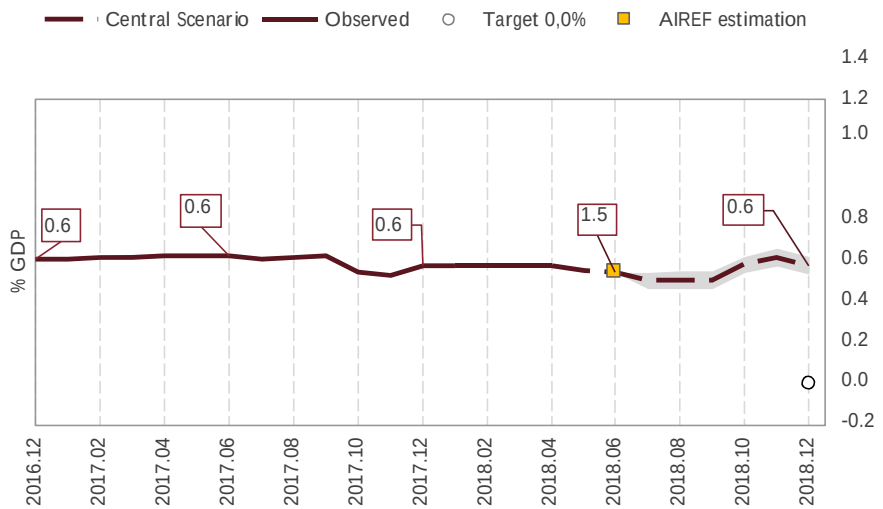
Social Security Funds



Regional Government

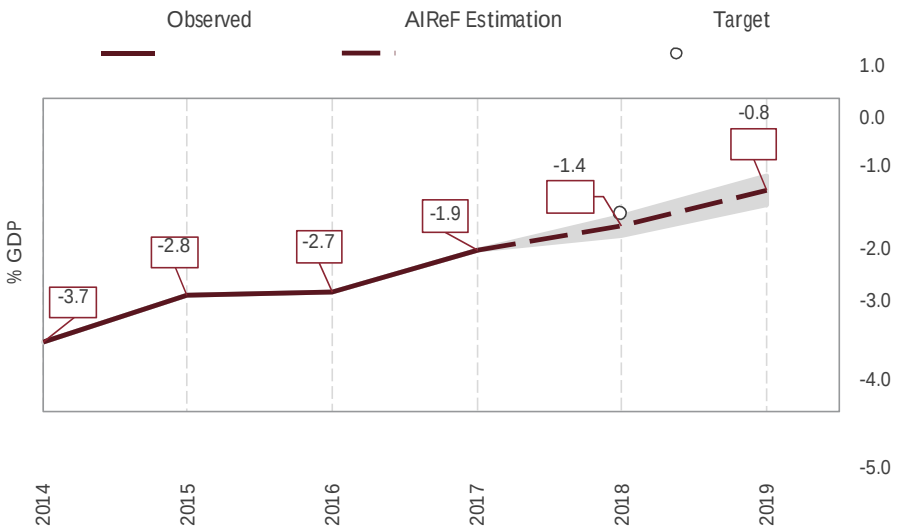


Local Government

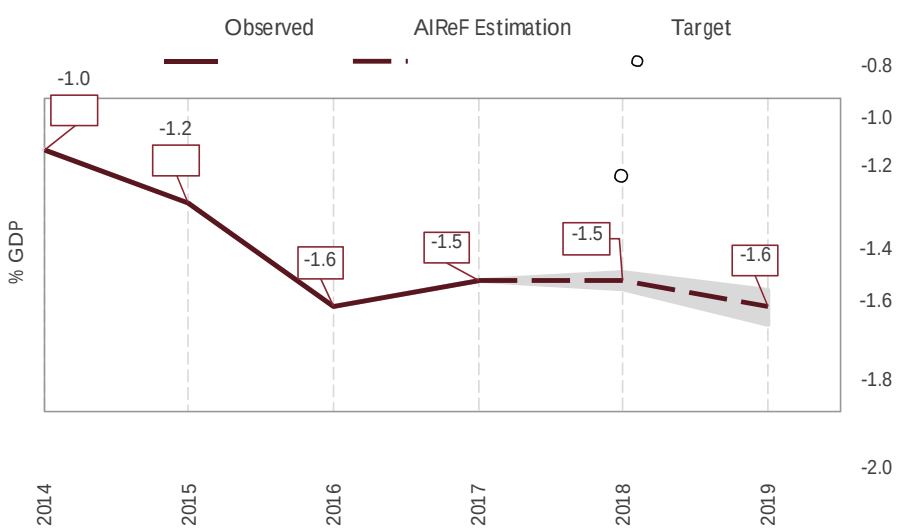


GENERAL GOVERNMENT SUBSECTORS: NET LENDING (+) / BORROWING (-) CAPACITY 2018-2019

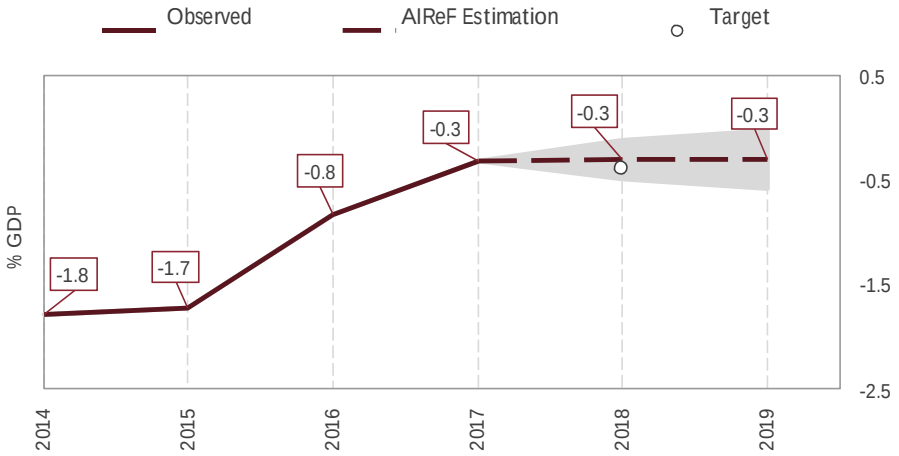
Central Government



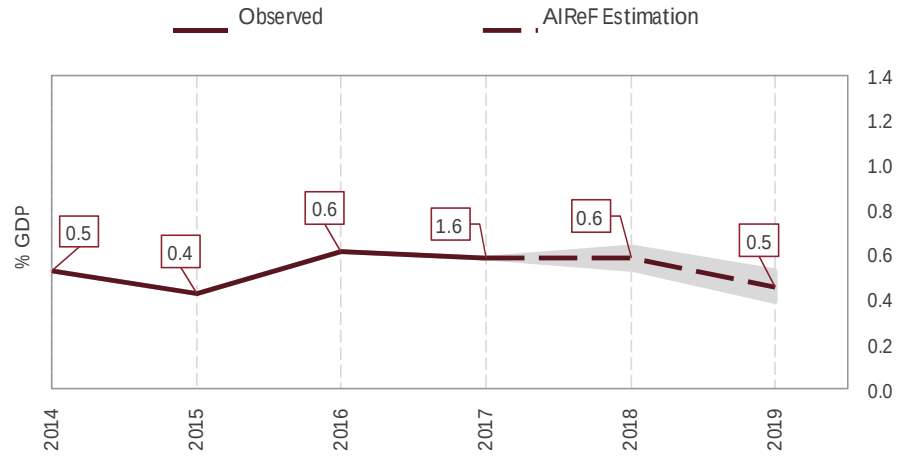
Social Security Funds



Regional Government



Local Government



1. Contents

1. Introduction

Motivation and normative framework

Article 15 of the Organic Law on Budgetary Stability and Financial Sustainability (LOEPySF) establishes that the Government, through an agreement of the Council of Ministers, will set the budgetary stability targets, in terms of net lending/borrowing, in accordance with the definition contained in the European System of National and Regional Accounts, and the government debt target referred to the three following years, both for the General Government (GG) sector and for each of its sub-sectors. This agreement will also contain the non-financial expenditure limit of the State Budget referred to in Article 30 of this Law.

In this context the Independent Authority for Fiscal Responsibility (AIReF), as an independent public institution, guarantor of effective compliance with the principle of budgetary stability by the Public Administrations (PAs), can provide a reference framework for the Government through the preparation of a no-policy-change forecast for the PAs for 2018 and 2019. This forecast will be made based on a no-policy-change macroeconomic outlook and revenue and expenditure dynamics that fall within the current regulatory framework, that is, with no policy changes.

These forecasts can serve as a starting point for the Government's design of a path that includes economic and fiscal policy measures where appropriate. There are several European Union countries in which independent fiscal institutions (IFIs) like AIReF produce no-policy-change forecasts on which the Government constructs the official outlook, making the fiscal impact of the measures adopted transparent in the exercise of its powers.

In the Spanish case, domestic regulations require that the official macroeconomic forecasts upon which the budget is based are endorsed by AIReF, who must also analyse the budgets of the different PAs to ensure consistency with the fiscal rules, making recommendations subject to the principle of "comply or explain". Additionally, article 5 of Organic Law 6/2013 of 14 November, establishing AIReF, establishes that this institution may carry out studies at the behest of, among others, the Central Government. With the legal authority thus established, the Government has requested AIReF to prepare a no-policy-change budgetary scenario.

In accordance with article 23.4 of Royal Decree 215/2014, of 28 March, approving its Organic Statute, AIReF submitted a work plan to the interested party for confirmation, prior to the preparation of the study. The work plan included a detailed description of the content and the methodology to be followed in conducting the study. In addition,

the studies commissioned to AIReF must allow the recovery of the cost incurred during their preparation. Therefore, the plan also included a budget for the study, in accordance with the provisions of article 23 of Royal Decree 215/2014, of 28 March, approving AIReF's Organic Statute.

AIReF has proceeded with the preparation of the study in full autonomy in accordance with the provisions of Organic Law 6/2013. Likewise, AIReF has defined the methodology, the objective criteria and the specific aspects to be assessed therein.

Object

This study consists of a forecasting exercise of the macroeconomic and fiscal variables aimed at deriving the most probable budgetary balance for the GG sector in 2018 and 2019, in the absence of new budgetary policy, fiscal or other economic policy measures that may have a significant impact on the evolution of the economy, price levels or public accounts.

The study is divided into three main sections. Firstly, a methodological review is carried out, identifying the tools and models on which the macroeconomic and fiscal forecasts are based, as well as the different channels that ensure the consistency between them. Second, the macroeconomic context for the years 2018 and 2019 is developed, which serves as a support to the fiscal forecasts. Third, a breakdown of the closing budget forecasts for 2018 and 2019 is presented, detailed by revenue and expenditure sub-items, as well as for the different sub-sectors of the PAs.

2. Methodology

Macroeconomic forecasts

AIReF has projected six quarters (the last two quarters of 2018 and 2019 in full) for its macroeconomic outlook under a no-policy-change assumption. Firstly, AIReF defined the expected international context, based on technical assumptions taken from the main international organizations' forecasts and mainly using the short- and long-term empirical models developed by AIReF. This projection exercise was concluded by conducting a consistency check looking at the deviations with respect to long-term economic trends and digging into different sectoral accounts within a simplified framework of national accounts.

The steps followed to prepare a complete macroeconomic scenario can be summarized as follows:

1. Estimation of dynamic factor models for the short-term projection of all demand components, using the available short-term information.
2. Setting of technical assumptions, related to the international economic context, the evolution of the yield curve, oil prices, or the exchange rate, among others.
3. The joint determination of the demand variables, alongside the technical assumptions, determine the results of the macroeconomic outlook forecasts in real and nominal terms, as well as the employment and wage variables, obtained in a complementary fashion from:
    - On the one hand, reduced form multivariate models with exogenous variables.
    - On the other hand, structural models with equilibrium or long-term relationships (error correction models).

AIReF uses a diverse set of econometric tools when it comes to making its macroeconomic outlook forecasts for demand, employment and prices, which cover a relatively broad methodological spectrum.

Depending on their level of structural specification (from less to more) and depending on the forecasting horizon covered by this report (2 years), they can be classified as follows:

1. Dynamic factorial models used for short-term (2 quarters) forecasts of GDP, its deflator and components, that allow the impact of the short-term information on said aggregates to be reflected[1].
2. Reduced form multivariate model with exogenous variables. This model shows the dynamics for the main aggregates for real activity in the macroeconomic outlook and allows quarterly confidence intervals for the envisaged trends in these aggregates, with very little a priori conditioning. The methodology is included in the Bayesian autoregressive vector models with exogenous variables (BVARX) and uses quarterly data. Its forecast horizon is 3 to 8 quarters [2.]
3. Uni-equational structural models These models define a behavioural relationship between a macroeconomic variable and its determinants, as suggested by economic theory. The technique applied uses quarterly data and error correction models. Its predictive scope is also between 3 and 8 quarters.

Budgetary forecasts

The budgetary prospects were prepared following a bottom-up approach, using available data from different units comprising the sub-sectors of the GG sector. The forecast methodology differs between the year 2018 and 2019. AIReF presents the results of the estimates by sub-sectors. In the case of the Autonomous Regions, figures at the sub-sector level have been obtained by aggregating the analysis carried out for each individual Region. Likewise, for the Social Security Fund sub-sector forecast, different estimates were made for the Social Security System, the Public State Employment Service (SEPE, by its Spanish acronym) and the Wage Guarantee Fund (FOGASA).

The final budgetary scenarios were obtained by consolidating the sub-sector results, which entails the aggregation of the forecasts for the different revenue and expenditure items and the elimination of the estimated operations, in terms of transfers and interest, between units classified into different sub-sectors.

About the time horizon of the estimates, for 2018 AIReF exploited budgetary execution data from the first half of the year calculated based on fiscal information

[1] Detailed information can be found in the following AIReF working paper Integrated model of short-term forecasting of the Spanish economy (MIPred model)

[2] Detailed information can be found in the following AIReF working paper BVARX modelling of the Spanish economy

published up to the month of April and, for some variables, May. Therefore, the 2018 budgetary scenario is estimated on a monthly basis until the end of the year, in twelve-month accumulated terms. For 2019, however, the estimate was made in annual terms.

AIReF's forecasts were made considering:

1. Data provided by the competent administrations, such as the financing system resources to be paid to the territorial administrations in the current year, specific amounts for specific items included in the Law on General State Budgets, etc.
2. Results obtained from specific calculation models and methodologies developed by AIReF, the details of which are incorporated as an annex to this document. There is a model for the main revenue of the central administration (CA), the resources of the territorial financing system, interest rates, civil servants, pensions, unemployment benefits, healthcare and education expenditure. Specific calculations are also carried out based on basic information on certain measures or actions, such as the estimation of compensation of employees, incorporating the effect of the Agreement with the trade unions on the compensation of personnel at the service of public administrations; forecasts of funds to be received from the EU based on the information available on the programming of these funds, the amount of local expenditure on financially sustainable investments, etc.
3. Trend estimates: Certain items are calculated by evolving the base year at a certain rate, be it an average increasing trend, the reference rate of the expenditure rule or the nominal GDP growth rate, etc.

The result of each block is corrected dynamically with the most up-to-date information available at each moment.

Linking elements between the macroeconomic and budgetary outlook

The consistency between the macroeconomic and budgetary outlook is ensured through two main channels. First, public consumption serves as a meeting point between both scenarios. The forecast for public consumption is prepared iteratively, using a two-fold perspective. The starting point is a top-down macroeconomic forecast, used as a no-policy-change reference point. This initial forecast is then adjusted according to the difference in relation to the disaggregated estimate of the main public expenditure items from the bottom-up approach described above. This adjustment is technically introduced as a "disturbance" or "shock" in the

macroeconomic scenario. The exercise is iterated until the difference between the bottom-up and top - down process is insignificant.

Second, the forecast for the main tax figures is linked to the macroeconomic scenario, which is provided with a high level of detail, using a simplified system of National Accounts. This allows feedback on the behaviour of the different institutional sectors, through their income accounts and income usage, with the evolution of revenue. This dependence on the macroeconomic environment will be incorporated into this framework through structural models that incorporate long-term equilibrium relationships (error correction models). These models provide forecasts for the main tax revenue (personal income tax, VAT, tax on asset transfers and documented legal acts, corporate income tax, special taxes (alcohol, beer, hydrocarbons, tobacco and electricity), social security contributions and for some expenditure with a high cyclical element, such as unemployment benefits, and more structural expenditure such as pensions, health and education.

Finally, an estimate is made of each of the variables at the sectoral level of the operating accounts, primary income allocation accounts, secondary income distribution accounts, income utilization accounts and capital accounts until the net lending/borrowing balance at the sectoral level is obtained, which will finally provide the complete macroeconomic scenario.

3. Macroeconomic perspectives

3.1. Recent evolution and reference scenario

The most recent short-term information confirms the strength of the Spanish economy at the beginning of 2018, in line with the dynamics observed in 2017. After three years of growth above 3% in real terms, the Spanish economy has recovered the historical highs reached before the crisis. In 2018, the pace of growth remains in line with the last quarters of 2017. Thus, in the first quarter of this year, GDP grew by 0.7% in quarter-on-quarter terms. The most recent short-term indicators point to similar rates for the coming quarters, as evidenced by the real-time forecasting model developed by AIReF (see Figure 1 for the evolution of the forecast for the second quarter). Year-on-year this evolution translates into rates of 2.8% for the first half of 2018.[3]

In structural terms, contrary to previous cycles, the current growth pattern has not affected the fundamental equilibriums of the Spanish economy, providing a good starting point and laying the foundations for growth in the medium term. First, breaking historical trends, since 2015 the evolution of GDP has been supported by a positive contribution of both domestic and external demand, achieving a current account surplus close to 2% GDP (compared to the deficit of 1.5% existing at the beginning of the previous cycle). Second, investment has mainly been directed towards production sectors, reducing the weight of the construction sector, which represents 14% of GDP compared to 17% at the beginning of the century. Third, the pull of domestic demand has gone hand in hand with a necessary deleveraging of the private sector, with very contained bank credit and majority recourse to self-financing by companies. Finally, the moderate evolution of labour prices and costs has suppressed inflation expectations, helping to prolong the expansive tone of the European Central Bank's (ECB) monetary policy, which has been a decisive tailwind for the Spanish economy.

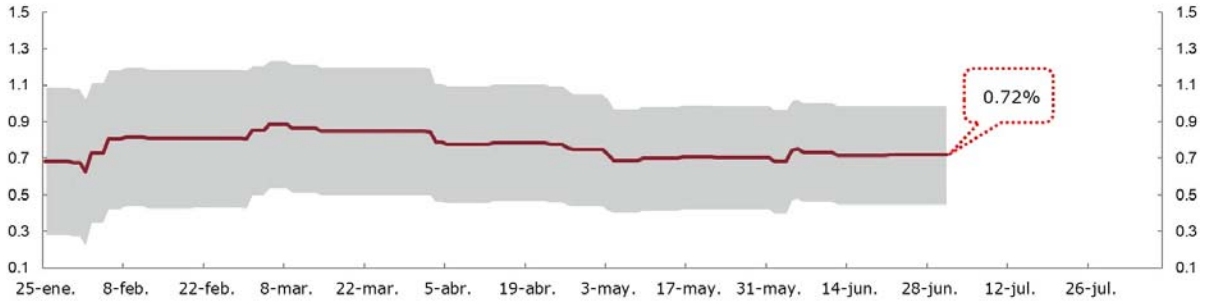
The GDP growth forecast for 2018 (2.8%) and 2019 (2.6%) remains robust, although more moderate than in previous years, with domestic demand as the main driver, supported by a slight positive contribution from the external sector. As can be seen in figure 2.1, AIReF's growth path forecast for 2018 and 2019 remains high, with 2.8% and 2.6%, respectively. This dynamic is linked to the contribution of domestic demand, although its components tend to decelerate as the forecasting horizon progresses, given the evolution of the economic cycle and its increasing deviations from the long-term equilibrium relationships reflected in the

[3] For more details, the results of the forecast model are available on AIReF's website (link here)

structural behaviour models. On the other hand, it is expected that external demand will decrease its positive contribution, until near elimination by 2019 (see Figure 2.2).

Greater price dynamism is expected, in line with a progressive improvement of the output gap. Expected growth continues to be above potential, helping to close the output gap and completing a full economic cycle that began 20 years ago (see Figure 2.4). The cyclical dynamic supports greater pressure on prices, which tend to recover growth rates above 1.5%, both in 2018 (1.6%) and in 2019 (1.7%).

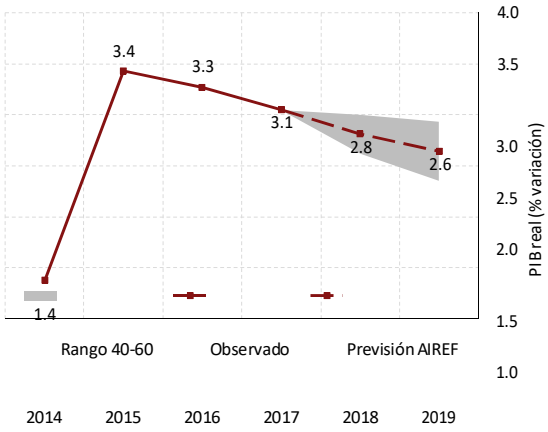
GRÁFICO 1. REAL TIME GDP FORECAST EVOLUTION 2018 Q2. QUARTERLY RATE



Source: AIReF's estimate

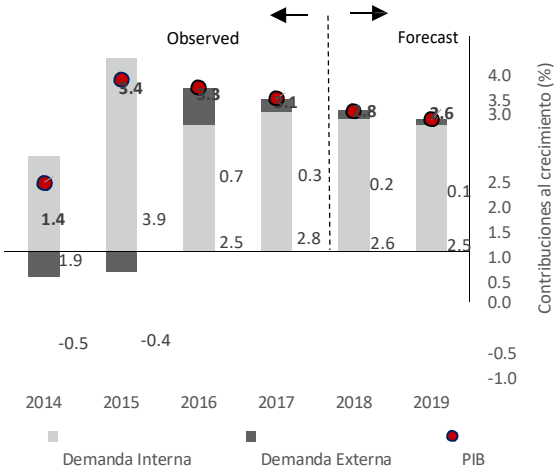
GRÁFICO 2. MACROECONOMIC SCENARIO: MAIN FEATURES

❶ The GDP forecast for 2018 and 2019 maintains a robust but more moderate growth path ...



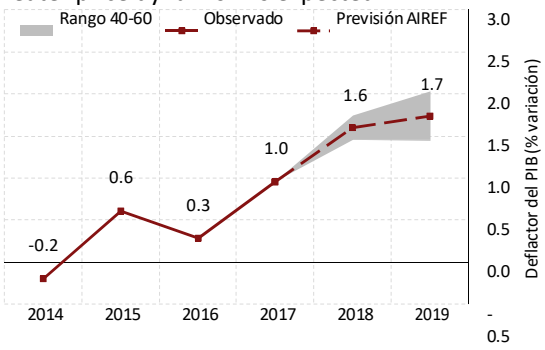
Source. National Statistics Institute and AIReF

❷ ... keeping domestic demand as the main driver, with a slight positive contribution from the foreign sector



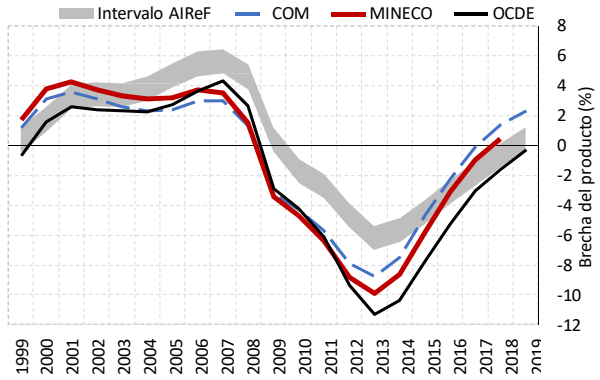
Source. National Statistics Institute and AIReF

❸ Greater price dynamism is expected ...



Source. National Statistics Institute and AIReF

❹ ... in line with a progressive improvement in the output gap, which closes the cycle that began 20 years ago



Source. AIReF, OECD, Ministry of Economy, European Commission

Demand components

Starting with private consumption, AIReF's baseline forecasts stand at 2.3% for 2018 and 2.2% for 2019, as can be seen in Table1, which details the projected scenario, from the point of view of both volume and prices. These projections are in line with those of the main national and international institutions (see Tables 3 and 4) for 2018 and stand systematically above them in 2019. These results are supported by the good performance of the labour market, the persistence of favourable financial conditions and the improvement in the household balance sheets. In this regard, the incorporation of the announced budgetary measures will help to boost the revenue of households with more modest income levels, whose propensity to consume is high, which will lead to a significant shift in spending on goods and services.

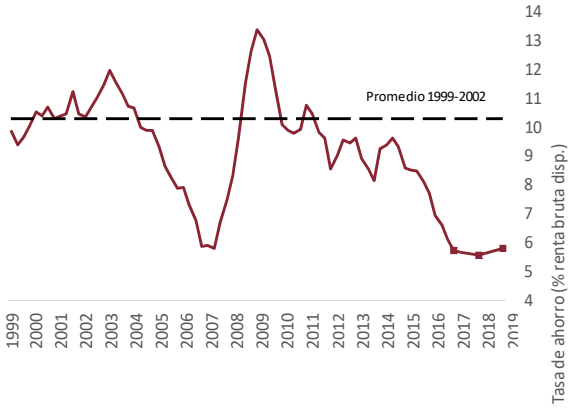
There is support for medium-term growth in private consumption. Despite the recent evolution of the savings rate, reaching lows in the first quarter of 2018 (see figure 3.1), the financing capacity of households is worth noting (see Figure 3.2 and Table 5 which details the accounts of institutional sectors), remaining at high levels compared to similar times in the last cycle, having undergone major changes to its composition. Contrary to the last cycle, the low savings rate is accompanied by low investment in housing by households. At the same time, their financial wealth has grown, reaching 120% of GDP, as can be seen in figure 3.3 (compared to a low 100% at the cyclical peak in 2007). In addition, the maintenance of advantageous credit conditions could revitalise the flow of new credit, entailing additional support. Likewise, these factors will be reinforced by the favourable effects on household income obtained through the announced expansionary fiscal measures. Of these budgetary measures with a significant macroeconomic impact through private consumption, the following stand out: (i) The Government-Union agreement for the Civil Servant pay raise and an increase in the replacement rate; (ii) in relation to PIT, an increase in the reduction for income from work and an extension of family tax credits; and (iii) the update of pensions above the Pension Revaluation Index (PRI) of 0.25% and the improvement in widowers' pensions.

CUADRO 1. MACROECONOMIC SCENARIO: DEMAND AND INCOME COMPONENTS

VOLUMEN	2014	2015	2016	2017	2018	2019
PIB *(% var. real, salvo indicación en contra)*	**1,4**	**3,4**	**3,3**	**3,1**	**2,8**	**2,6**
Consumo total *(contribución al crecim. del PIB)*	*0,8*	*2,2*	*1,9*	*1,7*	*1,6*	*1,5*
Consumo privado	*1,5*	*3,0*	*3,0*	*2,4*	*2,3*	*2,2*
Consumo público	*-0,3*	*2,1*	*0,8*	*1,6*	*1,3*	*1,4*
FBCF Bienes de Equipo y Recursos biológicos	*6,0*	*11,6*	*4,9*	*6,1*	*4,8*	*4,2*
FBCF Construcción y Propiedad Intelectual	*4,0*	*4,0*	*2,5*	*4,4*	*5,4*	*5,1*
Demanda Nacional *(contribución al crecim. del PIB)*	*1,9*	*3,9*	*2,5*	*2,8*	*2,7*	*2,5*
Exportaciones	*4,3*	*4,2*	*4,8*	*5,0*	*5,0*	*4,5*
Importaciones	*6,6*	*5,9*	*2,7*	*4,7*	*4,9*	*4,5*
Saldo Exterior *(contribución al crecim. del PIB)*	*-0,5*	*-0,4*	*0,7*	*0,3*	*0,2*	*0,1*
Output gap ***(% PIB Potencial)***	**-5,7**	**-4,5**	**-3,1**	**-1,9**	**-0,7**	**0,4**
PRECIOS	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
PIB *(% var., salvo indicación en contra)*	**-0,2**	**0,6**	**0,3**	**1,0**	**1,6**	**1,7**
Consumo privado	*0,2*	*-0,1*	*-0,1*	*1,8*	*1,6*	*1,5*
Consumo público	*0,4*	*1,3*	*0,1*	*0,3*	*1,4*	*2,0*
FBCF Bienes de Equipo y Recursos biológicos	*-0,8*	*0,3*	*1,3*	*0,1*	*1,4*	*1,3*
FBCF Construcción y Propiedad Intelectual	*-0,4*	*0,5*	*0,9*	*2,8*	*3,8*	*3,4*
Exportaciones	*-1,5*	*0,6*	*-1,1*	*2,5*	*1,6*	*1,3*
Importaciones	*-0,7*	*-0,5*	*-1,6*	*4,4*	*2,3*	*1,5*
NOMINAL	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
PIB *(% var., salvo indicación en contra)*	**1,2**	**4,1**	**3,6**	**4,0**	**4,4**	**4,4**
Consumo privado	*1,7*	*2,9*	*2,9*	*4,2*	*3,9*	*3,7*
Consumo público	*0,1*	*3,4*	*0,9*	*1,9*	*2,7*	*3,4*
FBCF Bienes de Equipo y Recursos biológicos	*5,2*	*12,0*	*6,3*	*6,2*	*6,2*	*5,5*
FBCF Construcción y Propiedad Intelectual	*3,6*	*4,5*	*3,4*	*7,4*	*9,2*	*8,5*
Variación de Existencias	*-458,4*	*272,7*	*-8,2*	*24,7*	*6,6*	*0,0*
Exportaciones	*2,7*	*4,8*	*3,6*	*7,7*	*6,6*	*5,8*
Importaciones	*5,8*	*5,4*	*1,1*	*9,2*	*7,2*	*6,0*
PIB a precios corrientes *(miles de millones de €)*	*1.038*	*1.080*	*1.119*	*1.164*	*1.215*	*1.268*
Rentas						
PIB	***1,2***	***4,1***	***3,6***	***4,0***	***4,4***	***4,4***
Remuneración de asalariados	*1,3*	*5,3*	*2,9*	*3,3*	*4,1*	*4,2*
Excedente Bruto de Explotación	*0,3*	*1,7*	*4,9*	*4,8*	*4,2*	*4,1*
Impuestos netos s/producc e M	*4,3*	*8,4*	*1,4*	*4,5*	*6,8*	*5,9*
Tasa ahorro hogares *(%RBD)*	***9,4***	***8,4***	***6,8***	***5,7***	***6,5***	***7,4***

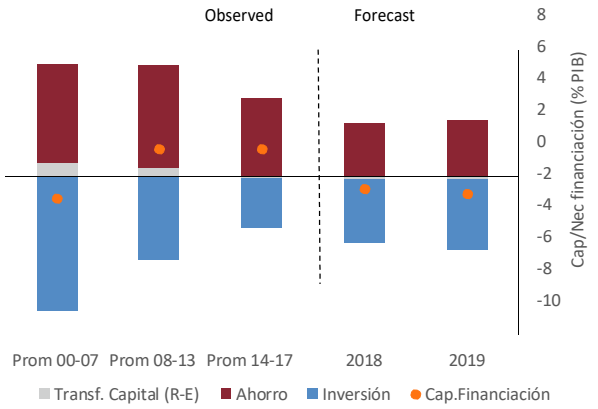
GRÁFICO 3. SUPPORT TO PRIVATE CONSUMPTION

❶ Even though the savings rate has reached historical lows ...



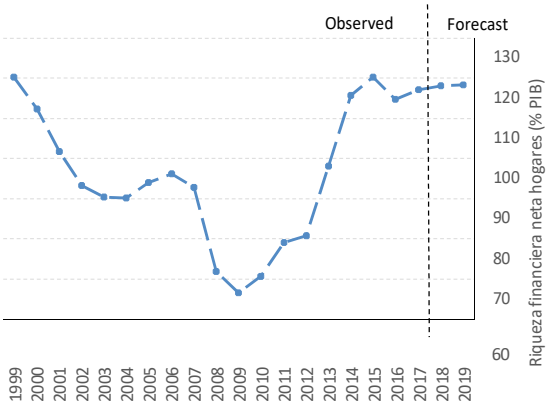
Source. National Statistics Institute and AIReF

❷ ... households maintain a healthy position due to a historically low investment in housing



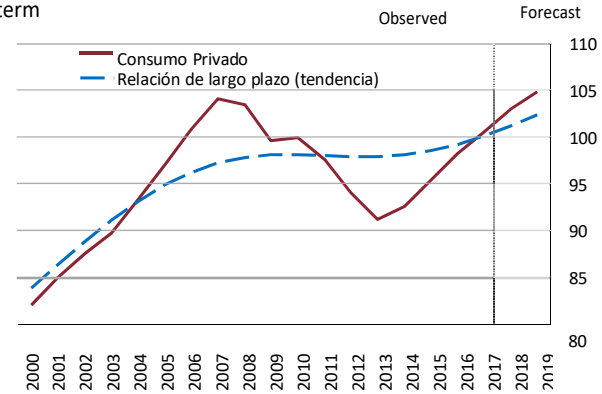
Source. National Statistics Institute and AIReF

❸ Supported by the deleveraging process, financial wealth is at its highest in the la[illegible]



Source. Bank of Spain and AIReF

❹ The low positive deviation with respect to its long-term or trend level indicates the existence of a path in the medium term



Source. National Statistics Institute and AIReF

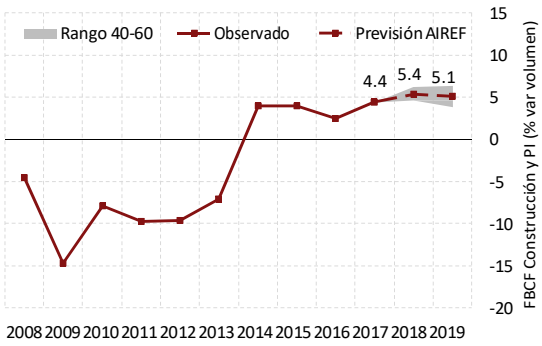
On the other hand, in light of AIReF's models, investment in construction shows an increase of 5.4% and 5.1% for 2018 and 2019 respectively. These forecasts (shown in Figure 4.1) do not diverge substantially from the most recent forecasts from the other institutions for 2018 and are somewhat more optimistic in 2019.

The recovery of the residential segment lies behind these robust growth forecasts. The sale of homes has grown steadily since 2014, which favours the recovery of prices and the start-up of new residential construction projects, as reflected in the evolution of new construction permits, which is growing at double-digit rates and is beginning to recover from historical lows (see Figure 4.2). New credit for home purchases continues to grow and contributes to the rebound in demand for housing. On the other hand, it is expected that the evolution of the sector will come

up against some structural obstacles that will regulate its dynamism. First, there is still a relatively ample stock of new, unsold housing. Its gradual absorption hinders the dynamism of investment in residential construction to a certain extent. On the other hand, the growth of the population is anticipated to be more moderate than in the previous cycle, therefore the formation of households will also be less dynamic. This leads to a more balanced sector size in relation to GDP. AIReF's forecasted path.

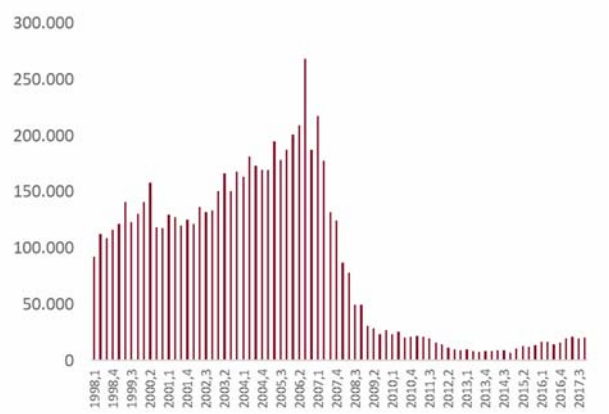
GRÁFICO 4. INVESTMENT SUPPORTS

❶ Investment in construction will maintain robust growth in the medium term ...



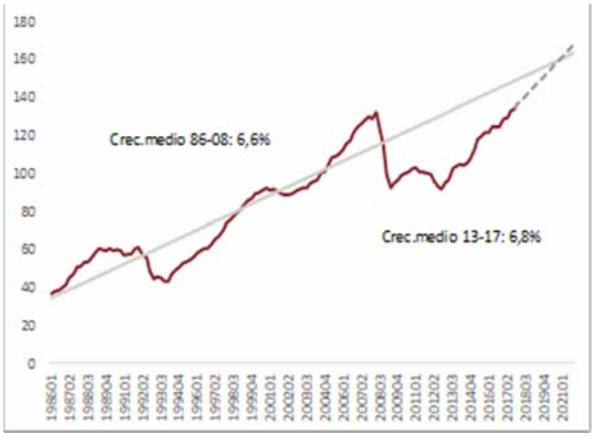
Source. National Statistics Institute and AIReF

❷ **...** in line with the recovery of the residential segment, as shown by various supply and demand indicators such as permits



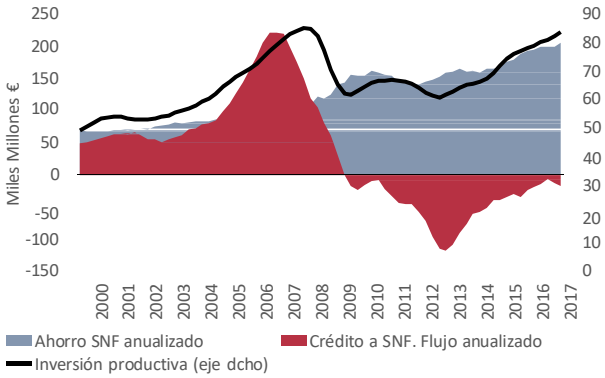
Source. Ministry of Development

❸ There is a path for the current trend of productive investment ...



Source. National Statistics Institute and AIReF

❹ ... with a high capacity for self-financing, based on a sound position in the sector



Source. National Statistics Institute and AIReF

About investment in production, a progress rate of 4.8% in 2018 and 4.2% in 2019 is expected, smaller than what was recorded in 2017 (6.1%), but in line with expectations for the evolution of final demand. Comparatively, AIReF is in line with the consensus of analysts (except with the Bank of Spain, which forecasts a significant reduction in its growth for this year).

Support for this progress notably includes the maintenance of good financing conditions and the recourse to self-financing observed among companies. Effectively, the gap between current investment in production and its long-term level is closing at a good pace (see Figure 4.3), as margins applied to loans to non-financial corporations have been normalised and their equity position and the participation of corporate GOS in the generation of income have improved. A macroeconomic approach to corporate profits reveals a notably healthier composition, with a rebound in contributions to corporate profits from net investment and savings from the rest of the world and a decline in the importance of the public sector.[4]

In the medium term the evolution of public consumption is expected to grow slightly towards a sustainable balance, growing at rates below GDP (1.3% for 2018 and 1.4% for 2019), with the limit provided by the expenditure rule coming into play. There are no great divergences in this dynamic with respect to the forecasts of other institutions, whether national or international.

The evolution of this component essentially depends on the behaviour of the Autonomous Regions and Local Governments (LGs). For this aggregate to remain within the foreseen levels, the actions carried out by these sub-sectors and the correct application of the expenditure rule will be key. The tensions arising from highly inertial or structural expenditure, such as education or healthcare, will also be conditioned by the pressures linked to the population increase, which are expected to be contained in view of the stagnation of the population foreseen in the medium term by the National Statistics Institute (INE).

Lastly, a positive but moderate contribution to growth of around 0.1 to 0.2% is foreseen for the external sector. Progress forecasts for exports are at rates of 5.0% for 2018 and 4.5% for 2019, in line with most panellists. In this way, the no-policy-change scenario derived from AIReF's models envisages a growth pattern more oriented towards the external sector, with an economy that is more productive and capable of sustaining solid growth rates for exports. The stability in global activity and trade, closely linked to the cyclical recovery that investment has undergone, seems to more than offset the period that currency appreciation is undergoing. On the other hand, imports are projected towards rates in tune with the evolution of final demand in our economy, with growth (4.9% in 2018 and 4.5% in

[4] From the point of view of national accounting, corporate profits can be obtained from the Levy-Kalecki equation.

2019) slightly below exports. This view is like those of the analysts.

This balanced growth profile, however, is subject to potential unfavourable risks, mainly via trade tensions arising from the announcement of tariff increases by the US or a slowdown in the growth of the main trade partners of the European Union.

Labour market

In line with the rest of the forecasts, AIReF expects the dynamism observed in the labour market to continue in 2018. However, by 2019, it is expected that there will be a slower deceleration in job creation than that foreseen by the other national and international institutions. AIReF's baseline scenario forecasts a total employment growth of 2.5% for 2018 and 2.2% for 2019. As in the other national and international forecasts, it is expected that the dynamics in private job creation recorded in 2017 will continue throughout 2018. For 2019, AIReF's forecasting models point towards a slower deceleration than that expected by the other analysts (see Tables 3 and 4). This result is mainly based on a forecast of the most dynamic economic activity, which is reduced, to a lesser extent, due to the accumulation of productive capital, as the more capital-intensive processes return. Regarding employment by the PAs, AIReF's no-policy-change foresees a more subdued evolution in 2018 with respect to that observed in 2017, accelerating gradually from 2019, in line with the evolution of a population that has stopped falling and the greater need for the provision of services. In any case, public job creation is projected to be systematically less dynamic than that envisaged for the private sector. If we consider these figured coupled with GDP growth data, we would observe a contained productivity growth per worker in the medium term, around 0.3 to 0.4%. This forecast is consistent with the trend observed in the level of productivity per worker during the last 30 years and is in line with the values observed at comparable times in the cycle (see Figure 5).

For the next two years, a more dynamic evolution of compensation per employee is expected, in line with the increase in prices. Unlike what was observed in 2017, where compensation per employee in the private sector increased slightly (according to National Accounts figures), the macroeconomic scenario involves a recovery of private salaries. AIReF's baseline scenario assumes an annual growth in compensation per employee of 1.5% in 2018 and 2% in 2019, approximately in line with expected inflation. Although there might still be a slight loss of purchasing power in 2018, it is expected that in the medium term the robustness in job creation, the return to unemployment rates yet unseen during the last 10 years and the mirror effect of public wage agreements will be the factors that contribute to generating upward wage pressures. In addition to the evolution of the average salary included in the National Accounts, it is important to emphasise that complementary

information available to date suggests that wage increases are distributed in a disparate manner, with lower-wage workers experiencing an increase in their compensation at a greater speed. [5] As for public sector wages, the expected recovery is more significant than in the private sector, with real gains close to one percentage point per year, mainly due to the agreement signed between the Government and the Trade Unions. The expected evolution of compensation per employee, alongside projected growth in productivity, would mark an evolution of unit labour costs of around 1.2% for 2018 and 1.6% for 2019, slightly below that expected for the private consumption deflator, although above the average expected by international organisations for the Euro area.

[5] For example, the Active Population Survey with the wage deciles that provide data until 2016.

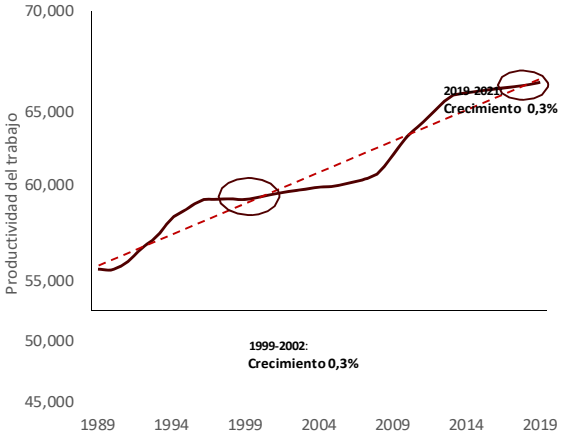
CUADRO 2. EMPLOYMENT AND POPULATION

	2014	2015	2016	2017	2018	2019
Empleo *(%var. salvo indicación en contra)*						
Empleo total EETC	**1.0**	**3.2**	**3.0**	**2.8**	**2.5**	**2.2**
Del sector privado	*1.0*	*3.7*	*3.2*	*3.2*	*2.9*	*2.5*
Del sector público	*1.3*	*1.3*	*2.2*	*1.4*	*1.0*	*1.0*
Remuneración por Asalariado EETC	**0.1**	**1.6**	**-0.3**	**0.1**	**1.5**	**2.0**
Del sector privado	*0.1*	*1.4*	*-0.4*	*0.3*	*1.4*	*1.8*
Del sector público	*0.0*	*2.6*	*-0.1*	*0.0*	*2.1*	*2.7*
Productividad por ocupado €	*0.3*	*0.3*	*0.3*	*0.2*	*0.3*	*0.5*
Coste laboral unitario nominal (CLU)	*-0.2*	*1.4*	*-0.6*	*0.2*	*1.2*	*1.6*
Población						
Población Total	-0.3	-0.1	0.1	0.2	0.0	0.0
Población activa	-1.0	-0.1	-0.4	-0.4	0.0	0.1
Tasa de paro (% población activa)	24.4	22.1	19.6	17.2	15.2	13.4

Note: The public sector refers to the public administration, defence, compulsory social security, education, healthcare and social services.

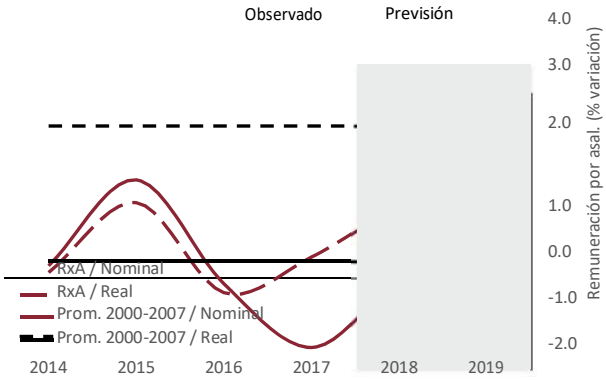
GRÁFICO 5. EVOLUTION OF THE LABOUR MARKET

❶ It is expected that productivity growth will evolve in line with its long-term trend ...



Source. National Statistics Institute and AIReF

❷ **...** and the recovery of wages will continue, albeit in a contained manner.



Source. National Statistics Institute and AIReF

CUADRO 3. COMPARISON WITH NATIONAL ORGANISATIONS

	Consenso FUNCAS		BdE		AIReF	
	2018	2019	2018	2019	2018	2019
Ultima actualización	*jul.-18*		*jun.-18*		*jul.-18*	
PIB	2,8	2,4	2,7	2,4	2,8	2,6
Consumo hogares	*2,4*	*2,0*	*2,4*	*1,8*	*2,3*	*2,2*
Consumo público	*1,6*	*1,5*	*1,5*	*1,3*	*1,3*	*1,4*
FBCF	*4,3*	*4,1*	*4,2*	*4,2*	*5,2*	*4,8*
FBCF B.equipo	*3,8*	*4,0*	*2,5*	*4,2*	*4,8*	*4,2*
FBCF Construcción	*4,9*	*4,5*	*5,7*	*4,5*	*5,4*	*5,1*
Demanda nacional	*2,6*	*2,3*	*2,5*	*2,2*	*2,7*	*2,5*
Exportaciones	*4,1*	*4,1*	*4,6*	*4,8*	*5,0*	*4,5*
Importaciones	*3,9*	*4,2*	*4,5*	*4,6*	*4,9*	*4,5*
IPC (media anual) [1]	*1,7*	*1,6*	*1,9*	*1,7*	*1,6*	*1,5*
Costes laborales	*1,1*	*1,5*	-	-	*1,2*	*1,6*
Empleo	*2,4*	*2,0*	*2,4*	*2,0*	*2,5*	*2,2*
Paro (% pob.activa)	*15,3*	*13,6*	*15,2*	*13,4*	*15,2*	*13,4*
Sdo B.Pagos c/c (% PIB)	*1,5*	*1,4*	*1,6* [2]	*1,6* [2]	*1,4*	*1,0*
Output gap (%PIB pot)	-	-	-	-	*-0,7*	*0,4*
Déficit público (% PIB)	*-2,5*	*-2,0*	*-2,7*	*-2,3*	*-2,7*	*-2,2*

(1) La proyección de AIReF se refieren al deflactor del consumo privado

(2) Capacidad de financiación frente al resto del mundo

CUADRO 4. COMPARISON WITH INTERNATIONAL ORGANISATIONS

	FMI		OCDE		COM		AIReF	
	2018	2019	2020	2021	2020	2021	2018	2019
Ultima actualización	*abr.-18*		*may.-18*		*may.-18*		*jul.-18*	
PIB	2.8	2.2	2.8	2.4	2.9	2.4	2.8	2.6
Consumo hogares	*2.3*	*2.0*	*2.3*	*1.8*	*2.3*	*1.9*	*2.3*	*2.2*
Consumo público	*1.0*	*0.7*	*1.2*	*1.1*	*1.9*	*1.3*	*1.3*	*1.4*
FBCF	*4.5*	*3.6*	*4.4*	*4.3*	*4.6*	*3.9*	*5.2*	*4.8*
FBCF B.equipo	-	-	-	-	*5.0*	*4.3*	*4.8*	*4.2*
FBCF Construcción	-	-	-	-	*4.8*	*4.1*	*5.4*	*5.1*
Demanda nacional	*2.5*	*2.1*	*2.6*	*2.2*	*2.7*	*2.2*	*2.7*	*2.5*
Exportaciones	*4.7*	*4.2*	*4.6*	*4.5*	*5.0*	*4.7*	*5.0*	*4.5*
Importaciones	*4.3*	*4.1*	*4.2*	*4.2*	*4.7*	*4.5*	*4.9*	*4.5*
IPC (media anual) [1]	*1.7*	*1.6*	*1.6*	*1.5*	*1.4*	*1.4*	*1.6*	*1.5*
Costes laborales	-	-	*1.3*	*1.6*	*1.1*	*1.6*	*1.2*	*1.6*
Empleo	*2.0*	*0.8*	*2.2*	*2.0*	*2.6*	*2.3*	*2.5*	*2.2*
Paro (% pob.activa)	*15.5*	*14.8*	*15.5*	*13.8*	*15.3*	*13.8*	*15.2*	*13.4*
Sdo B.Pagos c/c (% PIB)	*1.6*	*1.7*	*1.7*	*1.7*	*1.5*	*1.6*	*1.4*	*1.0*
Output gap (%PIB pot)	*0.2*	*0.7*	*-1.1*	*0.3*	*1.4*	*2.3*	*-0.7*	*0.4*
Déficit público (% PIB)	*-2.5*	*-2.1*	*-2.4*	*-1.5*	*-2.6*	*-1.9*	*-2.7*	*-2.2*

(1) La proyección de AIReF se refieren al deflactor del consumo privado

CUADRO 5. INSTITUTIONAL SECTOR ACCOUNTS

	Sociedades no financieras			Instituciones financieras			AAPP			Hogares			**Total economía**		
	2017	**2018**	**2019**	**2017**	**2018**	**2019**	**2017**	**2018**	**2019**	**2017**	**2018**	**2019**	**2017**	**2018**	**2019**
Producción y explotacion															
Valor añadido bruto	*54,5*	*54,1*	*54,0*	*3,4*	*3,3*	*3,2*	*13,0*	*12,8*	*12,7*	*19,7*	*20,2*	*20,5*	*90,7*	*90,5*	*90,3*
Remuneración de los asalariados	*31,0*	*30,8*	*30,9*	*1,7*	*1,7*	*1,6*	*10,6*	*10,4*	*10,4*	*4,1*	*4,2*	*4,2*	*47,3*	*47,1*	*47,1*
Impuestos netos subv s/ productos y las M	*0,1*	*0,1*	*0,1*	*0,2*	*0,2*	*0,3*	*0,0*	*0,0*	*0,0*	*0,6*	*0,6*	*0,6*	*0,9*	*1,0*	*1,0*
Excedente de explotación bruto	*23,4*	*23,2*	*22,9*	*1,5*	*1,3*	*1,3*	*2,4*	*2,4*	*2,3*	*15,1*	*15,5*	*15,7*	*42,4*	*42,4*	*42,3*
Asignación de la renta primaria															
Impuestos netos sobre la producción y las importaciones (R)							*10,6*	*10,8*	*10,9*				*10,6*	*10,8*	*10,9*
Remuneración de asalariados (R)										*47,5*	*47,3*	*47,3*	*47,5*	*47,3*	*47,3*
Rentas de la propiedad (R-E) Saldo	*-3,4*	*-3,1*	*-3,6*	*1,4*	*1,0*	*1,2*	*-1,9*	*-1,7*	*-1,7*	*3,5*	*3,3*	*3,3*	*-0,5*	*-0,5*	*-0,8*
rentas primarias bruto	*20,0*	*20,1*	*19,4*	*2,9*	*2,3*	*2,5*	*11,0*	*11,4*	*11,5*	*66,0*	*66,1*	*66,3*	*100,0*	*100,0*	*99,7*
Distribución secundaria de la renta															
Renta disponible bruta	*17,6*	*17,5*	*16,7*	*2,5*	*1,9*	*2,1*	*17,6*	*17,9*	*18,0*	*61,4*	*61,6*	*61,7*	*99,1*	*98,9*	*98,5*
Utilización de la renta															
Ahorro bruto	*17,6*	*17,5*	*16,7*	*2,7*	*2,0*	*2,2*	*-0,9*	*-0,2*	*0,1*	*3,5*	*4,0*	*4,6*	*22,9*	*23,3*	*23,5*
Operaciones de capital															
Formación bruta de capital	*15,2*	*15,2*	*15,1*	*0,2*	*0,1*	*0,1*	*2,0*	*2,2*	*2,2*	*3,7*	*4,3*	*5,0*	*21,1*	*21,9*	*22,5*
Cap.(+)/Nec.(-) de financiación	*2,9*	*2,7*	*2,0*	*2,4*	*1,9*	*2,1*	*-3,1*	*-2,6*	*-2,2*	*-0,3*	*-0,4*	*-0,6*	*2,0*	*1,7*	*1,3*
Tasa de ahorro (% sobre RDB)										5,7	6,5	7,4			

3.2. Basic assumptions

The basic hypotheses that support the macroeconomic scenario point to the continuation of tailwinds from the solid growth of our trade partners and an accommodative monetary policy, which will offset the effect of rising oil prices. In relation to the last Stability Programme Update for the 2018-21 period (2018-21 SPU) from April this year, the review of the assumptions is approximately neutral as regards growth. The most recent forecasts of the international organisations reflect a slight deceleration of global GDP and a more accentuated deceleration of eurozone GDP. However, it is expected that Spanish exports will continue to grow at a good pace, since, according to the ECB, world trade will continue to grow at rates close to 5% and the nominal effective exchange rate of the Euro will appreciate less than expected in April. On the other hand, oil futures point to a 35% increase in oil prices for 2018, higher than the 28% expected in April, which will boost the growth of prices and imports in nominal terms. Finally, the assumptions related to the long-term yield curve have been revised downwards by 2.1%, contributing to the good performance of investment.

Solid growth of world GDP and in the euro zone is expected, in line with the main international organisations. Global activity continues to grow steadily, although the latest data suggest a weakening of the momentum, explained by fiscal tensions in certain emerging countries and the impact of oil prices in importing countries. Solid global growth of around 4% is expected in the forecasting horizon, with a slight downward revision compared to April. Advanced countries continue to benefit from an expansive monetary policy, strengthened, in the case of the USA, by fiscal stimulus. Export-oriented countries are benefiting from the revitalisation of world trade, while the increase in the price of raw materials is encouraging the expansion of commodity exporters. The USA tariff measures have been limited to date, with little macroeconomic impact. However, protectionist drift could damage trade and investor confidence in the medium term. As the momentum of the cycle and expansionary policies are diluted, growth of global activity and trade will relax.

Despite the slowdown observed in the first quarter of the year, the euro zone continues to grow steadily. While the European Commission maintains the growth of the euro area for 2018 at 2.3%, the ECB has revised it 0.3% downward, to 2.1%. In the medium term, domestic demand continues to be supported by economic foundations, such as the dynamism of credit to the private sector, the accommodative tone of monetary policy, the recovery of the labour market and the improvement of families' financial wealth. The good performance of exports is in response to the expansion of world trade.

The main forecast centres expect the euro to stabilise around 1.20 dollars per euro in 2018 and 2019, 12% above the level of the first half of 2017. After the rebound experienced at the start of the year, the euro has reversed part of that increase and has returned to the 1.17 dollars per euro observed one year ago. As a result, the ECB expects the nominal effective exchange rate of the euro to appreciate 4.4% in 2018, 0.1% below that expected in April, and to depreciate 0.1% in 2019. AIReF expects a nominal appreciation of 0.9% in 2018 for the OECD countries and a stabilisation for 2019.

Interest rates will continue at moderate levels thanks to the ECB's expansive stance. At its meeting in June 2018, the ECB announced that it would reduce the monthly purchase of assets from 30 to 15 billion euros as of October and that purchases would end at year-end, provided that its inflation forecasts are confirmed. In addition, for the first time the ECB envisaged a possible rise in interest rates: not before summer 2019. The maintenance of the quantitative expansion in 2018 suggests negative treasury bill rates at twelve months this year and the following and a containment of the Spanish sovereign debt rate at 10 years, up to 1.4% in 2018 and 1.5% in 2019, in line with the futures market. The downward trajectory of the interest rate at which companies are financed, from 2.9% in 2017 to an expected level of 2.5% in 2019, is also a reflection of the system’s monetary conditions. The favourable financial conditions will continue to support the granting of new credit and investment.

The expected stabilisation of the price of oil at around 72 dollars per barrel in 2018 and 2019 is in line with the futures markets and the forecasts of the main international organisations. The price of the Brent barrel has recently exceeded 77 dollars barrel. Market expectations predict a price of crude oil of 72.7 and 72.2 dollars per barrel for 2018 and 2019, respectively, higher than the forecasts of 69.7 and 67.8 dollars in April. This flat profile is aligned with the growth of demand stemming from global expansion. On the supply side, the decreasing trend due to the higher unconventional gas production in the USA is offset by geopolitical tensions in the Middle East and by the agreement of last November between the OPEC countries and Russia to limit production.

CUADRO 6. EXTERNAL ASSUMPTIONS

	2014	2015	2016	2017	2018	2019
Crecimiento área de la UE	1.8	2.2	1.9	2.6	2.3	2.0
Tipo de cambio efectivo nominal (Esp/OCDE)	*0.0*	*-3.0*	*0.8*	*1.2*	*1.3*	*0.0*
Tipos a 1 año (deuda pública España) (nivel)	0.4	0.1	-0.1	-0.3	-0.3	-0.1
Tipos a 10 años (deuda pública España) (nivel)	*2.7*	*1.7*	*1.4*	*1.6*	*1.4*	*1.5*
Tipo de interés *(Soc. no finan. < 1 M € nuevas operac.) (nivel)*	*4.9*	*3.8*	*3.2*	*2.9*	*2.7*	*2.5*
Precio del petróleo ($/barril) (promedio)	*99.4*	*52.2*	*43.3*	*54.3*	*72.7*	*72.2*

3.3. Impact of the budgetary measures included in the scenario

The scenario described incorporates the latest measures approved through the 2018 GSB, affecting both the current year, 2018, and the next fiscal year, 2019. Broadly speaking, **the transmission routes of these policies in the reference scenario will focus on public consumption and private consumption**.

In the former case, the translation of the increase in public wages into a nominal increase in public consumption through its deflator, this being one of the main components of GDP.

In the case of private consumption, this increase in public wages alongside other approved measures, such as pension revaluation or the measures adopted in the framework of the Personal Income Tax, for which a lower income of about 1 billion euros each year is expected, will result in an increase in families' gross disposable income[6]. The higher gross disposable income of households will cause a change in the spending behaviour of families, stimulating private consumption, the purchase of housing (investment in construction), and the consumption of imported goods and services. Likewise, they will have a greater capacity for saving, which is why they support a slight recovery with respect to its recent decreasing trend.

All the above will be reflected in an improvement in aggregate economic activity that could be quantified at approximately 0.2% real GDP growth, as well as an improvement in employment.

In addition to the approved fiscal measures, the no-policy-change scenario also envisages certain agreements recently adopted between trade unions and employers, according to which they commit to a salary increase agreed until 2020, with a similar transmission route to the measures described above, entailing a higher disposable income of households.

[6] There are also other measures with a smaller impact such as measures on social contributions and special taxes.

3.4. Risks and uncertainties

The Spanish economy has shown a higher level of resilience than expected, allowing stabilisation of growth around robust levels. A more balanced growth composition than at other similar times of the cycle and the presence of supports to growth that facilitate the dynamism of economic activity in the coming quarters, contribute to partially mitigating the risks and uncertainties present in the macroeconomic scenario underlying the forecasts included in this report.

In the domestic sphere, AIReF considers that the short-term risks are contained. The materialisation of the risk of political instability, stemming from the institutional uncertainty in Catalonia, has had a lower impact than initially estimated, confirming the fundamentally transitory nature of the shock. At the end of 2017, the main domestic risk was the political crisis in Catalonia, which led to a generalised downward revision of the growth rates for 2018. According to AIReF's analysis the negative impact on the growth forecasts stemming from the political tensions was in line with a transient shock, expected to last about three months. This outlook was considered prudent, given the methodological difficulties in making the estimate and faced with the absence of directly comparable episodes. The impact has been lower than initially estimated and the Spanish economy as a whole has performed better than expected in the first half of the year. However, an uncertainty scenario, even of a low intensity, becoming chronic could lead to a downward risk in the medium term, mainly if it ends up affecting the investment decisions of economic agents.[7]

The scenario of global growth risks and of the main trade partners is balanced in the forecast horizon. In the short term, global growth could be higher than expected if credit trends continue above projections in response to continued accommodative monetary policies. On the other hand, increasing risks are identified in the medium term. There is consensus in identifying the risks linked to a context of low interest rates over a long period of time, which could have generated distortions in the valuation of assets whose correction could be sharper than expected. This correction acts as a latent risk on global economic and financial stability. In addition, in terms of trade relations, the implementation of protectionist policies by the main global players could detract from the dynamism of global economic growth. At the European level, the UK's exit from the European Union scheduled for March 2019 may have negative consequences on trade and financial flows. Even when this risk is still potentially present, its materialisation is doubly uncertain both about when it might occur and the precise way in which it could take shape. It is also worth mentioning the tensions stemming from some euro zone economies, mainly Italy, that could affect the debt markets. The soundness of the economic fundamentals,

[7] For more details about the evidence in the literature about similar episodes, see AIReF's report on the 2018-2021 Stability Programme Update (link here).

alongside the reduction of political uncertainty, has led to the improvement in the credit rating of the Spanish Treasury in recent months, which has resulted in a structural improvement in its financing costs. However, Spain would not be immune to these turbulences, especially in a context of high government debt. This type of risk scenario is highly non-linear and, therefore, its impact is difficult to predict.

Further increases in crude oil prices, in line with the rebound observed at the beginning of 2018, would have a limited impact on the no-policy-change scenario. In view of the recent geopolitical tensions, it is not possible to rule out an additional increase in the price of oil higher than that included in the assumptions of the no-policy-change scenario discussed above. The expected impact of this shock is limited by the structural decline observed in the dependence of the Spanish economy on this raw material, with a downward trend in oil consumption in final energy consumption in the last 20 years. As an example, an increase in the price of crude oil of 10% of the current value would mean a moderation of economic growth in 2018 and 2019
around 0.1% GDP for 2018 and 0.2% for 2019, according to AIReF's estimates. [8]

[8] A BVAR model has been estimated for the oil price series deflated by the wage index, real household consumption and employment. Based on the impulse response function, it can be observed that a positive disturbance in the price of oil suppresses consumption, although this effect takes some time to manifest itself in all its intensity (about 5 quarters) and is not significant. Assuming a 60% share of household consumption in GDP, it is estimated that the cumulative impact of a permanent 10% increase in the price of oil on economic activity is -0.09 percentage points and -0.26 percentage points in the years t and t + 1, respectively, in line with the literature (see, for example, Arencibia et al., 2017).

4. Budgetary scenario

AIReF estimates a baseline deficit scenario for the GG sector of 2.7% and 2.2% GDP in 2018 and 2019, respectively, which means a reduction of 1.1% GDP since 2017. This forecast implies a deficit reduction of 0.4% GDP in 2018 and 0.5% in 2019, based on an increase in the weight of non-financial revenue of 0.5% GDP in the first year and a decrease of 0.4% in the weight of the expenditure recorded, for the most part, in the second.

CUADRO 7. MACRO-BUDGETARY FORECASTS FOR 2018 AND 2019

TOTAL AAPP	2002	2014	2015	2016	2017	2018	2019	17/16 Δ %	18/17 Δ %	19/18 Δ%
A. RECURSOS TOTAL AAPP	**38,2**	**38,9**	**38,5**	**37,7**	**37,9**	**38,4**	**38,4**	**4,6**	**5,7**	**4,4**
1. Total impuestos	21,7	22,3	22,5	22,0	22,3	**22,6**	**22,8**	**5,2**	**6,1**	**5,3**
1.1. Impuestos sobre la producción y las importaciones	*11,1*	*11,5*	*11,8*	*11,6*	*11,6*	***11,8***	***11,9***	***4,3***	***6,3***	***5,6***
1.2. Impuestos corrientes sobre renta y patrimonio	*10,3*	*10,2*	*10,1*	*9,9*	*10,2*	***10,4***	***10,4***	***7,3***	***5,9***	***5,1***
1.3. Impuestos sobre capital	*0,4*	*0,5*	*0,6*	*0,6*	*0,5*	***0,5***	***0,5***	***-11,4***	***2,8***	***2,9***
2. Cotizaciones sociales	12,7	12,5	12,3	12,2	12,3	**12,3**	**12,3**	**4,9**	**4,7**	**4,2**
3. Rentas de las propiedad y otros ingresos	3,8	4,1	3,7	3,5	3,3	**3,4**	**3,3**	**-0,4**	**7,6**	**-0,6**
B. EMPLEOS TOTAL AAPP	**38,6**	**44,8**	**43,8**	**42,2**	**41,0**	**41,1**	**40,6**	**1,1**	**4,6**	**3,2**
1. Remuneración de asalariados	9,7	11,1	11,1	10,8	10,6	**10,4**	**10,4**	**1,2**	**3,1**	**3,7**
2. Consumo intermedio	4,2	5,3	5,3	5,1	5,0	**4,9**	**4,8**	**2,1**	**2,5**	**2,8**
3. Transferencias sociales en especie	2,4	2,7	2,6	2,6	2,6	**2,5**	**2,5**	**2,4**	**2,4**	**2,6**
4. Transferencias sociales en efectivo	11,6	16,5	15,8	15,5	15,3	**15,3**	**15,4**	**2,4**	**4,7**	**4,8**
5. Intereses	2,6	3,5	3,1	2,8	2,6	**2,4**	**2,3**	**-5,0**	**-4,1**	**0,8**
6. Formación bruta de capital	4,0	2,1	2,5	1,9	2,0	**2,3**	**2,1**	**8,4**	**20,0**	**-2,2**
7. Subvenciones y otros gastos	4,1	3,7	3,4	3,4	3,1	**3,3**	**3,2**	**-6,4**	**11,6**	**0,8**
Capacidad (+)/Necesidad (-) de financ.	**-0,4**	**-6,0**	**-5,3**	**-4,5**	**-3,1**	**-2,7**	**-2,2**			
Administración Central	**-0,6**	**-3,7**	**-2,8**	**-2,7**	**-1,9**	**-1,4**	**-0,8**			
Fondos de la seguridad Social	**0,8**	**-1,0**	**-1,2**	**-1,6**	**-1,5**	**-1,5**	**-1,6**			
Comunidades Autónomas	**-0,5**	**-1,8**	**-1,7**	**-0,8**	**-0,3**	**-0,3**	**-0,3**			
Corporaciones Locales	**-0,1**	**0,5**	**0,4**	**0,6**	**0,6**	**0,6**	**0,5**			
Pro memoria										
PIB real[a]	**2,9**	**1,4**	**3,4**	**3,3**	**3,1**	**2,8**	**2,6**			
Contribución al crecimiento del PIB:										
Demanda nacional	**3,6**	**1,9**	**3,9**	**2,5**	**2,8**	**2,7**	**2,5**			
Exportaciones netas	**-0,7**	**-0,5**	**-0,4**	**0,7**	**0,3**	**0,2**	**0,1**			
Deflactor del PIB[a]	**4,1**	**-0,2**	**0,6**	**0,3**	**1,0**	**1,6**	**1,7**			
PIB nominal[a]	**7,1**	**1,2**	**4,1**	**3,6**	**4,0**	**4,4**	**4,4**			
PIB, precios corrientes *(miles de millones de €)*	**749,3**	**1037,8**	**1080,0**	**1118,5**	**1163,7**	**1215,0**	**1268,2**			
Empleo EETC[a]	**2,5**	**1,0**	**3,2**	**3,0**	**2,8**	**2,5**	**2,2**			
Tasa de desempleo[b]	**11,4**	**24,4**	**22,1**	**19,6**	**17,2**	**15,2**	**13,4**			
Remuneración por asalariado EETC[a]	**3,5**	**0,1**	**1,6**	**-0,3**	**0,4**	**1,5**	**2,0**			
Deuda pública	**51,3**	**100,4**	**99,4**	**99,2**	**98,3**	**97,0**	**95,3**			

Cifras expresadas como porcentaje del PIB salvo indicación en contrario. (a) % variación anual; (b) % población activa

The following sections show the result by sub-sectors for each of the years in question, as well as the scenario of the GG obtained following a *bottom-up* approach. AIReF has produced estimates for every sub-sector, which, as indicated in the methodology section, involved the individual analysis of the Regions and

the differentiated treatment of the Social Security System and of the Public State Employment Service (SEPE) and the Wage Guarantee Fund (FOGASA).

4.1. 2018 Forecast

The 2018 budgetary scenario is anchored to the execution data for the first half of the year. These estimates have been made according to the published fiscal data corresponding to April, and for some variables, to May. The projections for the second semester and year-end are presented on a monthly basis that accumulates the previous twelve months in each figure.

4.1.1. Analysis by sub-sectors

A. Central Administration

AIReF's estimate foresees a reduction in the CA deficit to reach 1.4% at the end of 2018. This implies an adjustment of 0.5% GDP with respect to the end of 2017 and represents the entire adjustment foreseen for the GG sector. However, this deficit is above both the target approved for 2018 and the forecast notified to the European Commission on March 31.

Non-financial revenue

Revenue are expected maintain a growing path in 2018 despite the measures approved in the GSB. CA revenue is largely determined by the collection of taxes before transfer and the evolution of the regional financing system, although in 2018 the expected evolution of non-tax revenue that bring about a growth of almost 0.2% GDP is also of great relevance.

Tax revenue grow by 0.3% GDP in 2018, mainly due to the improvement of the economic cycle. Below, for each of the main figures, their evolution in the Common Tax System Territory (CTST) is detailed in terms of cash before transfer to the territorial administrations and subsequently their evolution in national accounting terms. In general, the difference between both figures include, on the one hand, the adjustment between accrual and cash and, on the other hand, the application of the national accounting methodology with respect to the accounting treatment of deferrals, rebates and uncertain collection, and in the case of PIT, the transfer to the Regions.

CUADRO 8. EVOLUTION OF THE MAIN TAXES 2018 - 2019 IN CASH TERMS

	2014	2015	2016	2017	2018	2019	17/16	18/17	19/18
IRPF	7,0	6,6	6,4	6,6	6,8	6,8	7,2	6,6	4,9
IS (1)	1,8	1,9	1,9	2,0	1,9	2,0	6,8	1,1	7,0
IRNR	0,1	0,2	0,2	0,2	0,2	0,2	16,0	17,8	8,9
IVA	5,4	5,6	5,6	5,5	5,9	6,0	1,3	12,1	6,0
IIEE	1,8	1,8	1,8	1,7	1,7	1,8	2,2	1,0	9,4

(1) No se incluye en la estimación del IS las posibles devoluciones por DTA's

The growth of PIT reflects the dynamism of economic activity, which is partially offset by the effects of its reform. The PIT reform approved with the GSB for 2018 enters into force in the second half of the year, therefore its total effects, 2.2 billion euros, are distributed between 2018, for 40%, and 2019, the remaining 60%. However, a 6.6% growth in collection is expected for the whole year, in line with the forecasts of the GSB as a result of both the growth of the withholding tax bases (mainly due to job creation) and the rise of the average wage and therefore of the effective rate. In addition to the adjustments, in the case of the PIT, the National Accounts only include the part corresponding to the CA, excluding the Regional Financing System payments in 2018. For this reason, in 2018, the growth of resources for the CA, 11.2%, is higher than the growth of collection.

Corporate Income Tax records a weak growth in 2018, reducing its weight on GDP. This poor performance, which contrasts with the strong growth projected in the GSB, is mainly explained by the increase in rebates compared to the previous year and by a halted first instalment payment, since the increase in profits of large companies and SMEs has just managed to compensate the decreases recorded by the tax groups.

VAT maintains its dynamism in 2018 with growth close to 6% in homogeneous terms. The collection of VAT will be in line with that foreseen in the GSB in 2018. The difference in national accounting in 2017 is mainly since the Immediate Information System came into force in that year, which implied a significant change in the management of VAT and its collection schedule, transferring revenue from 2017 to 2018 in the amount of €4.15 billion. This change has no impact in national accounting terms, although it has altered the cash data for the last year, hence for 2018 a growth rate of 12.1% is expected in cash terns against 7.1% in national accounting terms. The measures approved on VAT have a reduced impact in terms of collection, just over 100 million euros between 2018 and 2019.

Special Taxes maintain their path of reduction of their weight on GDP in 2018. After analysing the data of the first semester, the growth of special taxes will be around 1.0% in 2018, far from the 6.4% envisaged in the GSB. This stagnation is generalised in the main figures of Special Taxes and will carry their weight in GDP to 1.7% in 2018.

Property income, transfers and other CA income grow by around 0.2%, driven by funds from the EU and dividends from the Bank of Spain and public corporations. Revenue from the EU recorded historical lows in 2016 and 2017 because of the delay in the implementation of the 2014-2020 programming framework and the regulatory changes stemming from it. In this sense, the rule of automatic de- commitment of funds extended the deadline to justify the commitments programmed for each year by one year, which, alongside the shift of the financial programming from 2014 to 2015, meant that significant income was not received from the previous period nor the current period in 2016 and 2017. Conversely, the first year in which there is an obligation to justify expenditure to avoid the automatic de-commitment of the funds is 2018. Additionally, the actual operation of the system means that reimbursement requests are concentrated in the second half of the year and including the last month, adding additional uncertainty to the revenue scenario. As a result, AIReF estimates a significant increase in revenue due to this item, although it will only be reflected in the last months of the year. On the other hand, the dividends of the Bank of Spain, Enaire and SELAE are higher than those distributed in previous years in accordance with the execution data for the first semester. Conversely, social security contributions will continue to reduce their weight as the proportion of public employees that contribute under the civil servant regime decreases.

Non-financial expenditure

CA expenditure maintains its weight in 2018, breaking the declining trend of previous years. Expenditure shows an annual growth of 4.5% in 2018 compared to the 0.7% fall registered in 2017. In the first half of the year, the main determinants of the increase were investment and the contribution to the EU budget, while in the second half of 2018, the entry into force of the proposed wage increase for public employees will contribute to the growth of expenditure.

CA expenditure presents a high level of incurred expenses over which there is no margin of discretion. This implies that the Government's capacity to modify these items and influence their evolution is very limited or non-existent in the short term. Among this type of expenses, which represent approximately 73% of expenditure in 2018, it is worth noting the transfers of the Territorial Administration financing system, interest expenses, civil servants' benefits and the contributions to the European Union. To facilitate its understanding, the evolution of the financing system resources is included in the section of the respective sub-sectors. Below each of the main expenditure concepts of the CA is analysed, starting from those over which the Government has a lower decision-making capacity.

The reduction in interest expenditure continues in line with previous years. In terms of GDP, interest expenditure is reduced from 2.3% to 2%. The ECB's monetary policy has continued to favour a continued saving in interest in 2018. In 2015, the ECB decided to support economic recovery through a large-scale asset purchase

programme, given the low margin to which interest rates were subject. This continued action has led to a significant drop in sovereign rate curves and a reduction in spreads or risk premiums for Spanish debt that will be maintained in 2018. The savings in terms of interest expenditure will continue to be felt as the Public Treasury issuance portfolio is renewed, and issues made during the crisis are replaced by others with lower marginal rates.

The growth of expenditure on social transfers reflects the impact of the pension revaluation foreseen in the GSB for 2018. The main component of social transfers in cash are civil servants' pensions, which will grow by around 5.8% in 2018. This growth is the result of the evolution of this group, both in terms of the number of pensioners and the substitution effect, calculated according to AIReF's model and the revaluation in the GSB of 1.6% for 2018. Additionally, this heading also includes the negative taxes that will grow with the incorporation of the new PIT deduction for families.

Contributions to the EU resume their usual level after the sharp decline of 2017. The low implementation of the cohesion policy in the EU due to the delays in the implementation of the new 2014-2020 programming framework led to the adoption of an EU amending budget in 2017 that substantially reduced the contributions of the Member States to the EU budget. Once these delays have been overcome, it is expected that the implementation of the EU budget will return to the previous levels and, accordingly, the contributions of the Member States for VAT and Gross National Income would also return to their previous level. In this case, this entails an increase in expenditure of around 2 billion euros with respect to 2017 as reflected in the item of Subsidies and other expenditure.

Compensation of employees increases in 2018 because of the measures included in the GSB and the agreement with the trade unions. According to AIReF's estimates, compensation of employees will grow by an average of 3.1% per year in 2018. This growth incorporates a wage update of 1.75% in 2018 and the wage equalisation of the State Security Enforcement Agencies with the autonomous police forces for which €300 million is allocated each year. Regarding the number of personnel in 2018, a moderate reduction is maintained in line with the observed data, because of affiliations to the public sector that are even lower than public servant retirements, as opposed to the GSB, which already foresees the stabilisation of the workforce.

Expenditure on investments increases strongly due to the impact of the State's financial liability for toll roads and the investment increases included in the GSB. The quantification and temporary allocation of the State's Financial Liability (SFL) for the reversal of the concessions for toll roads presents important uncertainties. In 2018, AIReF assumed an impact of 1.8 billion euros in accordance with the information provided by the Ministry of Finance (MINHAC). Outside the SFL,

the GSB for 2018 reflects a significant increase in investment for the current year. Finally, the provisions of the Special Defence Programmes exert an additional upward pressure on investment.

Intermediate consumption grows in line with the reference rate in 2018. According to the execution data for the first half of 2018, intermediate consumption is expected to evolve moderately in 2018 with a growth of 2.4%, like the reference rate of the expenditure rule.

The materialisation of the payments of the Asset Protection Schemes (APS) made by the Deposit Guarantee Fund (DGF) represents a strong increase in expenditure in 2018. During the first half of 2018 the APS of the Caja de Ahorros del Mediterráneo made a payment of 1.429 billion euros, almost double the previous year, and a payment by the APS of Unnim of 320 million euros is expected, also higher than that of 2017, as seen in the item of Subsidies and other expenditure.

B. Social Security Funds

AIReF expects the Social Security Funds sub-sector to close 2018 with a deficit of close to 1.5%. The forecast for 2018 is above the 1.4% deficit notified by the Government. Despite the good performance of social contributions, with an expected growth of over 5%, the strong growth in benefit expenditure and the base effect of the previous year's deficit will make the 2018 deficit like that reached in 2017.

Non-financial revenue

Social contributions record a growth above 5% in 2018. The increase in contributions is mainly explained by the good behaviour of affiliations, but the contribution to this growth of the increase in the contribution bases is already close to 2%, in line with the increase in the CPI.

In turn, revenue from transfers increases slightly with respect to 2017. Although the transfers for the operation of the SEPE and FOGASA disappear from the budget, a new transfer from the State to finance the Social Security System has been created in it, by means of an amendment to the GSB, for an amount close to 1.300 billion euros.

Non-financial expenditure

In turn, social benefits are expected to increase by 4.7% in 2018, mainly due to the strong growth of Social Security pensions. Pensions will increase by 5.3%. This growth is much higher than that presented in this item in recent years, of around 3% year-on-year. The main cause is the pension revaluation of 1.6% included in the GSB and that will rise to 3% in the case of minimum and non-contributory pensions. This increase, much higher than the one that had been determined by the application of the PRI in recent years, of 0.25%, means that expenditure on this item grows well

above that 3%. Likewise, expenditure on widow's pensions will increase steeply because of the 4% increase in the percentage to be applied to the regulatory base of the benefit, from 52% to 56%. This increase represents an increase of almost 8% for the affected pensions and has been estimated at 700 million euros per year.

Unemployment expenditure, on the other hand, is expected to remain stable compared to the previous year due to the normalisation of the labour market. The decrease in this item reached over 17% in 2014 (over 5 billion) and in 2017 it was still 6.5%. In 2018 it is expected that expenditure on contributory benefits will begin to grow and that subsidy expenditure, the product of long-term unemployment after the crisis, will be much less than in previous years.

Expenditure on Temporary Disability and other short-term benefits is expected to slow down its growth. After three years of increases of over 10% because of the reactivation of the labour market, growth will decrease to 8% in 2018. However, measures such as increasing paternity leave will mean an additional increase in expenditure in this year that will offset this moderation.

The financial situation of the SEPE and FOGASA will partially offset the imbalance of the Social Security System. Distinguishing the Social Security System within the sub-sector, i.e. the administrative Social Security, SEPE and FOGASA, AIReF's forecast is that the SEPE will reach a surplus close to 0.1% GDP in 2018, and the FOGASA close to 0.05%, in both cases without transfers from the State. SEPE contributions are expected to grow at a rate close to 6% while its benefits would remain approximately constant with respect to 2017.

C. Autonomous Regions

AIReF estimates that the regional sub-sector could end 2018 with a deficit close to -0.3% GDP, obtained by aggregating the individual estimates based on the information available to date. In 2018, the sub-sector deficit has reduced slightly over 0.1% GDP over the end of 2017 without considering the extraordinary income stemming from previous years' regularisation of the economic flows of the Navarre Agreement and the Basque Country Accord (0.1 % GDP). The individual forecasts that determine the sub-sector forecasts were made by considering the latest available information provided in the regional budgets of the Regions and the regional EFPs recently reported on. These individual estimates do not fully incorporate the analysis of the latest information requested by AIReF for the preparation of the report on the closing forecasts for 2018, therefore they may be subject to review in the coming days.

In the first semester of 2018, the Regions have reduced their accumulated annual deficit by 0.1%, to -0.2% GDP. The budgetary carry over situation of the first half of 2018 has conditioned the evolution of revenue and expenditure in 2018, as it

did in the previous year. In twelve-month accumulated terms, the improvement in the balance stems from the stabilisation of revenue in terms of GDP, after the increase in the financing system resources in the second half of 2017; and a slight reduction in the weight of expenditure on GDP (0.1%). The cumulative annual deficit of the sub-sector as of June implies an improvement of 0.1% over the end of 2017. Revenue and expenditure in the first semester of the year experienced a very similar growth, which is slightly higher in the case of revenue due the advances received on account for the 2016 settlement of the financing system resources.

With the current information available from the approval of the GSB and the data sent by the Regions, it is expected that in the second semester the situation will be maintained until the last months of the year when the upward pressure of expenditure and the non-replication of extraordinary revenue for 2017 are anticipated to raise the deficit to 0.3% GDP. In the second half of the year, it is expected that the behaviour of revenue will continue until the later months of the year: on the one hand, replicating the behaviour of the previous year, the interim payments of the financing system resources will be regularised (paid to date in accordance with the extension of the GSB); on the other hand, in the later months the extraordinary revenue that were computed in 2017 for the regularisation of economic flows from previous years stemming from the Navarre Agreement and the Basque Country Accord (which accounted for over 0.1% GDP for the sub-sector) will not be recorded, although an improvement of the funds coming from the EU is expected. In terms of expenditure, as in 2017 but with more intensity, the entry into force of the measures envisaged in the GSB will put upward pressure on expenditure, accentuating the pressure for the expected execution of expenditure co-financed by EU funds in greater amounts than in the previous year.

Net non-financial revenue

Revenue are growing by around 4% in net terms in 2018, maintaining their weight in GDP. It is expected that in 2018 revenue in the Regions may grow by 4.5% over the end of 2017. If payments to the State for the financing system (which in national accounts form part of expenditure) are removed from the overall figure, in net terms the total regional revenue grow by around 4%.

The increase in the net financing system resources of the Regions subject to interim payments is 4%. According to the latest data reported by the MINHAC for 2018, the financing system resources (net) of the Regions subject to interim payments will grow by 4% over those of the previous year. These revenue, recorded under the headings of *Current taxes* and *Property income and other revenue*,, increase their weight in GDP by 0.1% in gross terms, maintaining this weight in net terms.

The 4% increase in other revenue is, as a whole, strongly conditioned by particular factors. For revenue other than those from the financing system of the Regions under the general tax regime, it is expected that there will be growth of 4% as a whole, with different behaviours in each item:

- According to AIReF's forecasting model, a progressive moderation in revenue is estimated for TATDLA, which, however, could reach a rate of variation close to 14% in 2018. This tax is the main figure for the Regions of the *Taxes on production and imports*
- There is a gradual reduction in the collection of *taxes on capital* (Taxes on Inheritance and Donations), stemming from the tax reduction measures adopted in several Regions, although they still maintain their weight in GDP.
- Other revenue are recorded within the heading of *Income and other revenue*, in addition to the funds received from the financing system for Regions under the general tax regime, which include:
    - In the case of sales revenue, it is expected that the level of 2017 will be maintained in 2018, except for the extraordinary revenue estimated in Valencia from the settlements of healthcare concessions. Apart from these non-recurring revenue, the expected trend increases in public fees and prices may be offset by the reductions in university fees resulting from the final fourteenth provision of the GSB Law relating to the amendment of the Organic Law 6/2001 on Universities.
    - Transfers from the Provincial Councils received by the Basque Country are experiencing a reduction of around 6% in 2018 (over 600 million euros) as the extraordinary revenue that took place in 2017 have not been replicated.
    - A significant growth in revenue from EU funds is expected in 2018. These have experienced significant declines since 2015, as a result of the need for certification of co-financed expenditure so as not to lose the funds programmed in the current programming period. In any case, the information available does not allow an adjusted estimate to be made, as although the Regions generally expect an improvement in these revenue, in some cases very significant, important deviations on the initial forecasts, both regional and of AIReF, have occurred in recent years due to various factors (new control mechanisms in the operational programme, new lines of co-financing, difficulties in certification ...). It is not known whether these circumstances can continue to exist to a greater or lesser extent, once more generating downside deviations on current forecasts.

Net non-financial expenditure

AIReF expects growth of around 4% for net expenditure in 2018, which maintains its weight in GDP. It is expected that in 2018 all expenditure in the sub-sector may grow by 4.4% over the end of 2017. Removing the payments to the State from the financing system from the total expenditure (considering them as less revenue instead of more expenditure), its increase is 4% with different behaviour in current and capital expenditure.

Healthcare and education expenditure, which affects the main current expenditure items, is growing around 3% as a result of structural factors and the Agreement with the trade unions on the compensation of public employees. The healthcare and education expenditure estimation model developed by AIReF shows an increase in the main current expenditure associated with these items (compensation *of employees, intermediate consumption and social transfers in kind)* of 3.5% and 2%, respectively. This is coupled with the additional effect on the *compensation of employees* and *social transfers in kind* (by updating accords) from the Agreement with the trade unions. This determines a 3% overall growth of these items, which constitute 87% of net current expenditure, in 2018.

The rest of the current expenditure items are growing overall by around 3%, although with different year-on-year evolutions in each item. In the case of *interest*, expenditure will decrease in 2018, according to AIReF's model. On the other hand, *benefits other than transfers in kind,* which include dependency benefits and minimum or guaranteed income will record growth close to 4%, incorporating the forecasts for the increase in minimum income in some Regions, while *subsidies* and other current expenditure will grow around 3%.

The evolution of capital expenditure will depend on expenditure co-financed by the EU and non-recurrent operations. In 2018, in parallel with the estimate of revenue from EU funds, a significant increase is expected in co-financed expenditure, included in *Gross fixed capital formation* and in capital transfers included in the heading of *Subsidies and other expenditure*. It is expected that a significant volume of expenditure will be certified by the Regions so as not to lose the funds programmed in the current operating programme (2018 is the first year in which there is an obligation to justify expenditure to avoid automatic de-commitment of the funds). The impact of judgements has also been included in this year, according to the information provided by the Regions, which represent over 0.05% GDP with respect to similar operations of the previous year. However, it is known that there are other judgements whose amount and year to which they will be charged has yet to be determined, which is why they have not been included in the 2018 scenario. However, if they do fall within the year, their maximum joint impact could entail around an additional 0.1% deficit in the sub-sector. Finally, it should be noted that a significant impact in terms of investment growth from the application of the provision

on financially

sustainable investments at the regional level is not expected in the sub-sector, given that its entry into force affects and takes place in few Regions, whose weight overall is moderate.

The forecasts for year-on-year expenditure growth (above 3%), mean that it is considered that the computable expenditure stemming from such expenditure could grow above the 2.4% set as the reference rate for this year, a situation that is reflected in most of the Regions.

D. Local Governments

AIReF estimates that the LG sub-sector could close 2018 with a surplus close to 0.6% GDP, consolidating the results obtained in the two previous years. The forecasts are the result of the estimate of an increase in homogeneous revenue of around 2%, in line with the average year-on-year increase in recent years, and an estimate of an increase in homogeneous expenditure of around 3%, including the low impact of the adopted measures this year, with the growth of nominal GDP (above 4%) not offsetting both increases. These increases are higher than those reflected in the following fiscal sheet as, to make a homogeneous comparison, the extraordinary effect in 2017 of the regularisation of the Basque quota of previous years, which entailed almost 1.4 billion euros of additional revenue of the Provincial Councils and around 1 billion euros of expenditure for the contribution of these to the Region of the Basque country, were removed from both currents. AIReF's forecasts of maintenance of the results obtained in 2017 are corroborated by the latest published quarterly execution data, corresponding to the first quarter of 2018, which replicate those of the same period of the previous year in terms of GDP.

AIReF considers that the different revenue and expenditure measures adopted with an impact in 2018, will not be enough to alter the surplus obtained in the last two years, either because they require regulatory development or procedures that impede much of their realisation in the current year.

Non-financial revenue

In year-on-year terms over the end of 2017, the homogeneous revenue of the LGs are expected to grow around 2% in 2018. This increase does not offset GDP growth, which means a reduction of 0.2% over the results of the previous year. This net increase notably includes the increase in tax revenue of around 3%, highlighting the rebound of the taxes imposed in national accounting terms linked to the real estate sector, mainly taxes on capital. Revenue from transfers between public administrations (mainly from the LC financing system) is estimated to grow in homogeneous terms around 5%. These revenue are included with other non-tax income under the heading "property income and other revenue", which, for the most part, tend to evolve according to average growth in the last few years (almost 2%) or

the growth rate approved for the expenditure rule (2.4%) if they are components of public consumption. This growth is much lower than that expected for nominal GDP (4.4%), which determines the 0.2% decline in this item with respect to 2017.

About revenue, it is considered that there will be no impact in 2018 on the collection of Real Estate Tax due to the modification of the revised text of the Land Registry Law by the 2018 GSB Law, whereby the fundamental element of the tax base of the RET (cadastral value) will be set according to the market prices communicated by public notaries according to the transactions carried out. This measure requires regulatory development. Therefore, if this regulation is not approved in the near future, its effects would be appreciated in 2019 and following years.

On the other hand, the impact on the collection of the Tax on the Increase in the Value of Urban Land (IIVTNU) from the judgements of the Constitutional Court of 2017, for which the imposition of the taxable event is declared unconstitutional in the cases in which there is no capital increase, is not known as well as the effect of the amendment of the regulation on this tax by the Consolidated Text of the Law regulating Local Taxation.

Non-financial expenditure

AIReF estimates a year-on-year expenditure growth in homogeneous terms of around 3% in 2018. This evolution is affected by the estimated effect of the agreement with the trade unions on compensation of employees and the expected impact on investment expenditure of the effect of the extension of the rules on the application of the budgetary surplus and the expansion of the objective and temporal scope of financially sustainable investments (SFI). The impact of this expansion has been estimated, according to the information available, by taking into account the maximum amount to be invested by each local corporation in the budgetary programmes defined in the law and once the eligibility conditions have been met (limits on indebtedness, having obtained surplus and positive cash surplus in the previous year, guarantee through debt amortisation of not generating a deficit in the current year and compliance with the legal average payment period).

4.1.2. Budgetary scenario of the General Government sector

Analysis of the execution of the first semester

The rate of reduction of the public deficit has decreased in the first half of 2018. According to the latest published data and AIReF's estimates for the first half of the year, the reduction of the public deficit has continued in the first half of the year to reach 2.9% GDP for the GG sector in twelve-months accumulated terms from 3.1%

at the end of 2017. However, this declining trend entails a slowdown with respect to the previous year.

In the first semester revenue have evolved in line with the forecasts of the SPU. The non-financial revenue to GDP ratio has grown slightly in the first half of 2018 to 38% in twelve-month accumulated terms, which means growth in line with nominal GDP. The collection figures for Special Taxes and the first fractioned payment of the Corporate Income Tax have been worse than initially expected, although they have been offset by the good progress of other revenue, especially PIT.

Expenditure has continued the trend of reducing its weight on GDP. The non-approval of the GSB for 2018 at the beginning of the year explains the containment of the growth of expenditure below nominal GDP, especially in very important headings such as pensions and compensation of employees. In the first half of the year, this evolution of expenditure would be compatible with the provisions of the SPU, but the measures contained in the GSB for 2018 have not yet come into force.

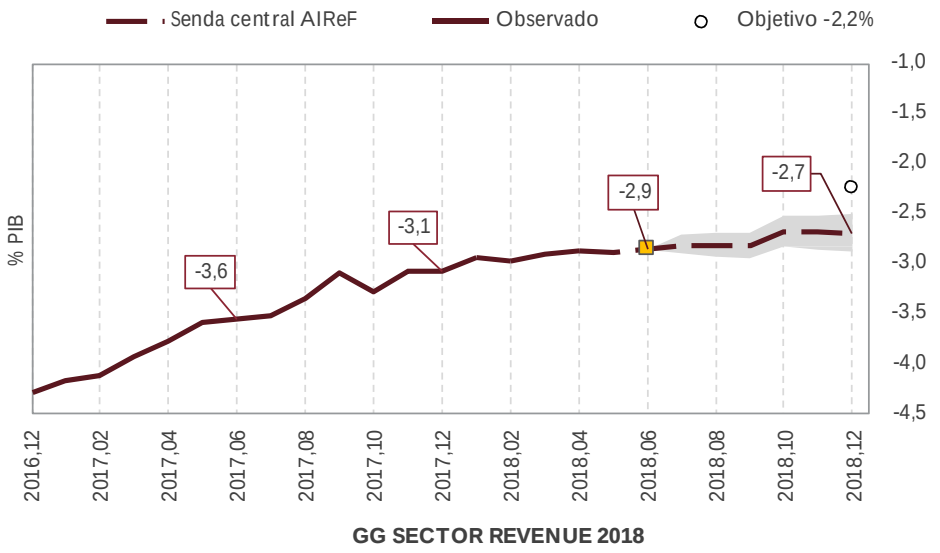
Second semester estimate and closing forecast

In the second semester, AIReF estimates a deficit reduction like that of the first semester, reaching 2.7% GDP at year-end, although with a different composition. In the second half of the year, the additional deficit reduction of 0.2% GDP will mainly be based on an increase in the weight of revenue of 0.4% GDP offset by a growth of 0.2% GDP in expenditure. In this way, a deficit reduction similar to that of the first semester is expected in the second half of the year.

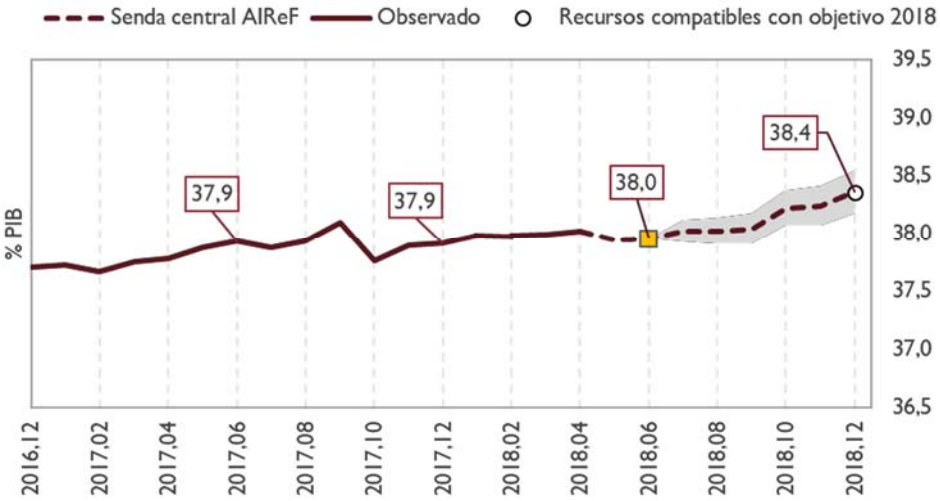
The revenue to GDP ratio will increase until it reaches 38.4% of GDP at the end of the year. Following the trend of the first half of the year, revenue will be in line with the forecast contained in the SPU. The concentration of the increase in revenue in the second half of the year is explained by the seasonality of some of the revenue for which a higher increase is expected, mainly those from EU funds. Conversely, the entry into force of the PIT reform in the second semester will reduce the dynamism of collection for this tax.

Expenditure will grow in the second semester due to the entry into force of the GSB for 2018, reaching 41.1% GDP at year-end. The revaluation measures for pensions and the wages of public employees have had a ripple effect since the beginning of the year and will become effective during the second half of the year following the final approval of the GSB for 2018. As a result, the trend of expenditure decline in recent years is interrupted and it increases to 41.1% GDP.

GRÁFICO 6. GG SECTOR: NET LENDING/BORROWING 2018



GG SECTOR REVENUE 2018



GG SECTOR EXPENDITURE 2018

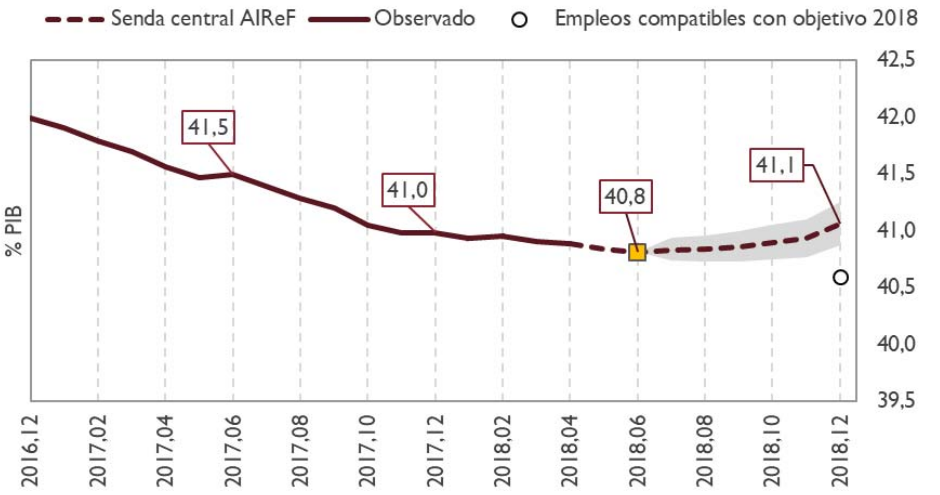
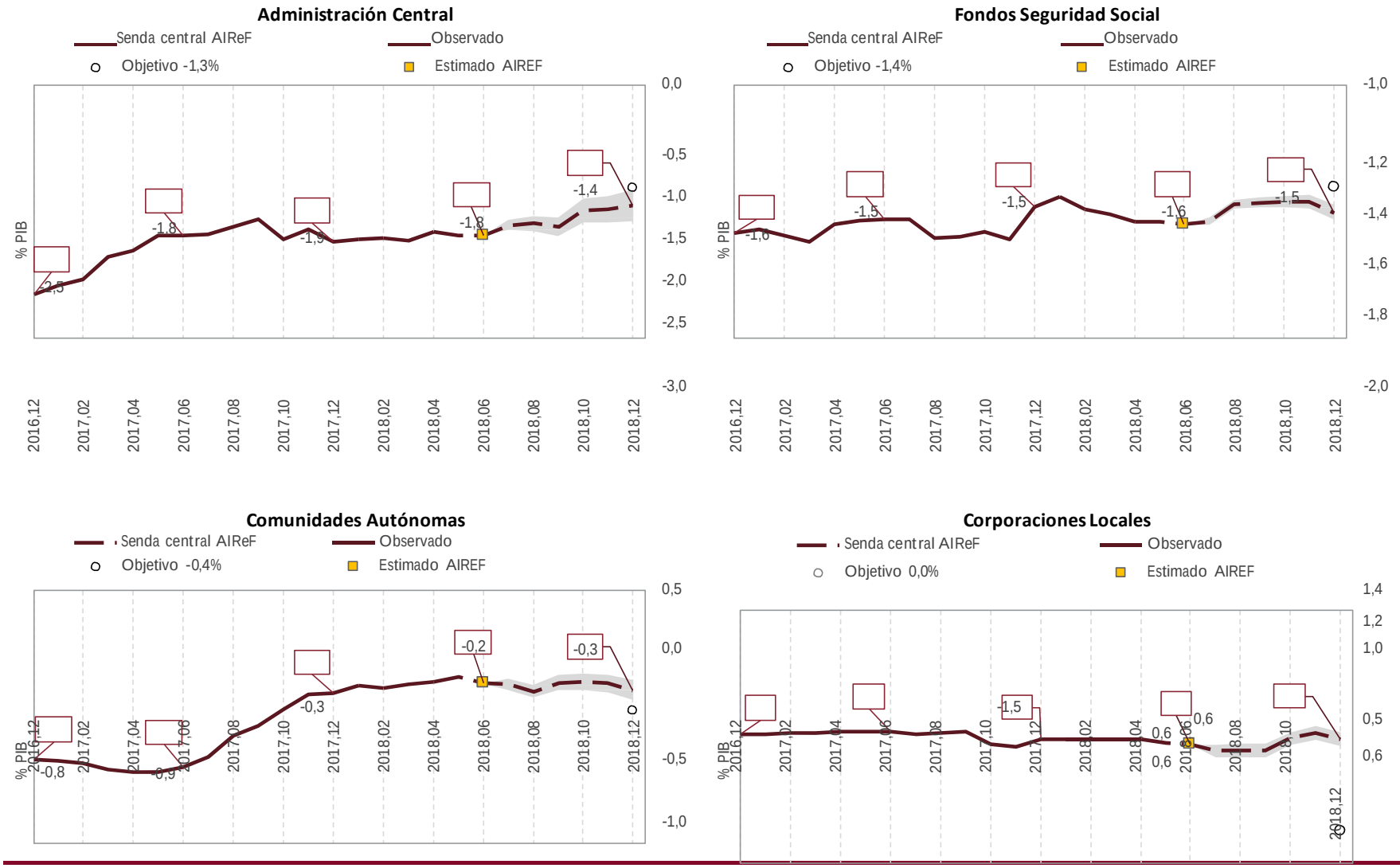


GRÁFICO 7. SUB-SECTORS 2018: NET LENDING/BORROWING



4.2. 2019 Forecast

The 2019 budgetary scenario has been prepared in annual terms. This scenario has been prepared considering the results obtained from AIReF's models and estimates for each of the sub-sectors as well as the available data, mainly derived from the GSB for 2018 and the Economic-Financial Plans (2018- 2019 EFPs) and budgetary frameworks (2018-2021) submitted by the Regions.

4.2.1. Analysis by sub-sectors

A. Central Administration

AIReF forecasts a reduction of the CA deficit to 0.8% GDP in 2019. Based on the -1.4% closing forecast for the sub-sector for 2018, it is estimated that an adjustment of 0.6% may be made in 2019, slightly higher than that made in 2018. This adjustment is obtained from an increase in revenue of over 0.3% GDP and a reduction in expenditure in a similar amount.

Non-financial revenue

In 2019 CA revenue will maintain a growing path. In 2019, revenue is conditioned by the collection of taxes before transfer and this year they will also grow owing to the effect of the 2017 settlement of the financing systems of the territorial administrations. Tax revenue will grow at a slower pace in 2019, mainly as a result of the PIT reform. cuadro 8 shows the expected evolution of the main taxes in 2019 over the forecast for 2018, both in cash and national accounting terms.

In 2019, the growth of PIT collection will be reduced due to the reform approved in the GSB for 2018. The PIT reform approved with the GSB for 2018 enters into force in the second half of the year, therefore its total effects, 2.2 billion euros, will be distributed between 2018 and 2019, as mentioned above, estimating an impact of 60% in the latter year. Therefore, a growth of 4.9% is expected for the whole year, somewhat more moderate than in the previous year because of the reform throughout the entire year.

AIReF expects Corporate Income Tax to recover in 2019. A recovery in revenue growth is expected in 2019, in line with the expected evolution of the tax bases and the gross operating surplus. On the other hand, in the self-settlement of the tax in July 2018, it is possible that some financial institutions will decide to convert deferred tax assets into receivables against the tax administration, as occurred in 2017. This amount is estimated at approximately 1.5 billion, therefore, adopting a prudent approach, it has been assumed that 500 million will be required each year in a similar way to 2017. This would imply a lower collection in 2019, although in national

accounting terms, this operation is recorded as a higher expenditure in the year in which the payment is requested, regardless of when it occurs.

VAT will maintain its dynamism in 2019 with growth close to 6%, as in 2018. According to the expected evolution of the macroeconomic scenario, the tax bases of VAT will maintain growth like 2018. The effect of the IIS will not be appreciated this year, either in cash or in national accounting terms. As already noted, the measures approved on VAT have a reduced impact in terms of collection, just over 100 million euros between 2018 and 2019.

Special Taxes will grow in weight on GDP in 2019 due to the increase in the Tax on Hydrocarbons. The increase in the Tax Hydrocarbons comes into effect in 2019, which in turn will be transferred to the Regions, so in net terms it will have no impact on the CA deficit.

It is anticipated that the increase in the other revenue expected for 2018 will be maintained in 2019. On the one hand, revenue from EU funds will remain at the 2018 level, reflecting the start of the 2014-2020 programming period. Likewise, it is also considered that the dividends of public institutions will be maintained. However, most of the growth of other revenue is explained by the increase in transfers from other PAs because of the regional financing system.

Non-financial expenditure

CA expenditure will record a fall of 0.4% GDP in 2019 with respect to 2018. Expenditure will present an annual growth of 2.5% in 2019, more moderate than expected for 2018. In 2019 the entry into force of the public employees' pay rise will contribute to expenditure growth, while there will be a sharp drop in gross fixed capital formation because of the re-tendering of the bailed-out toll roads.

The reduction in the weight of interest expenditure, favoured by the ECB's monetary policy, will continue in 2019. Three years after starting its asset purchase programme, the ECB continues to maintain its expansionary policy, although it could be contained at the first signs of an upturn in inflation. In any case, the effect of replacing old issues with others with lower marginal rates will continue.

Civil servants' pensions, the main component of social transfers in cash, will grow by around 5.5% in 2019. The estimated evolution of this group according to AIReF's model together with the revaluation contained in the GSB of 1.6% for 2019, determine a slightly lower increase in civil servants than in 2018. Additionally, as already indicated for 2018, this heading also includes the negative taxes that will grow with the incorporation of the new PIT deduction for families.

Contributions to the EU in 2019 will maintain the level of the previous year. As reflected in the item of Subsidies and other expenditure, it is considered that the

contribution to the EU will grow in line with the EU budget, which would register lower growth than 2018.

Compensation of employees will increase at a greater pace in 2019 than in 2018 because of the measures included in the 2018 GSB and the agreement with the trade unions. According to AIReF's estimates, compensation of employees will grow by 4.6% per year in 2019. This growth incorporates a wage update of 2.5% in 2019 and the wage equalisation of the State Security Enforcement Agencies with the autonomous police forces. Regarding the number of personnel in 2018, a slight increase in the number of personnel is assumed in line with the flexibility of the replacement rate included in the GSB and whose effects will also be felt the following year.

Investment expenditure will experience a sharp drop due to the impact of the re-tendering of the toll motorways bailed out. The quantification and temporary allocation of the State's Financial Liability (SFL) for the reversal of the concessions for toll roads presents important uncertainties. After the impact foreseen in 2018, the possible impact of both the re-tendering[9] and the potential dispute surrounding quantification of the SFL has also been envisaged for 2019. Aside from the SFL, it should be noted that the GSB for 2018 includes a significant increase in multi-year investment commitments for 2019, which has been included in the forecast by considering the usual practice of programming to future years. Finally, the provisions of the Special Defence Programmes exert less pressure on investment according to the information provided by the MINHAC.

Growth of intermediate consumption would accelerate in 2019 due to electoral expenditure. The organisation of the European, regional and municipal elections entails an above-trend growth of intermediate consumption, as can be seen in other years in which elections were held.

The materialisation of the payments of the Asset Protection Schemes (APS) made by the Deposit Guarantee Fund (DGF) will affect the deficit in 2019. As part of the CAM and Unnim sales process, the DGF granted two APS that would end in 2021 with the settlement of the estimated loss at that date. As the sale of the protected assets occurs, the DGF makes the payments for the guaranteed losses, which translates into greater CA expenditure. According to DGF information, the expected loss up to 2021 could reach up to 5,504 million euros, although it is not possible to determine the amount that will materialise in 2019. As a baseline scenario, AIReF has assumed that the distribution of the payments until 2022, which will mean payments of 1.35 billion in 2019. This amount is lower than expected for 2018, which is reflected in a drop in the *Subsidies and other expenditure* heading.

[9] Income from re-tendering would be recorded as lower Gross Fixed Capital Formation.

B. Social Security Funds

The Social Security Funds will increase their deficit to 1.6%. This sum is based on a slowdown in the growth of contributions to 4.5% when pensions and unemployment would grow by 5.2% and 1% respectively.

Non-financial revenue

The projected evolution of social contributions entails a slowdown in growth to 4.5%, in line with AIReF's forecast of a reduction in GDP growth rates. The growth of contributions will shift even more from the increase in employment to the increase in contribution bases than in 2018. Income from transfers between the PAs is expected to increase slightly, if the transfer to finance the Social Security System introduced in the budgets for 2018 is maintained at the same amount of 1.3 billion.

Non-financial expenditure

In turn, social benefits are expected to increase by 4.7% in 2019, mainly due to the strong growth of Social Security pensions. Pensions will increase by 5.2% owing to the revaluation of 1.6% foreseen in the budgets. However, growth is lower than expected for 2018 as minimum pensions are not revalued above the rest. Once again, expenditure on widow's pensions will increase steeply because of the 4% increase in the percentage to be applied to the regulatory base of the benefit, from 56% to 60%. On the other hand, unemployment expenditure is forecasted to increase slightly with respect to that expected for 2018. In turn, growth in expenditure on Temporary Disability and other short-term benefits is expected to continue to slow down, going from 8% in 2018 to 5% in 2019.

The financial situation of the SEPE and FOGASA will partially offset the imbalance of the Social Security System. In 2019 the SEPE surplus would increase to close 0.2% GDP, and the FOGASA deficit would surpass 0.05%, without State transfers in both cases.

C. Autonomous Regions

AIReF estimates that in 2019 the regional sub-sector will maintain the balance of -0.3% GDP of the previous years, considering that, overall, revenue will grow at rates like expenditure. For 2019, AIReF considers that the expected evolution of revenue and expenditure in the sub-sector would not allow an additional reduction of the balance over that expected in 2018. This figure is deduced from the individual forecasts, which determine that for most of the Regions, and all combined, the rate of revenue growth will be lower than that recorded in previous years, largely conditioned by the expected evolution of the resources of the financing system for Regions under the general tax regime.

In line with what has been shown so far, this factor, alongside the forecast of continued expenditure growth, in general and for most of the Regions, determines that in 2019 a balance like that of the previous year is expected for the sub-sector.

Net non-financial revenue

It is expected that revenue will grow in 2019 for all Regions by around 3% in net terms, falling 0.1% in terms of their weight in GDP. It is expected that in 2019 revenue in the Regions may grow by around 3.6% over the expected end of 2018. Removing the expected payments to the State for the financing systems, regional revenue overall would grow around 3% in net terms.

The increase in the net financing system resources of the Regions subject to interim payments is estimated at 3.6%. AIReF estimates the financing system resources according to the model developed in this regard, whose results for 2019 have been compared with the latest forecast communicated by the MINHAC for the sub-sector. The 2019 estimate incorporates the effect of the reform of the hydrocarbon tax envisaged in the SPU, as the regional tariff is incorporated into the special state rate, which is established by the State at the maximum rate, becoming integrated into the system; as well as the effect estimated by AIReF in the 2017 settlement of the VAT for that year by the IIS. These gross revenue, recorded under the headings of *Current taxes* and *Property income and other revenue*, will maintain their weight in GDP, but in net terms they will fall by 0.1%.

It is expected that the remaining revenue will grow by around 2% as a whole, conditioned by the integration of the tax on hydrocarbons into the financing system and maintenance at the level of other revenue. For revenue other than those from the financing system of the Regions under the general tax regime, it is expected that there will be growth of 2% as a whole, under the following conditions:

- The progressive moderation of revenue from TATDLA estimated with AIReF's forecasting model, determines that the growth rate could be around 12% in 2019. This increase would be offset, under the heading of *Taxes on production and imports,* by the disappearance of the individualised regional tariff of the hydrocarbons tax, which will be integrated into the system resources.
- It is expenditure that the decline in the collection of Tax on Inheritances and Donations will continue, stemming from the fiscal reduction measures envisaged in several Regions.
- The heading *Income and other revenue* will lose weight in GDP as, although it is estimated that the transfers of the Provincial Councils received by the Basque Country in 2019 will grow by around 5%, other items will see very moderate evolution. Thus:

- In the case of sales revenue, although a growth trend associated with the reference rate of the expenditure rule is applied to the level of the previous year, the revenue expected in Valencia in 2018 that will not be replicated in 2018 mean that the final rate of change will be almost zero.
- On the other hand, in 2019 once a standardised level of certification of co-financed expenses has been reached, no growth in the EU's income is expected, maintaining the level of 2018.

Net non-financial expenditure

AIReF expects growth of around 3% for net expenditure in 2019, which loses 0.1% of its weight in GDP. The growth trend for current expenditure is expected to continue, maintaining the level of capital expenditure.

The projected evolution of healthcare and education expenditure and the effect estimated for 2019 of the Agreement with the trade unions on the compensation of public employees determine growth of the main current expenditure items of over 3%. The healthcare and education expenditure estimation model developed by AIReF shows an increase in the main current expenditure associated with these items like that expected in 2018. This is coupled with the additional effect estimated for 2019 of the Agreement with the trade unions, which determines an overall growth of these items of 3.3% in 2019.

Considering the above, it is expected that there will be no growth in capital expenditure. The significant increases expected in 2018 as a result, on the one hand, of the need to certify a greater volume of expenditure in this year and, on the other, of the impact of judgements, mean that there will be no growth in capital expenditure in 2019, provided that the forecasts of the evolution of investment associated with EU funds are met and that the judgements pending quantification and time of imputation mentioned in the 2018 analysis, whose maximum impact could amount to 0.1% GDP, do not materialise this year.

D. Local Governments

AIReF estimates that the LG sub-sector could close 2019 with a surplus close to 0.5% GDP, entailing a slight reduction over that expected in 2018. This reduction in 2019 is a result of the expected lower increase in revenue (slightly above 1%, such as the stable year-on-year growth of the last settlements) with respect to the estimate for expenditure (around 3%), which means that the expected surplus for 2019 is about 0.1% lower than in 2018.

Non-financial revenue

In year-on-year terms over the end of 2018, in 2019 the revenue of the LGs is expected to grow below the homogeneous growth of 2% expected for 2018. This increase does not offset GDP growth, which means a reduction of 0.2% in 2019 as well. This increase notably includes that of tax revenue, which is expected to be around 3%. Revenue from transfers between PAs, which are included with the rest of non-tax revenue under the heading "property income and other revenue", is estimated to grow around 1%, below the 5% growth expected for 2018. The rest of the items in this heading evolve according to average growth rates of recent years (of almost 2%) or to the growth rate approved for the expenditure rule (2.7%) if they are components of public consumption. Both growth rates are much lower than expected for nominal GDP (above 4%), which determines the drop in this heading with respect to 2018.

Non-financial expenditure

AIReF estimates year-on-year expenditure growth of around 3% in 2019. This growth is affected by the same factors as in 2018, although with a more pronounced expected impact resulting from the provisions of the agreement with the trade unions on compensation of employees and the extension to 2019 of the financially sustainable investments initiated in 2018, in addition to those that could be initiated in 2019 if the rule was extended.

4.2.2. Budgetary scenario of the General Government sector

AIReF estimates a deficit of 2.2% GDP for the General Government sector. Based on a closing forecast for 2018 of 2.7%, AIReF's baseline scenario envisages a deficit reduction of 0.5% GDP. The lower deficit reduction in 2019 is mainly explained by the effect of the measures included in the GSB for 2018, as well as by the increase in the compensation of employees envisaged in the Agreement with the trade unions. In fact, the PIT reform has a greater impact in 2019 than in 2018. Similarly, the revaluation of pensions accumulates to the increase of the previous year, as would also happen with the increase in public employees' wage.

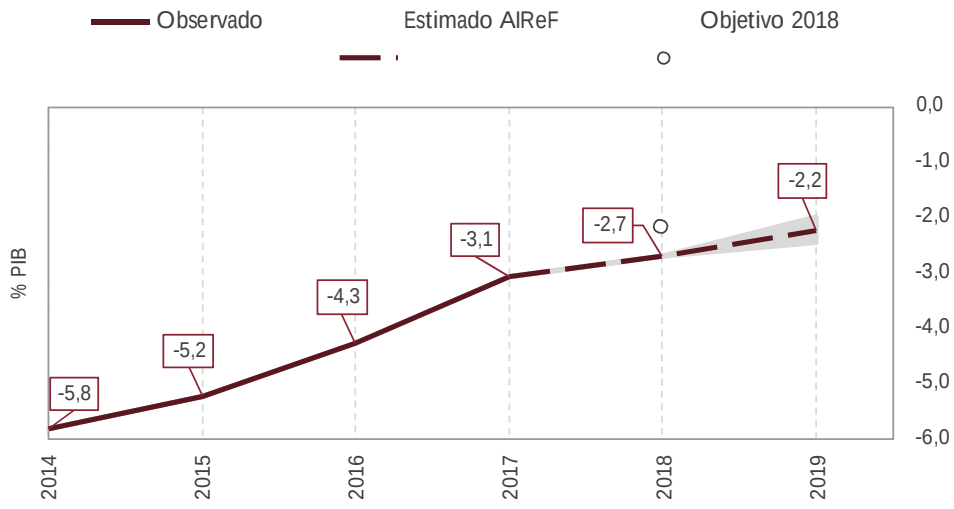
Revenue will grow in line with nominal GDP, remaining at 38.4% GDP. The lower dynamism of the tax bases, alongside the effect of the PIT reform, leads to a lower growth in revenue in 2019 compared to that expected in 2018. Tax collection would grow around 5% while property income and other revenue would fall slightly compared to 2018 following the expected increase in income from EU funds.

The expenditure to GDP ratio will continue to fall, although at a lower rate than in previous years. Based on the 2018 closing forecast at 41.1% GDP, expenditure

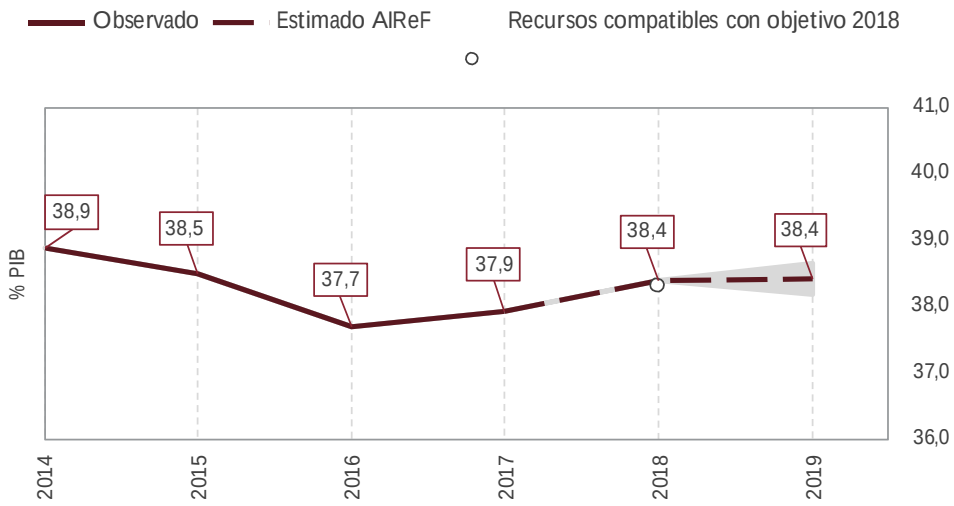
will stand at 40.6% GDP in 2019. Expenditure on social transfers, mainly pensions, will increase by around 4.8%. Likewise, growth of compensation of employees will accelerate because of the application of the Agreement with the trade unions. Investments will also grow, although to a lesser extent than in 2018 due to the impact of the re-tendering of toll motorways. Conversely, interest expenditure will continue to fall as in previous years.

In 2019 the deficit reduction is once more concentrated in the CA, which also compensates for the worsening of the budgetary balance of the Social Security Funds and the LGs. The CA deficit will be 0.8% in 2019 because of an increase in revenue of 0.4% GDP and a reduction in expenditure of 0.4% GDP. In turn, the Social Security Funds deficit will increase by 0.1%, standing at 1.6% GDP. In the Territorial Administrations, the Regions will maintain their deficit of 0.3% GDP, while the LG surplus will be reduced to 0.5% GDP.

GRÁFICO 8. GENERAL GOVERNMENT SECTOR: NET LENDING/BORROWING



GENERAL GOVERNMENT TOTAL REVENUE



GENERAL GOVERNMENT TOTAL EXPENDITURE

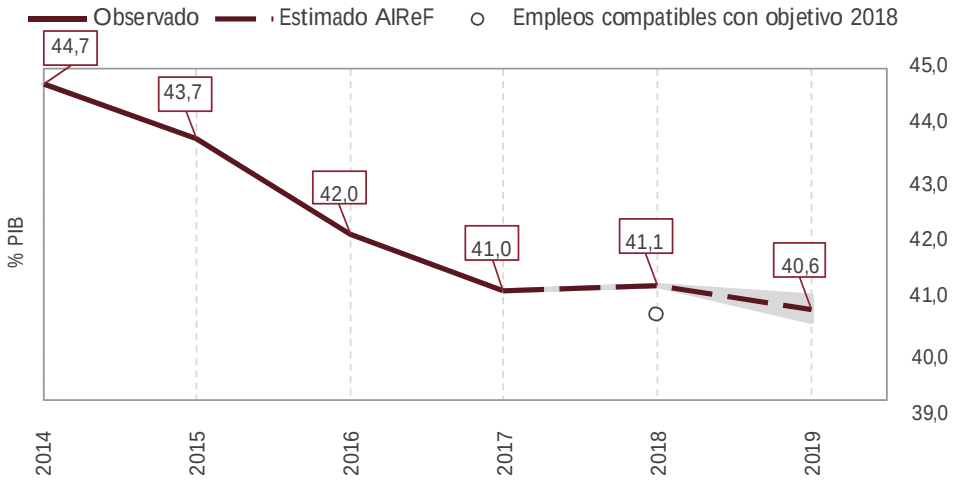
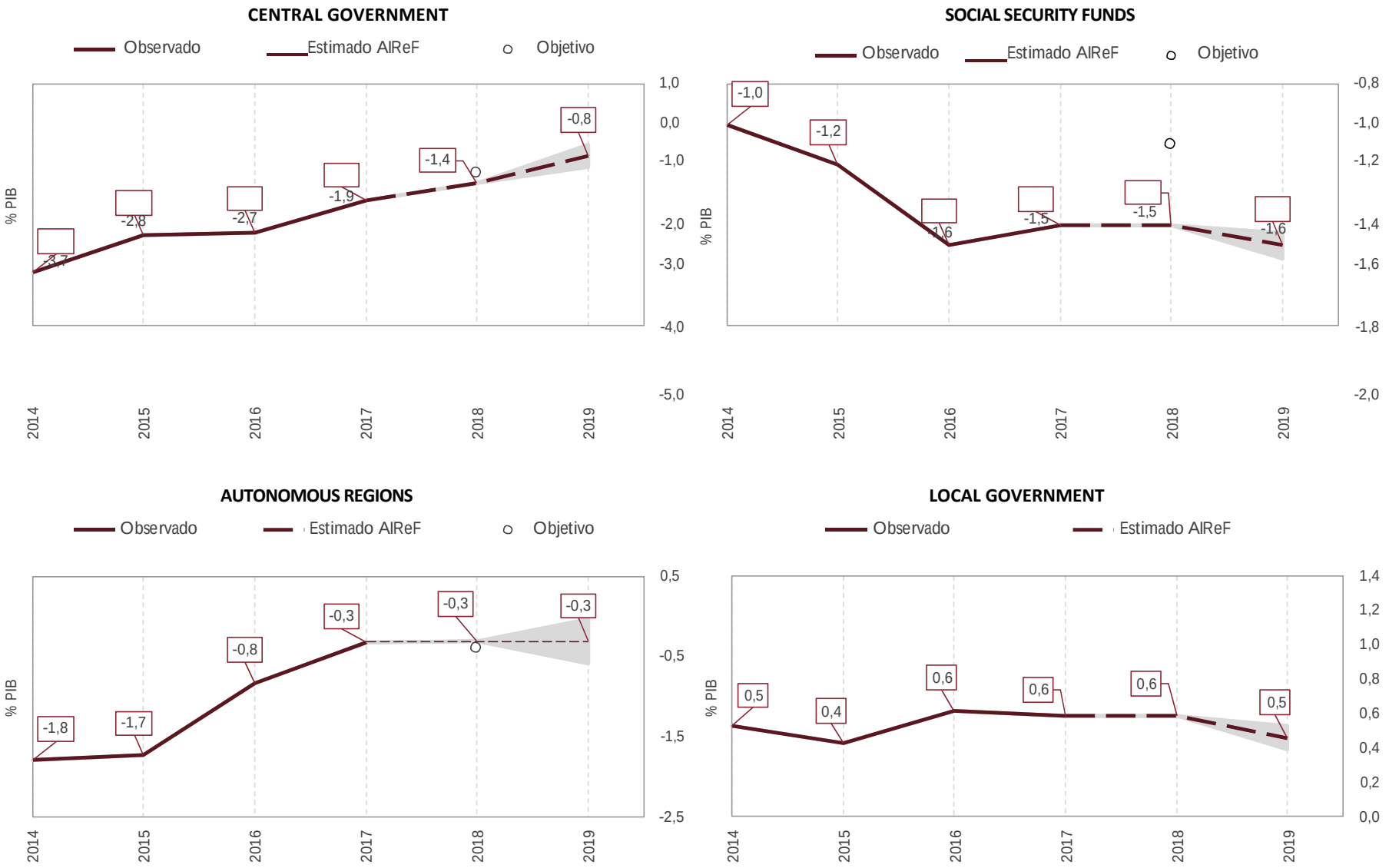


GRÁFICO 9. SUB-SECTORS 2018-2019 NET LENDING/BORROWING



4.3. Tables and figures of the budgetary scenario

TOTAL AAPP	2002	2014	2015	2016	2017	2018	2019	17/16	18/17	19/18
A. RECURSOS TOTAL AAPP	**38,2**	**38,9**	**38,5**	**37,7**	**37,9**	**38,4**	**38,4**	**4,6**	**5,7**	**4,4**
1. Total impuestos	21,7	22,3	22,5	22,0	22,3	**22,6**	**22,8**	**5,2**	**6,1**	**5,3**
1.1. Impuestos sobre la producción y las importaciones	*11,1*	*11,5*	*11,8*	*11,6*	*11,6*	***11,8***	***11,9***	***4,3***	***6,3***	***5,6***
1.2. Impuestos corrientes sobre renta y patrimonio	*10,3*	*10,2*	*10,1*	*9,9*	*10,2*	***10,4***	***10,4***	***7,3***	***5,9***	***5,1***
1.3. Impuestos sobre capital	*0,4*	*0,5*	*0,6*	*0,6*	*0,5*	***0,5***	***0,5***	***-11,4***	***2,8***	***2,9***
2. Cotizaciones sociales	12,7	12,5	12,3	12,2	12,3	**12,3**	**12,3**	**4,9**	**4,7**	**4,2**
3. Rentas de las propiedad y otros ingresos	3,8	4,1	3,7	3,5	3,3	**3,4**	**3,3**	**-0,4**	**7,6**	**-0,6**
B. EMPLEOS TOTAL AAPP	**38,6**	**44,8**	**43,8**	**42,2**	**41,0**	**41,1**	**40,6**	**1,1**	**4,6**	**3,2**
1. Remuneración de asalariados	9,7	11,1	11,1	10,8	10,6	**10,4**	**10,4**	**1,2**	**3,1**	**3,7**
2. Consumo intermedio	4,2	5,3	5,3	5,1	5,0	**4,9**	**4,8**	**2,1**	**2,5**	**2,8**
3. Transferencias sociales en especie	2,4	2,7	2,6	2,6	2,6	**2,5**	**2,5**	**2,4**	**2,4**	**2,6**
4. Transferencias sociales en efectivo	11,6	16,5	15,8	15,5	15,3	**15,3**	**15,4**	**2,4**	**4,7**	**4,8**
5. Intereses	2,6	3,5	3,1	2,8	2,6	**2,4**	**2,3**	**-5,0**	**-4,1**	**0,8**
6. Formación bruta de capital	4,0	2,1	2,5	1,9	2,0	**2,3**	**2,1**	**8,4**	**20,0**	**-2,2**
7. Subvenciones y otros gastos	4,1	3,7	3,4	3,4	3,1	**3,3**	**3,2**	**-6,4**	**11,6**	**0,8**
Capacidad (+)/Necesidad (-) de financiación	**-0,4**	**-6,0**	**-5,3**	**-4,5**	**-3,1**	**-2,7**	**-2,2**			

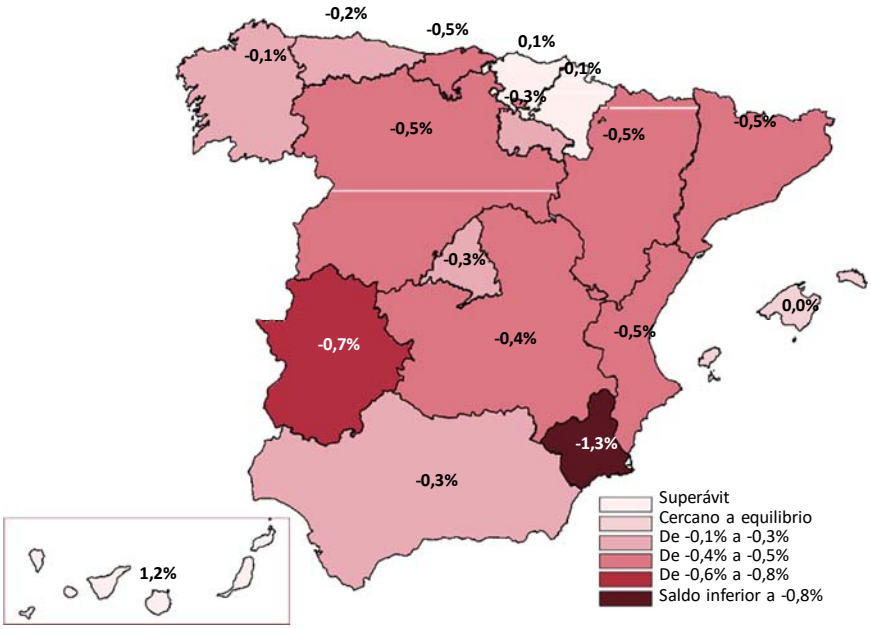
ADMINISTRACIÓN CENTRAL	2002	2014	2015	2016	2017	2018	2019	17/16	18/17	19/18
A. RECURSOS AC	**17,9**	**18,1**	**17,9**	**17,0**	**16,9**	**17,3**	**17,7**	**3,4**	**7,3**	**6,5**
1. Total impuestos	15,0	14,3	14,4	13,8	13,9	**14,2**	**14,4**	**4,1**	**7,0**	**6,0**
1.1. Impuestos sobre la producción y las importaciones	*7,3*	*8,0*	*8,3*	*8,1*	*8,1*	***8,2***	***8,4***	***4,0***	***6,5***	***6,6***
1.2. Impuestos corrientes sobre renta y patrimonio	*7,7*	*6,1*	*6,0*	*5,7*	*5,7*	***5,9***	***6,0***	***5,4***	***7,7***	***5,2***
1.3. Impuestos sobre capital	*0,0*	*0,1*	*0,1*	*0,1*	*0,0*	***0,0***	***0,0***	***-66,1***	***4,4***	***4,4***
2. Cotizaciones sociales	1,1	1,0	1,0	0,9	0,9	**0,8**	**0,8**	**-2,1**	**-0,6**	**0,0**
3. Rentas de las propiedad, transferencias y otros ingresos	1,8	2,8	2,5	2,2	2,1	**2,3**	**2,4**	**1,3**	**12,5**	**11,4**
B. EMPLEOS AC	**18,5**	**21,7**	**20,6**	**19,7**	**18,8**	**18,8**	**18,4**	**-0,7**	**4,5**	**2,5**
1. Remuneración de asalariados	2,1	2,2	2,2	2,1	2,0	**2,0**	**2,0**	**-1,4**	**3,1**	**4,6**
2. Consumo intermedio	0,8	0,8	0,8	0,8	0,7	**0,7**	**0,7**	**0,9**	**2,4**	**4,3**
3. Transferencias sociales en especie	0,1	0,1	0,1	0,1	0,1	**0,1**	**0,1**	**-2,1**	**6,4**	**2,7**
4. Transferencias sociales en efectivo	1,1	1,5	1,5	1,6	1,6	**1,6**	**1,6**	**4,6**	**6,3**	**5,8**
5. Intereses	2,3	3,1	2,8	2,5	2,3	**2,0**	**2,0**	**-5,7**	**-6,4**	**2,2**
6. Transferencias	8,8	11,0	10,4	9,8	9,6	**9,5**	**9,4**	**1,9**	**2,6**	**3,6**
7. Formación bruta de capital	1,1	0,7	0,7	0,6	0,6	**0,8**	**0,7**	**7,2**	**40,7**	**-15,2**
8. Subvenciones y otros gastos	2,1	2,3	2,1	2,2	1,8	**2,0**	**1,9**	**-12,8**	**16,3**	**0,1**
Capacidad (+)/Necesidad (-) de financiación	**-0,6**	**-3,7**	**-2,8**	**-2,7**	**-1,9**	**-1,4**	**-0,8**			

FONDOS DE LA SEGURIDAD SOCIAL	2002	2014	2015	2016	2017	2018	2019	17/16	18/17	19/18
A. RECURSOS FSS	**12,7**	**14,4**	**13,6**	**12,9**	**12,7**	**12,7**	**12,7**	**2,8**	**4,5**	**4,0**
2. Cotizaciones sociales	11,6	11,5	11,2	11,2	11,4	**11,4**	**11,5**	**5,6**	**5,1**	**4,5**
3. Rentas de las propiedad, transferencias y otros ingresos	1,2	2,9	2,3	1,7	1,4	**1,3**	**1,2**	***-15,2***	***-0,8***	***-0,5***
B. EMPLEOS FSS	**11,9**	**15,4**	**14,8**	**14,5**	**14,2**	**14,3**	**14,3**	**2,2**	**4,8**	**4,7**
1. Remuneración de asalariados	0,5	0,2	0,2	0,2	0,2	**0,2**	**0,2**	**-2,1**	**1,8**	**3,3**
2. Consumo intermedio	0,2	0,1	0,1	0,1	0,1	**0,1**	**0,1**	**1,8**	**4,7**	**2,7**
3. Transferencias sociales en especie	0,2	0,0	0,0	0,0	0,0	**0,0**	**0,0**	**3,0**	**2,4**	**2,7**
4. Transferencias sociales en efectivo	10,3	14,5	13,9	13,6	13,3	**13,3**	**13,4**	**2,0**	**4,6**	**4,7**
Pensiones	*7,8*	*11,0*	*10,9*	*10,9*	*10,7*	***10,8***	***10,9***	**3,0**	**5,3**	**5,2**
Prestaciones por desempleo	*1,4*	*2,4*	*1,9*	*1,7*	*1,5*	***1,4***	***1,4***	**-6,5**	**0,0**	**1,0**
Otros	*1,0*	*1,1*	*1,0*	*1,1*	*1,1*	***1,1***	***1,1***	**5,2**	**3,5**	**4,8**
7. Subvenciones y otros gastos	0,8	0,5	0,5	0,5	0,5	**0,6**	**0,6**	**8,5**	**13,3**	**4,7**
Capacidad (+)/Necesidad (-) de financiación	**0,8**	**-1,0**	**-1,2**	**-1,6**	**-1,5**	**-1,5**	**-1,6**			

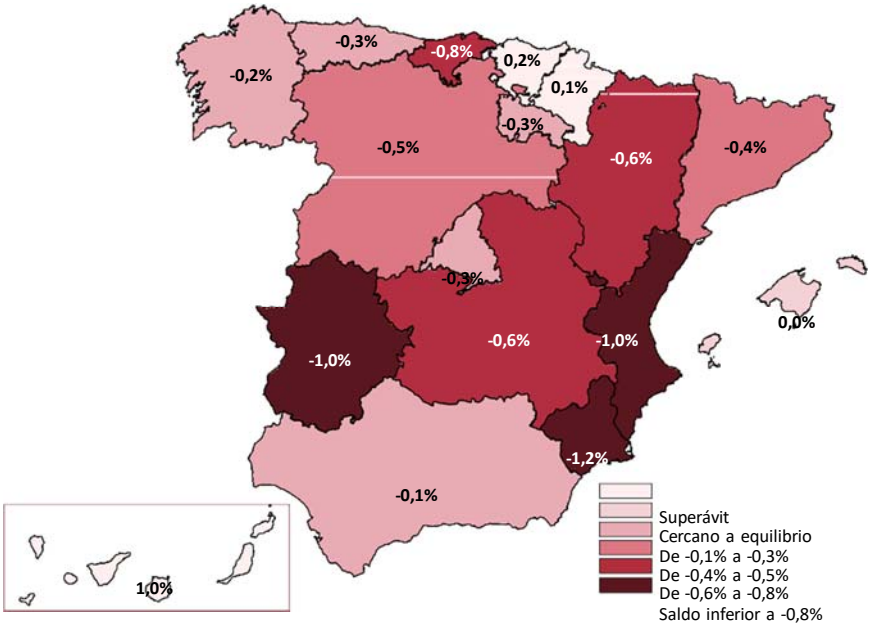
COMUNIDADES AUTONÓMAS	2002	2014	2015	2016	2017	2018	2019	17/16	18/17	19/18
A. RECURSOS	**12,8**	**14,1**	**14,1**	**14,2**	**14,5**	**14,5**	**14,4**	**6,6**	**4,5**	**3,6**
1. Total impuestos	3,9	4,6	4,7	4,9	5,2	**5,2**	**5,2**	**9,9**	**5,0**	**4,4**
1. Impuestos sobre la producción y las importaciones	*1,8*	*1,2*	*1,2*	*1,2*	*1,3*	***1,3***	***1,3***	**9,8**	**9,9**	**3,4**
2. Impuestos corrientes sobre renta y patrimonio	*1,9*	*3,2*	*3,3*	*3,5*	*3,7*	***3,7***	***3,7***	**10,4**	**3,7**	**5,1**
3. Impuestos sobre capital	*0,2*	*0,2*	*0,2*	*0,2*	*0,2*	***0,2***	***0,2***	**1,4**	**-2,2**	**-1,9**
3. Rentas de las propiedad, transferencias y otros ingresos	8,9	*9,4*	*9,3*	*9,2*	*9,3*	***9,3***	***9,2***	**4,9**	**4,2**	**3,2**
B. EMPLEOS	**13,3**	**15,9**	**15,8**	**15,0**	**14,8**	**14,8**	**14,7**	**2,9**	**4,4**	**3,7**
1. Remuneración de asalariados	5,5	6,6	6,6	6,6	6,4	**6,4**	**6,4**	**2,0**	**3,2**	**3,8**
2. Consumo intermedio	1,7	2,5	2,6	2,4	2,4	**2,4**	**2,3**	**2,3**	**2,7**	**2,7**
3. Transferencias sociales en especie	2,0	2,4	2,4	2,4	2,3	**2,3**	**2,3**	**2,6**	**2,2**	**2,6**
4. Transferencias sociales en efectivo	0,2	0,4	0,3	0,3	0,3	**0,3**	**0,3**	**7,2**	**4,2**	**4,1**
5. Intereses	0,3	0,8	0,4	0,4	0,4	**0,3**	**0,3**	**-3,0**	**-2,3**	**5,5**
6. Formación bruta de capital	1,7	0,9	1,2	0,8	0,9	**0,9**	**0,9**	**8,8**	**12,5**	**2,2**
7. Subvenciones y otros gastos	1,9	2,2	2,3	2,0	2,1	**2,2**	**2,2**	**4,8**	**10,2**	**5,9**
21. Capacidad (+)/Necesidad (-) de financiación	**-0,5**	**-1,8**	**-1,7**	**-0,8**	**-0,3**	**-0,3**	**-0,3**			

CORPORACIONES LOCALES	2002	2014	2015	2016	2017	2018	2019	17/16	18/17	19/18
A. RECURSOS	**5,8**	**6,6**	**6,5**	**6,4**	**6,4**	**6,2**	**6,0**	**3,7**	**1,4**	**1,2**
1. Total impuestos	2,9	3,4	3,3	3,3	3,3	**3,2**	**3,2**	**3,0**	**3,8**	**3,3**
1. Impuestos sobre la producción y las importaciones	*1,9*	*2,3*	*2,3*	*2,3*	*2,2*	***2,2***	***2,2***	**2,4**	**3,6**	**2,9**
2. Impuestos corrientes sobre renta y patrimonio	*0,7*	*0,8*	*0,8*	*0,8*	*0,8*	***0,8***	***0,8***	**6,4**	**3,4**	**3,4**
3. Impuestos sobre capital	*0,2*	*0,2*	*0,3*	*0,3*	*0,2*	***0,3***	***0,3***	**-1,8**	**7,0**	**6,6**
3. Rentas de las propiedad, transferencias y otros ingresos	2,9	3,2	3,1	3,1	3,1	**2,9**	**2,8**	**4,4**	**-1,0**	**-1,1**
B. EMPLEOS	**5,9**	**6,1**	**6,0**	**5,8**	**5,8**	**5,6**	**5,5**	**4,1**	**1,2**	**3,2**
1. Remuneración de asalariados	1,7	2,0	2,0	2,0	1,9	**1,9**	**1,9**	**1,7**	**2,8**	**2,7**
2. Consumo intermedio	1,5	1,9	1,8	1,8	1,8	**1,7**	**1,7**	**2,4**	**2,1**	**2,4**
3. Transferencias sociales en especie	0,0	0,1	0,1	0,1	0,1	**0,1**	**0,1**	**1,2**	**2,4**	**2,7**
4. Transferencias sociales en efectivo	0,1	0,0	0,0	0,0	0,0	**0,0**	**0,0**	**-1,2**	**1,2**	**0,0**
5. Intereses	0,1	0,1	0,1	0,1	0,1	**0,0**	**0,1**	**-6,2**	**-6,7**	**9,7**
6. Formación bruta de capital	1,2	0,5	0,6	0,4	0,5	**0,5**	**0,5**	**9,5**	**6,9**	**12,0**
7. Subvenciones y otros gastos	1,4	1,4	1,4	1,4	1,5	**1,4**	**1,3**	**8,7**	**-3,7**	**1,7**
21. Capacidad (+)/Necesidad (-) de financiación	**-0,1**	**0,5**	**0,4**	**0,6**	**0,6**	**0,6**	**0,5**			

2018 closing forecast by Autonomous Region % GDP



2019 closing forecast by Autonomous Region % GDP



ANNEX I PROJECTION METHODOLOGY FOR MACROECONOMIC FORECASTS

This annex summarises the main characteristics of the econometric tools used to make the macroeconomic forecasts.

The first section briefly presents the dynamic factorial models used for short-term (2 quarters) forecasts of GDP, its deflator and its demand components, allowing the impact of the short-term information on said aggregates to be reflected.

The second section describes the employee reduced-form multivariate model. This model shows the dynamics for the main aggregates for real activity in the macroeconomic outlook and allows quarterly confidence intervals for the envisaged trends in these aggregates, with very little a priori conditioning. The methodology is included in the autoregressive vector models with exogenous variables and uses quarterly data.

Finally, the third section details the uniequational structural models and their design methods. These models have served as a basis on which to examine the consistency of official forecasts for the behaviour of their macroeconomic determinants. The technique applied uses quarterly data and error correction models.

Dynamic Factor Models

For short-term (2 quarters) predictions of GDP and its main components of demand (private consumption, public consumption, investment in equipment, investment in construction, exports and imports of goods and services), dynamic factorial models are used, synthesized on the model known as MIPReD. The joint estimates for GDP and its components provides a more comprehensive and detailed perspective of the economy, allowing the composition of growth to be identified, its external and domestic origins. These in turn lead to determining the composition of Final Consumption and Investment in Domestic Demand.

Technically, estimates are made in two stages:

In the first, GDP and each of its components are predicted independently, following the dynamic factorial model methodology for real time forecasting. Forecasts are based on a combination of short-term information, issued at different frequencies (quarterly and monthly), using the respective dynamic factorial models. This combination allows forecasts to be updated as new information becomes available for the indicators in the model, providing a real-time or permanently updated vision of the aggregate status of Spanish economy.

The methodology used in each of the models consists of the following stages:

1. Seasonal and calendar adjustments for all indicators in the system.

2. For quantitative indicators, the variation rates are calculated for the immediately preceding period, to obtain a short-term growth signal. Qualitative indicators are not transformed, as these offer an immediate (directional) interpretation of growth.

3. All the indicators, whether qualitative or quantitative, are typified rendering their mean as zero and their variance as one.

4. The series thus obtained are combined into a dynamic factorial model, breaking down its temporal evolution into a part attributed to elements that are common to all and another part that is specific to each.

5. The dynamic factorial model is represented in the space of states, combining a transition equation (that describes the system dynamic) and a measure equation (that defines the connection between the observed series and their underlying factors).

6. Estimates for the parameters in the model are made maximising their feasibility. Such maximisation considers both the presence of series with a different sampling frequency (monthly or quarterly) and asymmetrical series lengths among those included in the panel of data, either because they do not all commence at the same time or because they do not all end in the same period.

7. Having estimated the dynamic factorial model, its representation in the space of states permits, by means of Kalman filtering, both the forward projection of the series comprised in the model and the calculation of the typical deviations from said projections, thus obtaining a measure of the uncertainty surrounding them.

8. One of the series making up the set of series used is the aggregate, for which forecasts are obtained simultaneously with those of the remainder of indicators. In this manner, the internal consistency of forecasts is assured.

9. Whenever new data becomes available for any of the indicators in the model, the above steps are repeated, reviewing all forecasts depending on the sign and magnitude of the innovation. This continuous updating process defines the real-time nature of the system.

In the second stage, individual forecasts are reconciled with those for GDP, by means of the balancing method proposed by Van Der Ploeg (1982), in which individual forecasts are combined with the accounting restriction that establishes that GDP growth should be equal to the aggregation of contributions to its growth from its components. Final forecasts are the result of adjustments to the individual forecasts according to the discrepancies observed between the sum of the corresponding contributions to GDP growth, and GDP growth foreseen in its own model, bearing in mind the historical correlation among the series for contributions to growth. The initial forecasts are thus modified, taking into account their discrepancies when

incorporating accounting restrictions. These discrepancies are weighted according to their precision, that is, inversely to the uncertainty associated with initial estimates.

This procedure has several desirable properties:

1. The greater the variance in the initial forecast, the greater the magnitude of the revisions, as an absolute value. In other words, the greater the uncertainty regarding the initial forecast, the greater the amount in the modification it may be subject to.

2. If a given preliminary estimate is considered to be known with absolute precision, no adjustments are made in the corresponding forecast.

3. When the historical correlation between two components is positive, their revisions are made in the same direction: both upward or both downward. If, on the contrary, they correlate negatively, adjustments will take opposite directions: one upward and the other downward, or vice-versa.

Reduced-form multivariate model

The Bayesian Vector of Autoregressions (BVAR) with exogenous variables was used for the assessment of the projections given in the macroeconomic outlook.

This type of models offers both flexibility and objectivity. Flexibility is achieved through allowing a high degree of adaptability to the dynamic observed. Objectivity is assured since, having determined the set of variables to model, estimates for the model parameters are conducted according to statistical, objective and replicable criteria.

The Bayesian component in the model has been incorporated to improve its predictive performance, and captures purely statistical interactions of the variables with the dynamics, in part or in whole of the series analysed. Likewise, specifically included in this extra-sample information component are behavioural traits of the economy in the medium term.

In the BVAR model with exogenous variables, the level of any variable at a given moment is expressed by the linear combination of four parameters: lagged values of the variable itself (dynamic), offset values for the remaining variables involved in the model (crossed dynamic), contemporary values of exogenous variables, and a purely random innovation that captures any other aspect that is not attributable to the variables taken into account in the system.

The weight of each component is determined empirically by finding the best sampling fit and the Bayesian elements offset the effects of over-rating that may exist due to the high number of parameters being estimated.

Projecting the BVAR model forward gives both specific prediction values and their associated confidence intervals. In particular, the confidence intervals quantify the degree of uncertainty attributable to the predictions of different variables for different horizons.

The endogenous variables included in this model are: the GDP deflator, the GDP volume index, the full-time employment equivalent, real credit (financing to business and households deflated by the core CPI) and net incomes with cyclical sensitivity (defined as the sum of taxes on production and imports, current taxes on income and wealth and social contributions, from which unemployment benefits are deducted) as a percentage of GDP. The exogenous variables considered are: the exchange rate of the euro, the dollar price of oil, the EU GDP, interest rates (loans requested by companies of up to 1 million euros) and a constant term.

A secondary BVAR model is also used to represent the joint dynamic of five series that describe the breakdown of GDP from the viewpoint of demand. The variables studied are: final consumption by households and not-for-profit institutions at the service of households (ISFLSH); consumption by Public Administrations; gross fixed capital formation; exports of gross fixed capital formation and imports of goods and services.

Uniequational structural models

For a quantitative assessment founded on a structural formula suggested by economic theory, several behavioural equations have been used based on the representation of error correction. A simplified presentation using Excel spreadsheets is available on the AIReF website for use by analysts.

The general principle of this approach is, first, to define a behavioural relationship between a given variable and its determinants, as suggested in economic theory. This theoretical relationship is quantified by means of a linear relationship characterising the long-term behaviour between the variable that is being described and its conditioning factors. This equation defines what is known as the “equilibrium relationship”, acting as point of attraction toward which the variable under analysis should converge, but this is not always the case period for period. This deviation or error between the value compatible with the theoretical and the observed fundamentals mainly reflect shocks that distort long-term relations between the variable and its fundamental properties.

The short-term dynamic, usually characterized by the trend in the quarterly growth rate, results from combining two elements. The first of these is the partial correction of the error arising in the long-term relationship. This adjustment quantifies the rhythm in which the variable closes the gap with the level compatible with its fundamentals in the long term. The second is a purely statistical, short-term dynamic that is complementary to the first and that defines the empirical relationship between the growth rates for the variable being described and the rates that apply to its determinants.

This equation, known as error correction, is supported by the econometric method known as co-integration analysis, that conducts comparative checks on any stable,

well-defined long-term relationships for the quantification, in a second step, of the short-term dynamic.

Below is a brief description of the equations used herein: in all the equations, the frequency of observation was quarterly, the data were adjusted to seasonality and the calendar, and the sampling interval ranged from 1995:TI to the most recent quarter observed.

Final household consumption

The equation describing the demand for final household expenditure considers that the trend depends on the gross real income available to households, their financial and real estate wealth (taken separately), compensation per employee, the unemployment rate, and the value of real credit available for consumer goods.

Investment in fixed capital: capital assets

Companies are expected to determine their investment in capital goods according to the evolution of the aggregate demand, the envisaged profitability of their investment projects, the price of the labour factor, the user cost of capital and the use of the productive capacity. Aggregate demand is approximated in volume by means of the Gross Domestic Product. The expected profitability measure is determined from Tobin's Q, estimated as the quotient of the IBEX-35 over the productive capital stock. The price for the work factor will be given by the compensation per employee.

Fixed capital investment in construction

The determinants of gross fixed capital formation in construction included in this equation are the real available gross income, financial wealth and real estate wealth in the household sector, the flow of credit for housing purchase and refurbishing in real terms, relative prices of freehold property, deflated by the price index for expenditure in final household consumption and the construction sector confidence indicator.

Exports of goods and services.

The volume of exports in goods and services is set to depend on a variable that approximates external demand for goods and services, and on prices relative to exports of products that are substitutes for said goods, produced and exported by the rest of OECD countries.

The variable that approximates the external demand for goods and services is global trade in goods by volume, provided by the Dutch Central Planning Bureau (CPB). In addition, as a variable for relative prices, the competitiveness trend index is taken, calculated through a comparison of domestic consumer price indices with those of the OECD, adjusted for changes in nominal exchange rates.

Imports of goods and services

Demand for imports of goods and services is set to depend on the capacity for expenditure by the units residing within the economic domain, and on prices of imported goods in relation to their domestic substitutes. Thus, imported goods and services compete with those produced internally in the overall expenditure.

As the variable representing the demand for imported goods and services, an index is designed that ponders each component in the final demand (Consumption, Investment and Exports) according to the share of imports. The indicator applied for relative prices is the quotient of the deflator of imports and goods and services over the deflator of domestic demand.

Private wage earners

The following are considered determinants of private employment: activity level, represented by GDP in volume, the active population and the stock of private capital.

Private compensation per employee

The evolution of private compensation per employee will be conditioned by the behaviour of prices, reflected in the General CPI, productivity per employee, obtained as the ratio of GDP in volume and total full-time equivalent employment, and the public compensation per employee.

Underlying inflation

Inflation will depend on unit labour costs, GDP in volume, the unemployment rate, the effective VAT rate and a dummy variable introduced starting in the fourth quarter of 2012 that reflects the effect of the labour reform.

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ANNEX II GENERAL METHODOLOGY FOR THE BUDGETARY FORECASTS

AIReF's budgetary forecasts are carried out for each sub-sector and, where appropriate, each individual administration, using three large estimation blocks:

- **Data:** The figures included in AIReF's scenario reflect specific data provided by the competent authorities, such as the financing system resources to be paid to the territorial administrations in the current year, individual amounts for specific items contained in the GSB Law, etc.
- **Specific models and estimates**: The figures are the result of projection models or specific estimation methods developed for this purpose, the details of which are incorporated as annexes to this document. There are models for the estimation of the main tax revenue, the territorial financing system resources, interest expenditure and revenue, civil servants, pensions, unemployment benefits and the expenditure on healthcare and education. There are also specific calculations based on background information on certain measures or actions, such as the estimate of the impact of the agreement with the trade unions on the compensation of employees at the service of the public administrations, forecasts for funds to be received from the EU based on the information available on the programming of these funds or the amount of local expenditure on investment financially sustainable.
- **Trend estimates:** The figures for the estimated year are calculated by simulating the base year at a given rate, either an average increasing trend, the reference rate of the expenditure rule, the rate of nominal GDP growth, etc.

The results of each of the blocks are corrected dynamically with the most up-to-date information available at the time.

The weight of each methodological block in the estimates for each sub-sector, as well as the calculations and specific circumstances considered for each year, are described in the following paragraphs.

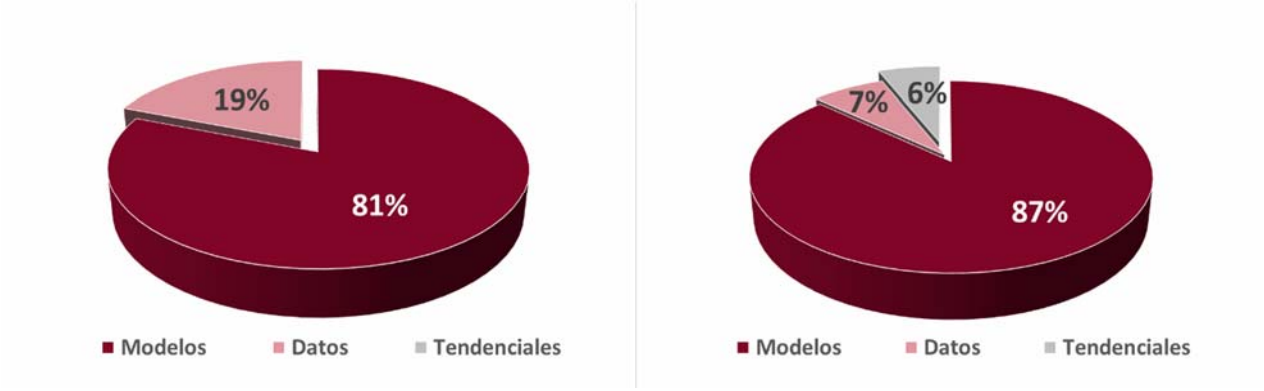
CA FORECASTING METHODOLOGY

Revenue

AIReF modelled 87% of CA revenue. On the one hand, each of the major taxes (PIT, CIT, VAT and ST) has its own annual estimation model based on macroeconomic variables that is corrected with the monthly data observed for tax collection in cash terms, subsequently applying national accounting adjustments. In addition, specific models or methods are used for the estimation of interest revenue,

the EU funds and transfers between PAs. For the rest, 13%, the estimate depends on the time horizon, as for the current year information from the GSB and complementary sources, such as the EU budget or the annual accounts of public enterprises, is used. For the following year, 6% of the revenue is estimated based on historical trends.

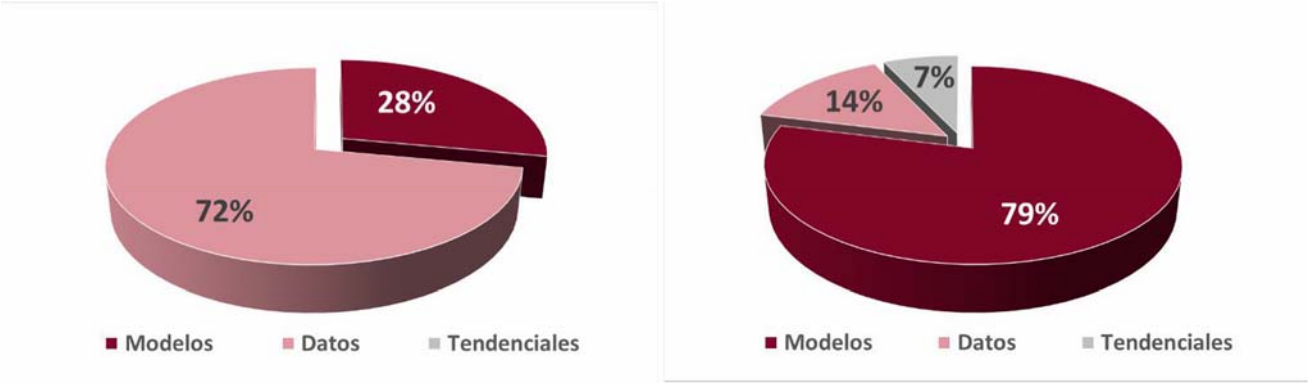
GRÁFICO 1. CA REVENUE ESTIMATION CRITERIA 2018 AND 2019



Expenditure

Of the total CA expenditure, AIReF has modelled 79%, in particular, interest payments, compensation of employees, and transfers between PAs. The rest is estimated, for the current year, based on information from the GSB and supplementary information sources such as specific requests for information to ministerial departments. For the following year, a portion of expenditure is estimated in accordance with its trend.

GRÁFICO 2. CA EXPENDITURE ESTIMATION CRITERIA 2018 AND 2019



The estimate for compensation of employees, which represents 10.5% of the total expenditure, reflects the effect of the agreement with the trade unions. This item is projected using a model that considers the evolution of the number of personnel, the impact of the annual revaluation to be agreed in the budgets and a “drift” effect. The latter is a significant part of the growth of compensation of employees and is explained by elements such as changes in the structure and composition of public

employment, the accumulation of three-yearly bonuses or the modification of the allowances associated with the job, based on other issues such as the evolution of vacancies or the three-yearly bonuses. The estimate for the number of personnel was based on its recent evolution, including data from recent months on the affiliation to Social Security in the public sector and the figures on civil servants' pensions. Regarding the wage increase, the agreement with the trade unions is included in a prudent macroeconomic scenario. Finally, a reduced wage drift in line with that observed in recent years is assumed.

On the other hand, the expenditure forecast for civil servants' benefits, which represents 6.4% of the total expenditure, is made with a short-term model that uses inflow and the target population likely to retire due to their age. These data are obtained from the information published on the Ministry of Finance website. As in the social security system pensions, the expenditure increases arising from legal increases in pensions and revaluations are modelled exogenously. Updates are made for the years 2018 and 2019 in accordance with the increases envisaged in the 2018 GSB.

It should be noted that transfers to the Social Security Funds for 2018 are obtained from the forecast included in the 2018 GSB, incorporating the amendments approved in the parliamentary processing phase. For 2019 it is estimated that the transfers to the Social Security System will evolve in the same way as the non-contributory expenditure financed and that the SEPE will maintain a situation of financial equilibrium and will therefore not receive transfers from the State to balance its budgets, a situation already occurring in 2018.

Gross fixed capital formation and investment aid, items that amount to around 5.9% of expenditure, considering the multi-year information included in the GSBs each year. For 2018 an impact of €1 billion from the State's financial liability for toll motorways is also included. For 2019 revenue from re-tendering of a similar amount and moderate litigation expenditure have been considered. The data known on the contributions to ADIF-high speed reflected in the 2018 GSB and the estimated impact from the materialisation of the Asset Protection Schemes, based on information contained in the accounts of the Deposit Guarantee Fund or communicated by the Ministry of Finance, are included.

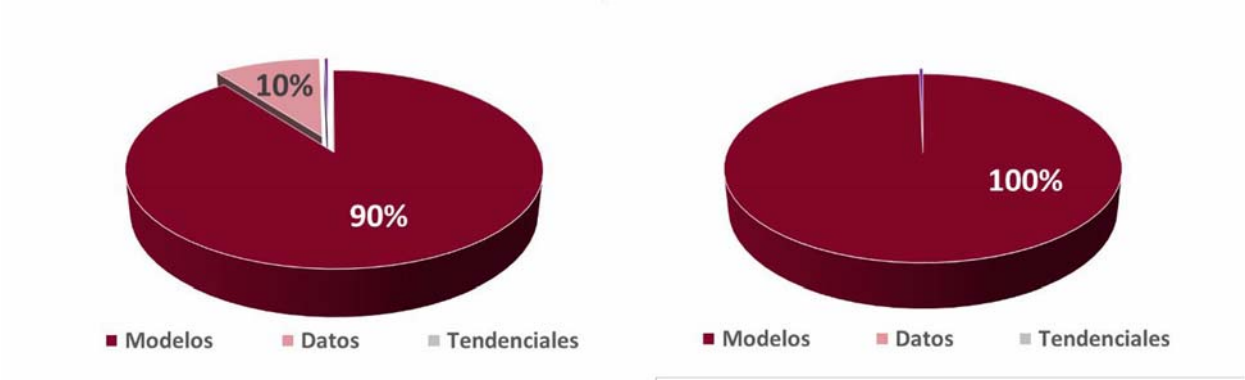
Regarding the rest of expenditure, such as subsidies, social transfers in kind or social benefits other than those of civil servants, these are projected with the information on the specific budget items that make up these headings, such as contributions for the electricity sector or the negative taxes of PIT, incorporating the new family deductions established in the 2018 GSB.

SSF FORECASTING METHODOLOGY

Revenue

90% of the total Social Security Funds revenue, consisting of contributions, is estimated based on forecasting models. In the current period 10% of the sub-sector revenue, essentially revenue from transfers from the State, is obtained from the budgetary data. For the following year, in which this figure is not budgeted, such transfers are estimated from the specific forecasting model.

GRÁFICO 3. SSF REVENUE ESTIMATION CRITERIA 2018 AND 2019



Social security contributions are modelled in an iterative process based on AIReF's macroeconomic forecast. This stems from an annual frequency multivariate model in which a co-integration relationship is estimated between social contributions, employment and compensation per employee. This model is estimated based on the series adjusted for the exceptional or discretionary measures that are known to have affected contributions in previous years. The result of this modelling is used as the basis for the budgetary forecasts, which also considers the recent evolution of the different variables that determine contributions, affiliations and contribution bases, wages and specific regulations, such as the increase in the minimum and maximum contribution bases in the different schemes - already of a monthly frequency- and for each Social Security scheme. The main system schemes, General and Self-employed, are modelled in specific detail, analysing the inflows and outflows of the system and estimating the average contribution base in the scheme using an unobserved state model on the rate variables. Univariate models are also identified and estimated for the contributions of these schemes. In the event of very different results a weighted average of the different models is calculated, giving more weight to the univariate model in the short term. The rest of regimes are modelled using univariate models of different complexity.

The evolution of employment by type of contract is also examined, relevant for assessing the evolution of unemployment contributions as the unemployment contribution rate of temporary contracts is 18% greater than that of permanent contracts and this has caused the cyclical sensitivity of unemployment contributions to be significantly higher than for the social security system.

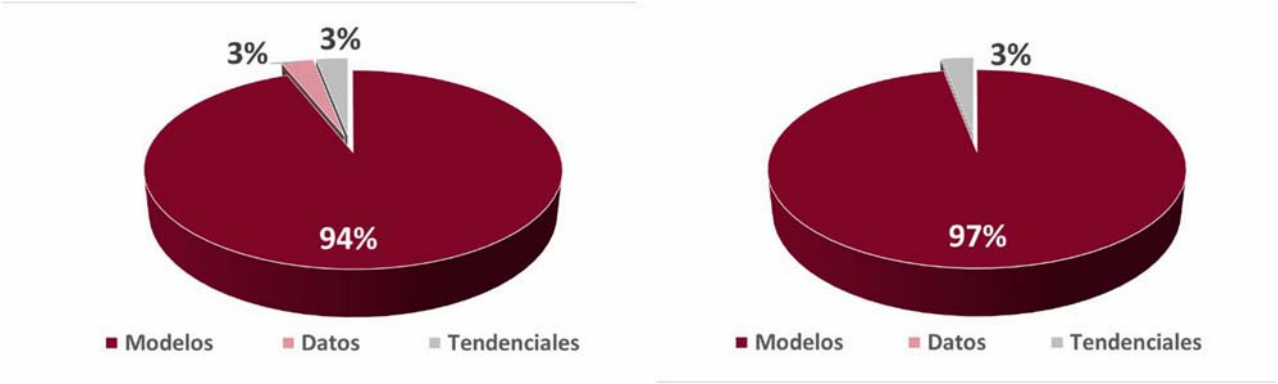
The result of these detailed short-term models is aggregated and compared with the annual model stemming from the macro-economic model and the discrepancies, if any, are analysed to reach a consensus or intermediate forecast.

Finally, the increases and reductions in the contributions envisaged in the short term are assessed according to their latest evolution, the general evolution of affiliation to the corresponding scheme and the rules regulating them. In this phase the behaviour of a series of short-term indicators related to these variables, when available, is also observed. Given the wide variety of increases and reductions there is no single methodology for quantifying and evaluating these. For the years 2018 and 2019 the so-called "flat rates" are especially relevant, as well as the completion of the so-called "minimum exempt level". The dynamics of these incentives have been modelled because of the monthly series of enrolments to these schemes and the evolution of similar benefits in previous years.

Expenditure

92% of sub-sector expenditure is projected using models. This is essentially expenditure on different types of benefits, including unemployment, although it is also calculated with specific methods for estimating staff costs. Expenditure on transfers between the PAs is obtained from the budget and is modelled if the budget is not available. Intermediate consumption is estimated using trends.

GRÁFICO 4. SSF EXPENDITURE ESTIMATION CRITERIA 2018 AND 2019



The benefits are obtained by applying AIReF's macroeconomic models. The forecasts for expenditure on unemployment are obtained from an annual frequency equilibrium model that envisages the convergence to the NAIRU estimated for the Spanish economy, whose results are evaluated considering the evolution of various short-term indicators, of monthly frequency, which take into account unemployment inflows and outflows.

Expenditure on pensions is modelled based on the recent evolution of the number of pensions for each type of pension, pension enrolments and cancellations and the cohorts of workers close to retirement age, as well as of the evolution of the average

pension of enrolments, cancellations and system total for each type of benefit. Legal revaluations are incorporated in this modelling as exogenous regressors. This expenditure is compared, in the part relating to the Social Security system, with a long-term model for the pension system that depends on the evolution of demographics and the labour market. In 2018 and 2019 the assessment of the various measures relating to expenditure on pensions included in the GSB, such as revaluation of pensions above that indicated by the PRI or the increase of widows' pension, has been incorporated into this forecast.

Expenditure on temporary disability in the short term is modelled based on expected affiliation, with which it is significantly correlated, and its own recent dynamics.

REGIONAL FORECASTING METHODOLOGY

AIReF's regional forecasts take into account, in addition to the results of the models and monthly budgetary execution and national accounting data, the information contained in the Economic-Financial Plans (EFPs) or other documents prepared by the Regions that have a similar time horizon, in the adjustment plans or other supplementary information.

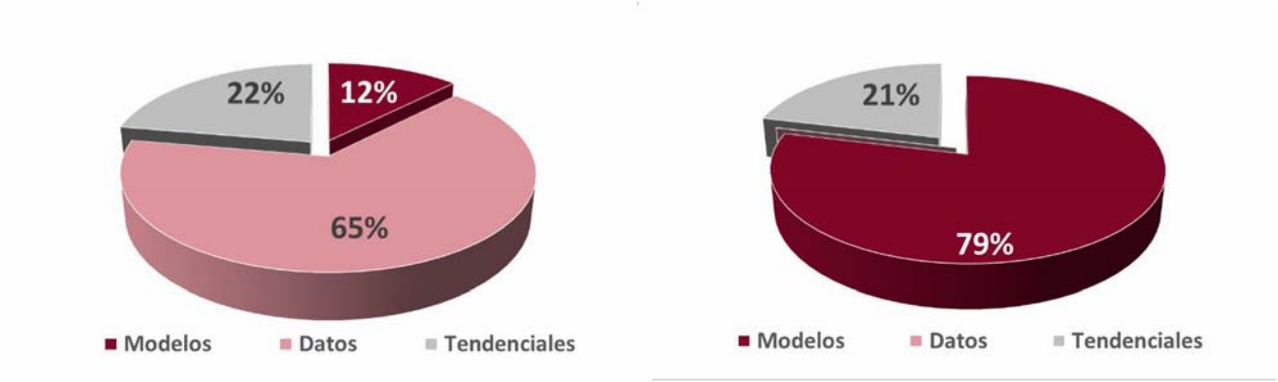
The sub-sector is obtained by aggregating the individual forecasts for each Autonomous Region.

Revenue

Around 80% of the total regional revenue is derived from specific data or are estimated based on AIReF's forecasting models, depending on the year to which they refer.

- In 2018, given the availability of published data on interim payments and settlement forecasts of the RFS under the general tax regime and other transfers provided for in the GSB in favour of the Regions, 66% of the revenue contained in AIReF's are based on such data; 12% of the revenue are based on specific estimation models or methods (TATDLA, income of Navarre, Canary Islands and Basque Country; EU funds); and the rest is estimated by applying a growth trend that is either constant or related to GDP or considering the reference rate of the expenditure rule.
- In 2019, 79% of revenue is based on forecasting models: the revenue modelled in 2018 are coupled with those of the financing system of the Regions under the general tax regime. The rest is projected in accordance with a growth trend.

GRÁFICO 5. REGIONAL REVENUE ESTIMATION CRITERIA 2018 AND 2019



The main block of regional revenue consists of the resources of the financing system for Regions under the general tax regime (RFS) subject to instalment payments, amounting to 65% of total revenue. For 2018 the revenue communicated arising from the GSB are reflected, which may vary because of the final settlement of 2016 which will be notified soon. For 2019, revenue are estimated according to AIReF's SFAYL model. The effect of the reform of the tax on hydrocarbons estimated in the SPU is included in 2019, as the regional rate will be established by the State at the maximum rate, becoming integrated into the system. The effect estimated by AIReF of the VAT Immediate Information System (IIS) on the 2017 settlement is also included. These revenue are separated into two groups on the fiscal sheet:

- "Current taxes on income and wealth", where the PIT derived from the system constitutes 94% of the heading.
- "Property income and other revenue", of which 64% is constituted by the current transfers from the State for the participation of the Regions in VAT, ST and the amounts in their favour from the Guarantee Fund, Adequacy Fund and Convergence fund.

About the rest of tax revenue, in the Regions' "Taxes on production and imports", the main tax is the Tax on Asset Transfers and Documented Legal Acts (TATDLA) that represents 6% of the total revenue. The "capital taxes" include the collection from the Tax on Inheritance and Donations (TID) which amounts to a little over 1% of total revenue, and is projected with a constant trend corrected downwards in 2018 and 2019 due to the measures reported by the Regions.
Other regional revenue of interest, included in the grouping of "property income and other revenue," are:

- The revenue earned by the Basque Country from the Provincial Councils, (6% of total revenue), for which a drop is estimated in 2018 owing to the extraordinary regularisation that took place in 2017 on income from prior years due to the economic flows from the Economic Accord.

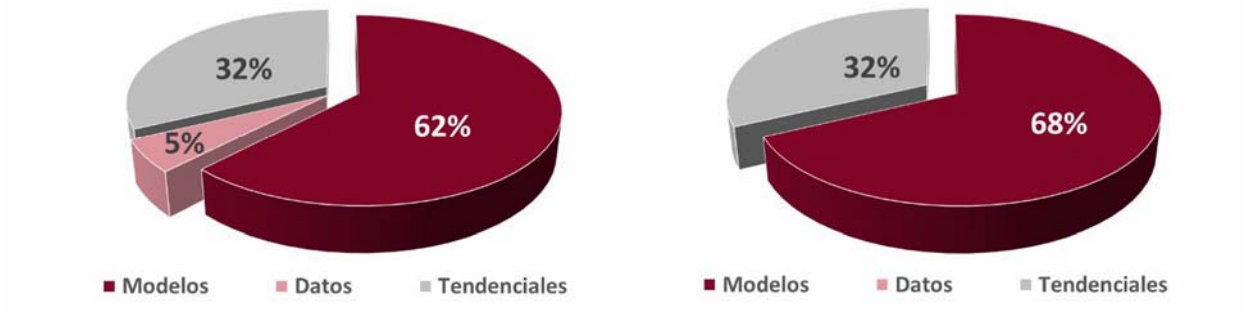
- Sales revenue, which include, among other items, public fees and prices, and represent 7% of the total revenue. They include the expected impact of the measures communicated (reduction in university tuition fees, regulatory amendments in other public fees or prices).
- The rest of the transfers received from the State (a little over 7% of total revenue). For 2018, information is taken from the GSB and for 2019 estimates are made with a constant trend corrected by the additional information which may be obtained.
- EU funds (1% of total revenue): estimated with a constant trend corrected, as appropriate, with the information available for each year and Region in relation to the forecasts for certification of co-financed expenditure and evolution of investments or associated expenditure.

Expenditure

78% of total regional expenditure is derived from forecasting models and/or specific data.

- In 2018, the expenditure modelled accounts for 61% of the total, mainly obtained from the figures of the main current expenditure headings (compensation of employees, intermediate consumption and social transfers in kind) of the results of the model for estimating expenditure on healthcare and education. In addition, specific calculations on the impact of the agreement of trade unions are made for compensation of employees and social transfers in kind. Specific estimates are also made for the calculation of capital expenditure associated with EU funds. As published data is available on interim payments and negative settlement forecasts for the RFS under the general tax regime (GSB), 5% of the expenditure listed in AIReF's forecasts is based on such data. Finally, the rest of expenditure is estimated by applying a growth trend which, in general, involves the application of the reference rate of the expenditure rule.
- In 2019, the expenditure modelled for 2018 is coupled with the of the model that estimates payments to the State from the RFS. The rest of the expenditure is estimated according to the criteria set out in 2018.

GRÁFICO 6. REGIONAL EXPENDITURE ESTIMATION CRITERIA 2018 AND 2019



The main expenditure at the regional level is concentrated in the areas of healthcare, education and social services, which constitute about 70% of total expenditure. Therefore, most of the main current expenditure headings, compensation of employees, intermediate consumption and social transfers in kind, are estimated according to AIReF's model of expenditure on healthcare and education. In addition, the specific measures known in each Region are included. In particular, compensation of employees and social transfers in kind for 2018 and 2019 included the additional estimated effect of the Agreement with the Trade Unions and the lower expenditure on the rebate of the extra payment for 2012.

The group "subsidies and other expenses" records a series of regional expenditure of various kinds, estimated based on different criteria:

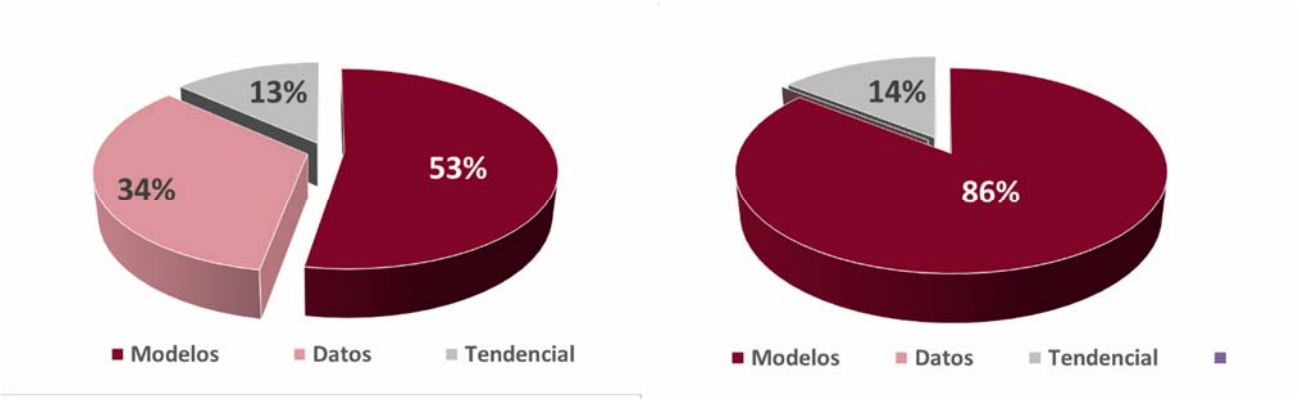
- The payments from the Regions the State for the system resources subject to interim payments and subsequent settlement (between 5 and 6% of total expenditure): these are the negative settlements and negative adequacy or guarantee funds of certain Regions. In 2018, the most recently reported data derived from the GSB is included; for 2019, expenditure is estimated according to AIReF's model, compared with the latest forecast provided by the MINHAC for the sub-sector.
- Other transfers to other PAs, which essentially include transfers to LGs, estimated based on trends, excluding information in this regard; and the contribution of Navarre to the State due to the Economic Accord, estimated according to AIReF's model.
- Gross fixed capital formation, largely conditioned by co-financing from the EU, which is estimated with specific calculations in accordance with the available information on certified expenditure and programming of structural funds.

LG FORECASTING METHODOLOGY

Revenue

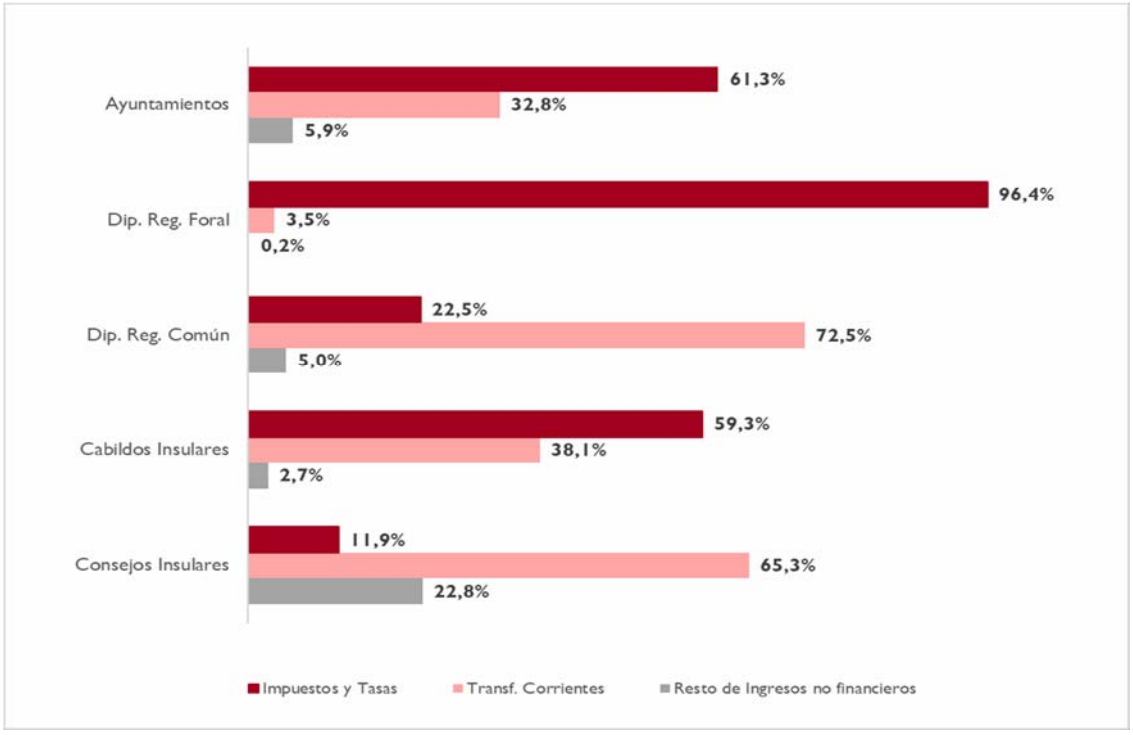
Over 85% of the total LG revenue is determined by using data and/or specific models or estimates. The estimate of the large local taxes (mainly the RET), as well as concerted taxes collected by the Provincial Councils of the Basque Country (VAT, Income Tax, ST, etc.) are obtained from observed data and the aggregation of measures adopted in the GSB and communicated in the 2018-2021 SPU; or from specific models developed based on published information. The estimate made using models has more weight in the year 2019, for which there is no published data on interim payments and forecast of the settlement of the local financing system resources. The rest of the revenue in both years are estimated by applying a growth trend that may be a constant trend or vary according to GDP or the reference rate of the expenditure rule.

GRÁFICO 7. LG REVENUE ESTIMATION CRITERIA 2018 AND 2019



The relative importance of the different types of revenue in the structure of local non-financial revenue is shown in the figure below:

Structure of non-financial revenue by type of local government (as a % of non-financial revenue)

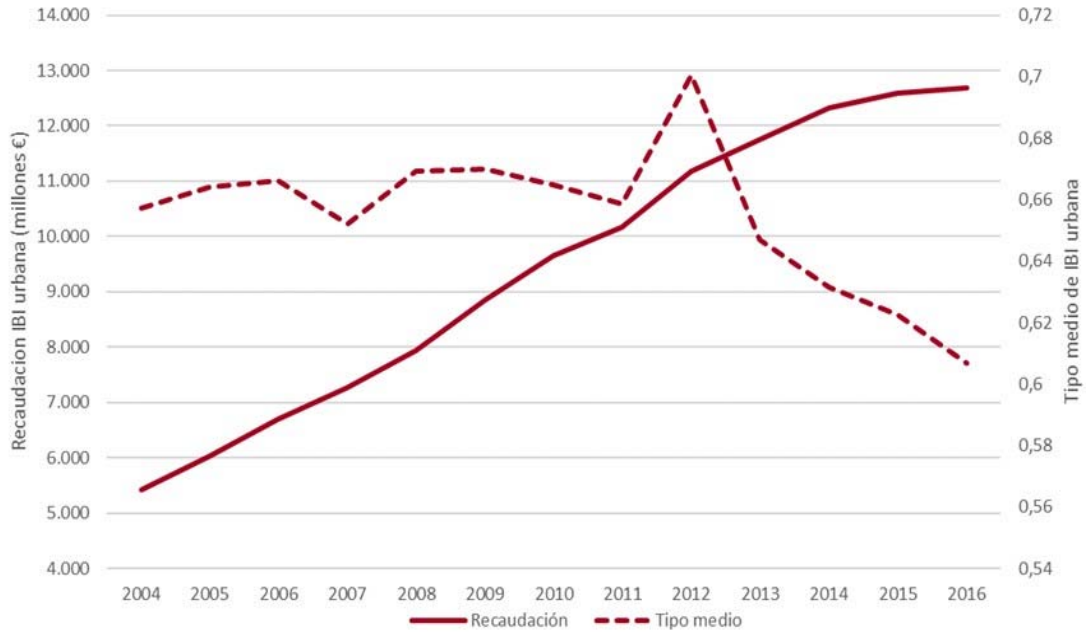


Local taxes constitute over 60% of the city councils' non-financial revenue, and are what determine their great financial autonomy. It was the exercise of regulatory capacity in this area which has largely allowed the potential cyclical revenue fluctuations in unfavourable times to be mitigated and a local surplus to be consolidated in the last 3 years. In recent years collection from these taxes shows very stable year-on-year increases, about 2%, therefore AIReF has replicated this growth in following years. In addition, the estimated impact of the tax measures

contained in the 2018-2021 Stability Programme Update is included, amounting to 418 million euros in 2018 and -49 million in 2019.

The largest local tax is the Real Estate Tax (RET) which represents almost 60% of local tax revenue. The collection of the RET has stabilised in the latest settlements even though the average rates are declining, a result of the adoption of new value proposals that enable collection to be maintained with lower rates imposed on the tax base.

RET collection and average rates



It has been estimated that the amendment of the consolidated text of the Land Registry Law by the 2018 GSB Law, according to which the fundamental element of the tax base of the RET (land value) will be based on the market prices communicated by the public notaries according to transactions carried out, will not have an impact in 2018, given that the measure requires regulatory development. Therefore, if approved this year, their effects will be appreciated starting from 2019.

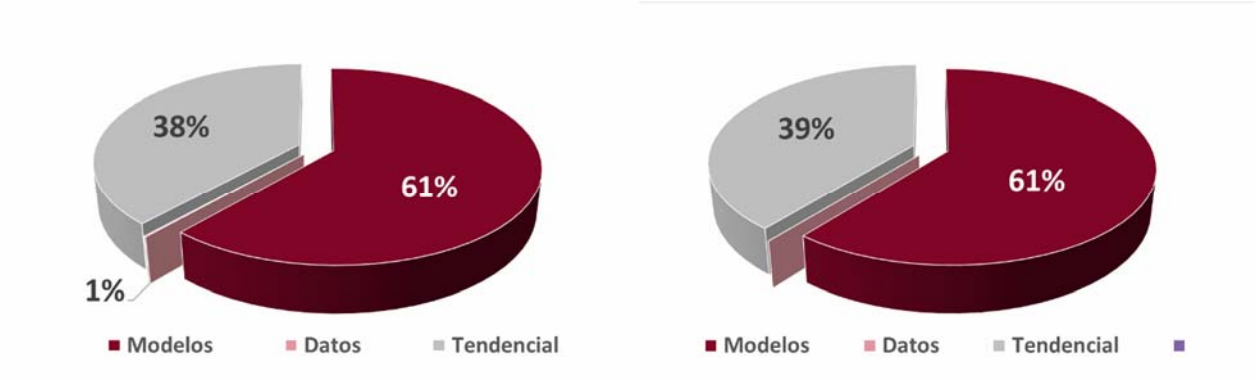
The tax revenue of the Provincial Councils is estimated based on the specific calculation model, corrected in 2018 by the information published by the Provincial Councils and the execution data for the year.

The local financing system resources account for over 30% of the non-financial revenue of the city councils and 70% of the Provincial Councils under the general tax regime. For 2018 the data derived from the GSB Law are reflected, which may vary because of the final settlement of 2016 which will be notified soon. For 2019, revenue is estimated according to AIReF's model.

Expenditure

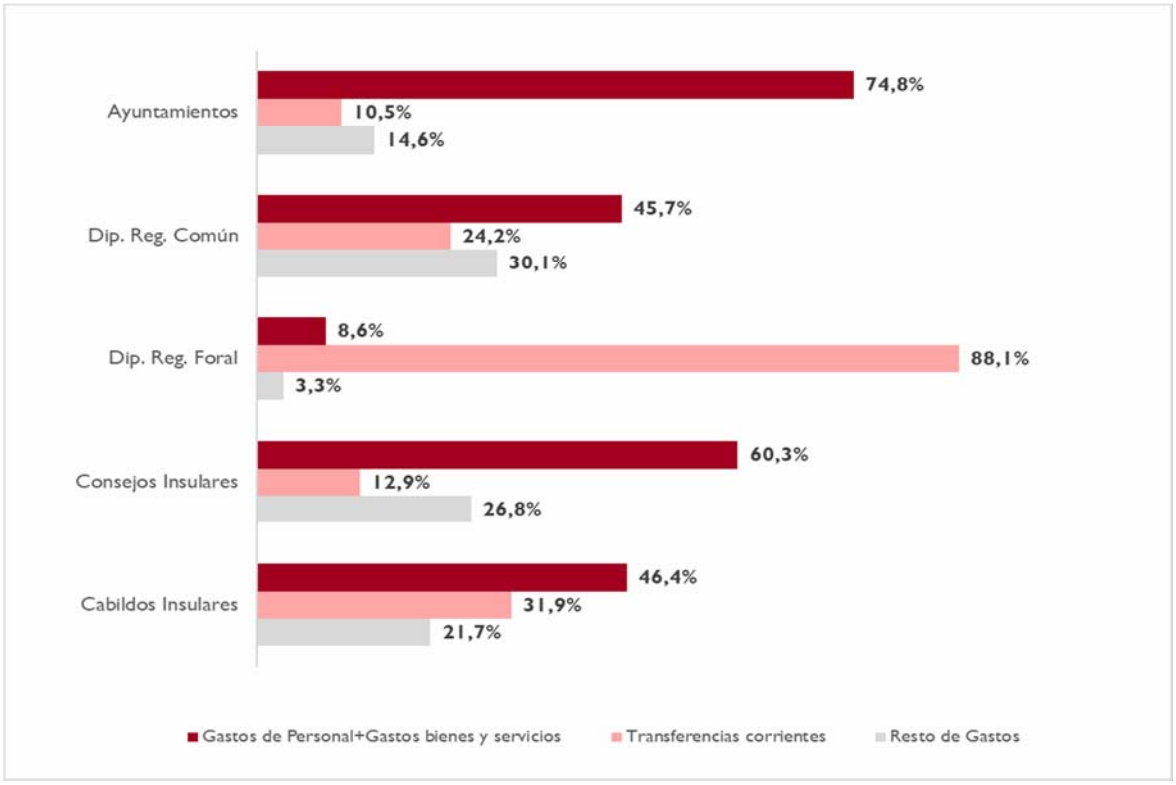
Around 60% of total LG expenditure is calculated by modelling specific groups or headings. This is mainly the case of interest, the quota of the Provincial Councils to the State, the compensation of employees and the transfers from the Provincial Councils to the Region of the Basque Country. Almost 40% of total expenditure is estimated by applying a growth trend that generally involves the application of the reference rate of the expenditure rule.

GRÁFICO 8. LG EXPENDITURE ESTIMATION CRITERIA 2018 AND 2019



The relative importance of the different types of expenditure in the structure of local non-financial expenditure is shown in the figure below:

Structure of non-financial expenditure by type of local government (as a % of non-financial expenditure)



The main local current expenditure headings, compensation of employees and intermediate consumption, account for almost 75% of municipal expenditure and close to 50% of the expenditure of the Provincial Councils.

- The estimates for compensation of employees incorporate the effect of the agreement with the trade unions, according to the most recent data on affiliation to the public sector published by the Treasury General of Social Security, and considering the personnel replacement permitted to the LGs in situations of budgetary stability.
- Intermediate consumption is estimated by applying the reference rate of the expenditure rule for each year to the data from the previous year, and incorporating the average effect of the non-execution of the current expenditure initially budgeted of the latest settlements (around 3%).

With regard to capital expenditure, the estimated amount of investment expenditure in 2018 and 2019 is greatly influenced by the uncertainties generated by the estimated effect of the extension of the rule governing the allocation of the budgetary surplus established in the Sixth Additional Provision of the LOEPySF by the Royal Decree Law 1/2018, of 30 March, which extends the objective scope of the financially sustainable investment (FSI) and allows the execution of the positive cash surplus obtained in 2018 during 2018 and 2019 if the demanding eligibility conditions are met. AIReF has estimated the maximum amount that could be used for financially sustainable investments in 2018 and 2019 based on the latest settlement available for each local corporation and the latest individual data published on debts with creditors for outstanding transactions to be booked and the average payment period to suppliers. The maximum amount to invest for this item once the conditions of eligibility are met is calculated for each local corporation and, with the aggregation of all LCs for which data is available, the maximum amount that can be devoted to SFI in 2018 and 2019 is estimated.