

SPANISH AND INTERNATIONAL ECONOMIC & FINANCIAL OUTLOOK

VOLUME 7 | number 1, January 2018

# The Spanish economy in 2018...and beyond

#### **WHAT MATTERS**

The **Spanish economy** in 2017 and the outlook for 2018

**EU and Spanish banking landscape** in 2018: Increased regulation and pressure to reduce NPLs

**Basel III** reforms and implications for European and Spanish banks

**Spain's insurance sector:** Profitability, solvency and concentration

**Spain's VAT tax burden** in the wake of the recent economic crisis

**European economic governance** reform: Moving past power politics



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SPANISH AND INTERNATIONAL ECONOMIC & FINANCIAL OUTLOOK

# The Spanish economy in 2018... and beyond

Carlos Ocaña, Director General of Funcas

The positive momentum of global growth at the end of last year is expected to persist in 2018, with monetary policy gradually tightening, but remaining accommodative enough to sustain the better than expected scenario observed across both advanced, in particular European, and most emerging economies. A sharp rise in inflation and a faster than expected monetary tightening across the main central banks remain among the major risks to this positive scenario, although they are unlikely to materialize.

In this context, this month's edition of Spanish and International Economic & Financial Outlook (SEFO) features the latest key insights from Funcas' Director General Carlos Ocaña on the outlook for the Spanish economy and financial sector in 2018 and beyond. Kicking off the year ahead, the following text presents the view for Spain in 2018 and into the medium-term, weighing the balance between political tensions, downside risks and opportunities.

Barring any unexpected shocks, in 2018, the Spanish economy will continue to grow strongly at 2.6%, half a percentage point below last year's growth, but in line with that of the last two to three years. In the longer term, we expect a similar growth performance. GDP is anticipated to increase 2.4% in 2019. This modest deceleration is due, in part, to the moderation of consumption growth, reflecting both a household savings rate at historical minimums and the depletion of pent up demand after two years of strong rebound in consumption. The anticipated impact of the slowdown in consumption could shave off 0.3 percentage points of GDP.

In addition, ongoing political tensions in Catalonia will have a negative impact on investment in the region that we do not expect to be completely offset by increased investment flows to other parts of Spain. We estimate the net impact to be moderate in the short term, accounting for a reduction of an additional 0.2 percentage points in our 2018 forecast for Spanish overall GDP growth. At the political level, uncertainties that accompanied 2017, particularly those linked to the tensions surrounding the independence movement in Catalonia, have dissipated somewhat after the Central Government and Constitutional Tribunal decisions. In the longer term, there remains a risk that the situation in Catalonia becomes chronic, which could lead to less investment and a gradual reduction in the weight of the Catalan economy. At this stage, it is not possible to quantify the potential impact from such a scenario, but the experience in Quebec and elsewhere suggests this risk merits consideration.

In contrast to other periods of growth, the recovery is not expected to fuel inflation. In line with many other advanced economies, inflation remains low. CPI is expected to increase by 1.6% but remains below the ECB's threshold for price stability. Meanwhile, the GDP deflator, reflecting the trend in core inflation, will be even lower.

Growth should translate into significant job creation. Our estimates point to the creation of 400,000 net new full-time equivalent jobs in 2018 that will bring unemployment down to 15.1%, a substantial decline from the peak of 26% reached five years ago, but still high. Spain's government has just agreed to a

4% increase in the minimum wage to 735.9 euros for 2018. This will benefit around 3.6% of the approximately 16 million salaried workers in Spain earning at or close to the minimum wage (an estimated 576,000 workers). The impact on other higher salaries is expected to be very limited, as is the impact on inflation. In other words, we do not expect the increase in minimum wage to erode competitiveness.

In short, the economic outlook for 2018 is optimistic, marked by a moderate deceleration with respect to 2017 or, in other words, convergence to Eurozone growth rates. From this central scenario, the main downside risks are those related to a faster than anticipated tightening of monetary conditions. In the base case scenario, these risks are unlikely, but they do remain. It is therefore crucial to take advantage of the current environment of growth and of access to extraordinarily favorable financing conditions to correct the two main outstanding weaknesses of the Spanish economy, namely the high levels of unemployment and debt.

#### **Labour markets**

There is scope for improvement of the Spanish labour market. The main challenge is to increase productivity and this requires increasing skills and education. According to the OECD, in 2016, the employment rate in Spain for workers between the ages of 25-64 years with tertiary education was 79.8%, much higher than the 53.9% that had less than upper secondary education. Moreover, despite recent improvement in some of the Autonomous Regions, the rate of early school leavers in Spain in 2017 was 18.3%. On the basis of latest available comparable data from 2016, this is 80% above the European average (19% *vs.* 10.7%). In addition, the percentage of young people in Spain who neither study nor work is also higher than the European average and the unemployment rate among those under 25 years of age is twice that of the EU.

Reducing duality in the labour market would also help to improve productivity by reducing the number of temporary workers. The incidence of temporary work is high by European comparison. This is also a source of both precariousness and low productivity, which may hinder the ability of Spain to seize the benefits of the digital economy.

It is also necessary to increase the efficiency of active labor market policies. The goal is to improve re-employment prospects of jobseekers, notably the long-term unemployed. This requires more effective public employment services, with a view to strengthening job-search support and enhancing contacts with employers who might be interested in recruiting jobseekers.

#### **Public deficit and debt**

The public deficit – at 3.1% of GDP in 2017- is now under control, and this year's target of 2.2% of GDP seems within reach. As a result, Spain will be able to exit the EU's Excessive Deficit Procedure (EDP).

Public debt levels are expected to continue their slow decline in 2018 to 96.4% of GDP, down 1.4% of GDP from the previous year, but remain uncomfortably high. While the government has been able to take advantage of savings on interest payments under the ECB's monetary accommodation, the announcement of policy normalization will push up the cost of debt service, and, in the absence of a long-term debt reduction strategy, increase sovereign risk. Private debt, that of both households and non-financial corporations combined, has declined significantly since the on-set of the crisis. After reaching a peak of over 215% of GDP, private debt levels as of the third quarter of 2017 stand at 159.9% of GDP, having converged to the Eurozone average. But Spain's private debt remains high and recent indicators point to a notable slowdown in the deleveraging process for both households and firms in the future.

Current, benign economic and financial market conditions will begin becoming less so in 2019 as monetary policy normalization begins to run its course in Europe (in accordance with the ECBs latest announcement). At present, given the positive macroeconomic outlook in Spain and in the Eurozone overall, it is expected that even as the ECB continues its tapering of sovereign debt purchases over the coming year, private buyers will come in. OMT and low policy rates remain in place for the time being as additional support. Moreover, we expect this downward trend in public debt to GDP to continue and that by 2020, public debt will converge down to 92% of GDP. But the new environment will nevertheless place additional pressures on the debt.

The deficit of the pension system (a structural problem given the demographic forecasts pointing to an aging population that exerts an upward pressure on spending on pensions), and the uncertainty over the possible reform of the financing system of the Autonomous Regions (that would add pressure to public spending), do not help to reduce uncertainty over the medium and long-term future of public finances. At the same time, in the absence of a new budget, the extension of last year's budget until, at the very least, mid-year, will probably reduce pressure on public expenditure.

Spain could benefit from the establishment of a credible and sustainable horizon to address these key issues: labour markets, public debt, pension system, regional financing system. However, the overall political situation does not contribute to positive reform momentum on the key challenges outlined above.

#### **Financial sector**

After 8 years of intense consolidation, clean-up and recapitalization, Spain's financial sector now stands more resilient, with improved profitability and solvency indicators since the onset of the restructuring process.

Profitability of the Spanish banking sector is among the highest across the main EU economies and notably above the EU average. The latest ECB quarterly consolidated banking data up to Q2 2017 point to an ROE for Spain of 4.1% versus 3.3% for the EU as a whole. While a significant improvement from the low point reached in 2012, Spanish banks' profitability is still low in historical terms (and is expected to remain so as long as interest rates stay at their current levels).

In addition, in line with the implementation of new global capital regulations, Spanish banks have boosted their solvency relative to pre-crisis levels. At the end of the second quarter of 2017, the solvency ratio for the sector stood at 14.4%, above minimum capital requirements, even in the event of an adverse scenario – as demonstrated by the Bank of Spain's latest stress-test (the Forward-Looking Exercise on Spanish Banks) published in its November 2017 *Financial Stability Report*. Nonetheless, Spain's banks' solvency ratios rank among the lowest of the main EU economies and below the EU average of 18.7%. Still, internal restructuring fueled by digitalization continues at a fast pace (banks are adjusting capacity as they transform their business model).

These improvements in the financial health of Spain's banks, together with stronger demand, have resulted in an increase in credit. According to the latest Bank of Spain data on bank lending to the private sector, total credit has increased 0.6% in November 2017 on a monthly basis from the previous month, the third consecutive month of positive growth rates this year. Despite this improvement, credit growth is still negative on a year on year basis. In line with this result, the latest Bank of Spain *Bank Lending Survey* published January 2018 shows that during Q4 2017, credit standards for new loans in Spain eased slightly in loans to households and were stable in loans to enterprises, mostly in line with the observed pattern in the euro area. Moreover, households' demand for credit rose moderately, while demand from enterprises grew in the euro area but remained stable in Spain.

Against this backdrop, although we do not rule out further consolidation in the financial sector, we believe that most of the major changes to the Spanish financial sector landscape (*i.e.* major operations) have already taken place – other than the privatization of Bankia, which should be completed in the next couple of years.

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### What's Ahead (Next Two Months)

| Month    | Day   | Indicator / Event   |
|----------|-------|---|
| February | 8     | Industrial production index (December)  |
|          | 15    | CPI (January)   |
|          | 19    | Eurogroup meeting   |
|          | 20    | Foreign trade report (December)   |
|          | 23    | European Council meeting  |
|          | 27    | Preliminary CPI (February)  |
|          | 28    | Balance of payments monthly (December)  |
| March    | 1     | Quarterly National Accounts (4 <sup>th</sup> quarter 2017)                    |
|          | 2     | Social Security registrants and official unemployment (February)              |
|          | 8     | ECB monetary policy meeting   |
|          | 9     | Industrial production index (January)   |
|          | 12    | Eurogroup meeting   |
|          | 13    | CPI (February)  |
|          | 14    | Retail sales (January)  |
|          | 21    | Foreign trade report (December)   |
|          | 22-23 | European Council meeting  |
|          | 26    | Balance of payments quarterly ( $4^{th}$ quarter 2017)                        |
|          | 27    | Preliminary CPI (March)   |
|          | 27    | Non-financial accounts, State (December, January and February)                |
|          | 27    | Non-financial accounts, Regional Governments and Social<br>Security (January) |
|          | 28    | Retail sales (February)   |
|          | 28    | Quarterly Non-financial Sector Accounts (4th quarter 2017)                    |
|          | 28    | Balance of payments monthly (January)   |

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### What Matters



### ${\mathcal 3}$ The Spanish economy in 2017 and the outlook for 2018

Global economic growth is exceeding expectations and the outlook remains positive for 2018. In this context, Spain's economy should stay on the solid and balanced growth path recorded in 2017.

Raymond Torres and María Jesús Fernández



#### 21 EU and Spanish banking landscape in 2018: Increased regulation and pressure to reduce NPLs

EU banks in 2018 will face an increased regulatory burden with three pieces of key regulation entering into force this year. In the meantime, progress on a European banking union has slowed due to political tensions over increased risk mutualisation prior to further reductions in NPL exposures.

Santiago Carbó Valverde and Francisco Rodríguez Fernández



# 33 Basel III reforms and implications for European and Spanish banks

The conclusion of Basel III reforms will, on the whole, increase capital requirements for European banks. Nevertheless, the reduction of regulatory uncertainty and the resulting increased resilience for the EU banking system should support a more constructive outlook for the sector over the medium to longer-term.

Fernando Rojas, Esteban Sánchez and Francisco José Valero



### 47 Spain's insurance sector: Profitability, solvency and concentration

Spain's insurance sector currently outperforms the country's banking sector, as well as the EU average. That said, challenging conditions are bound to trigger further concentration, particularly affecting the smallest players.

Daniel Manzano



## 55 Spain's VAT tax burden in the wake of the recent economic crisis

Spain is among the EU-15 countries that has increased its standard VAT rate the most between 2002-2016. However, the high percentage of items still taxed at the reduced and super reduced VAT rates pose an obstacle to increasing VAT revenues as a percentage of GDP.

Desiderio Romero-Jordán and José Félix Sanz-Sanz



## 65 European economic governance reform: Moving past power politics

Analysis of European economic governance reform often focuses primarily on who wins and who loses in the intergovernmental bargaining. Unfortunately, this perspective tends to leave out the ideas, assumptions, and underlying principles that are crucial to making the system work. Successful reform is more than just power politics.

**Erik Jones** 

### Regulation and Economic Outlook

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### The Spanish economy in 2017 and the outlook for 2018

Global economic growth is exceeding expectations and the outlook remains positive for 2018. In this context, Spain's economy should stay on the solid and balanced growth path recorded in 2017.

Abstract: The international economic environment has improved substantially virtually across the board. This constructive global backdrop has helped sustain the positive momentum of the Spanish economy in 2017. In 2018, growth is forecast at a solid, albeit more moderate, 2.6%, with 0.2-0.3% of the deceleration attributable to political tensions in Catalonia. Unlike previous episodes of growth in Spain, external accounts are not showing signs of tensions and the recovery is not expected to fuel inflation. Certain key imbalances are being corrected, with notable Raymond Torres and María Jesús Fernández

improvements in employment figures and deficit reduction in line with official targets. Nevertheless, the main challenges for the Spanish economy in the coming years remain public debt and the labour market, where longterm strategies from the government will be needed. Going forward, the main assumptions underpinning our forecasts are more likely to surprise on the upside. However, there are outstanding, important downside risks, such as a continuation of tensions in Catalonia and a faster than anticipated withdrawal of ECB stimulus.

#### The international environment

The international climate has improved substantially. The IMF has revised its 2017 estimates for global growth upwards. The Fund is currently looking for global GDP growth of 3.6% in 2017, which is up 0.2pp from the previous forecast.

The US economy remains one of the main growth engines, refuting all doubts about the sustainability of its growth. US unemployment is close to all-time lows, albeit apparently without impinging upon the momentum in growth.

Elsewhere, the risk of the credit bubble bursting in China has not materialised. The Chinese economy is managing to balance its economic model, reinforcing its internal growth drivers and reducing dependence on exports. Growth, albeit somewhat slower, remains robust. Moreover, some of the larger emerging markets that were looking weak, such as Argentina, Brazil and Russia, are staging a recovery. Virtually all the developing economies have come out of recession.

The biggest surprise across the analyst community has been the positive momentum displayed by the European economy. The core eurozone economies, especially Germany, despite the scarcity of labour starting to become evident in some of its most buoyant sectors, continue to grow. Growth has reached France and some of the countries that not long ago were in recession (Greece, Italy and Portugal). The non-eurozone economies are also performing well. Specifically, the British economy continues to grow despite the uncertainty surrounding its exit from the European Union. It would appear that the markets are pricing in a soft Brexit.

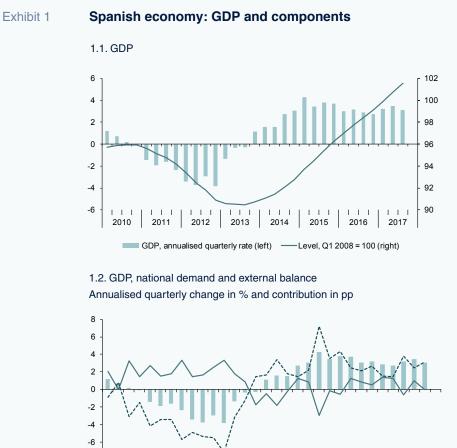
The outlook for 2018 is positive. The IMF is expecting another 0.1pp of global growth: 3.7%. In the US, some analysts think the tax reforms will give the economy a boost in the short term. Others believe the tax cuts will aggravate an already tight labour market, while prompting growth in the public deficit and a response from the Federal Reserve; however, in all likelihood, these tensions will not fully materialise until 2019. It is estimated that the major emerging economies will maintain current or even higher levels of growth, particularly Latin America, India and the main natural resource-rich countries.

The European economy is also expected to post vigorous growth. In the eurozone, Funcas is forecasting GDP growth of 2.3%, the same as in 2017. In a climate of growing demand, commodity prices, particularly gas, oil and metals prices, are expected to come under pressure. Elsewhere, it is probable that the central banks will continued to roll back the monetary stimulus measures adopted in response to the financial crisis. The Federal Reserve is expected to raise interest rates on a staggered basis, while the European Central Bank and Bank of Japan are likely to pare back their debt buyback programmes. In all, monetary conditions look set to be relatively accommodating once again this year.

#### The Spanish economy in 2017

Although not all the indicators are in for the fourth quarter yet, the Spanish economy is expected to grow by 3.1% in 2017. Assuming this outcome, real annual GDP will have recovered the high of 2008 in 2017 (in nominal terms this peak was reached last year) (Exhibit 1.1). Growth will come in 0.2pp shy of the 2016 reading, albeit substantially higher than what was expected at the end of that year, when consensus forecasts pointed to growth of just 2.4%. The higher than forecast growth is the result of more dynamic growth in national demand than was originally expected, specifically in construction and public spending, as well as a higher contribution by foreign demand, thanks to lower than anticipated growth in imports (Exhibit 1.2). The contribution by the foreign sector, albeit higher than expected, was nevertheless lower than in 2016 and is the main factor behind the slowdown in GDP growth year-on-year in 2017.

<sup>44</sup> The biggest surprise across the analyst community has been the positive momentum exhibited by the European economy. <sup>37</sup>

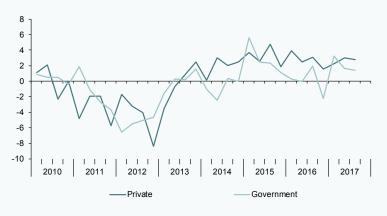


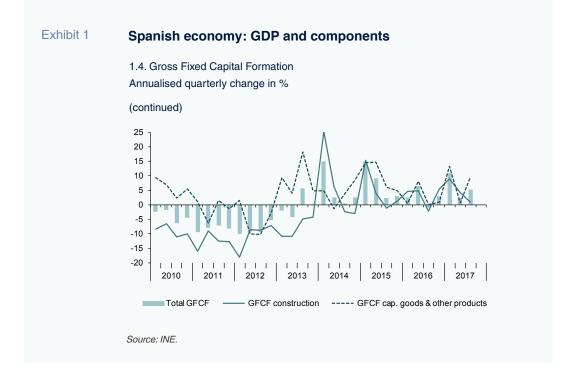


(a) Contribution to GDP growth in percentage points.

#### 1.3. Consumption

#### Annualised quarterly change in %





Although growth in household consumption slowed in real terms in 2017 (Exhibit 1.3), in nominal terms it accelerated considerably, from 2.9% to around 4.5%, due to the uptick in inflation. The growth in nominal spending outpaced the growth in disposable household income, prompting a sharp drop in the savings rate. In short, Spain's households have reacted to the increased cost of their shopping baskets by depleting their savings and, to a lesser extent, by purchasing fewer goods and services.

Despite the growth notched up since the start of the recovery, in 2017 annual household consumption was still 3.6% short of the record level of 2007. Growth in public spending was similar in 2017 to that observed in 2016 in both real and nominal terms.

Growth in investment in capital goods accelerated year-on-year, albeit largely due to the transfer of a portion thereof from the last quarter of 2016 to the first quarter of 2017 due to changes to corporate income tax regulations (Exhibit 1.4). This component of demand has grown the most since the recovery got underway (+30% from the low of 2012) and is, along with public spending, the only component of national demand that stands above its pre-crisis level. It is being driven by the recovery in corporate profits and low interest rates.

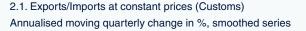
Investment in house construction registered very intense growth. However, it is worth pointing out that in the wake of the sharp contraction suffered during the crisis, investment volumes remain at only 55% of the high of 2007. Real estate activity remained particularly buoyant, marked by annual growth in house transactions of 15% and growth in average house prices of almost 6%. Investment in other types of building work remained weak, however, due to the contraction in public works (government investment contracted by 0.7% up to the third quarter of 2017).

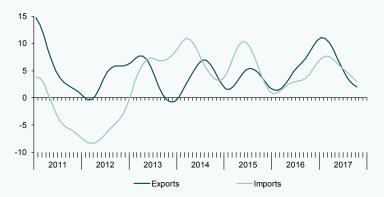
Exports of goods and services accelerated against the backdrop of revitalised global trade, which grew, according to IMF estimates, by more than global GDP for the first time since 2014. Growth in imports similarly accelerated in nominal terms in 2017 as a whole but by less than exports in real terms (note however that customs figures point to a recent trend of slightly higher growth in imports relative to exports) (Exhibit 2.1). This acceleration is partly attributable to the recovery in the purchase of energy goods, which fell considerably in 2016.

The growth in imports was however smaller than expected for the second year in a row, despite the fact that end demand was stronger than forecast, which would appear to confirm a certain decrease in their elasticity. The growth in imports at current prices outpaced that in exports, due mostly to the increase in oil prices (although growth in non-energy import prices also outpaced non-energy export prices).

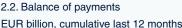
The sector spearheading growth in 2017 was construction, followed by the manufacturing industry. The tourism industry also registered noteworthy growth, with tourist arrivals increasing by 9%, which is very close to the record high of 10% in 2016. Growth in total expenditure by tourists even topped that

#### Exhibit 2 External sector

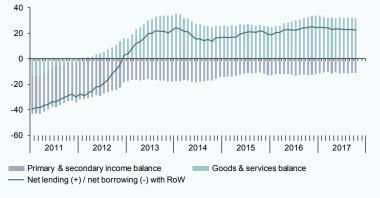




Source: Ministry of Economy and Funcas.







Source: Bank of Spain.

The growth in employment in 2017 in terms of Social Security affiliates was 3.6%, practically the best performance in the series.

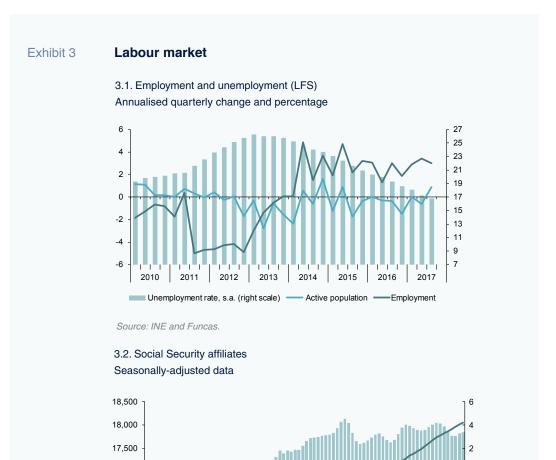
of 2016, thanks to the growth in average expenditure per tourist.

The growth in employment – measured in terms of full-time equivalent positions – is estimated at 2.9%. In terms of Social Security

affiliates, the growth in 2017 was 3.6%, which is equivalent to 626,000 new affiliates (Exhibit 3.2), the best performance in the series, which dates to 2001, with the exception of the increases registered in 2005 and 2006 due to the legalisation of undocumented

2

2017



2015

2016

2014

Affiliates (thousands, right scale) — Annualised moving quarterly change in % (left scale)

17,000 16,500

16,000 15,500

2012

Source: Ministry of Labour and Funcas.

2011

2013

workers. The number of affiliates (annual average) reached 18.2 million, the highest figure since 2008, implying the recovery of two-thirds of the jobs lost during the crisis. Affiliation numbers registered the strongest growth in the construction sector, although the growth in the manufacturing industry affiliates is similarly notable on account of its lack of precedence in the series: +3.1%. Most of the jobs created were temporary in nature.

According to the labour force survey, growth in employment was somewhat lower than that indicated in the national accounts and Social Security affiliate numbers. Until the third quarter (the latest figures available), growth was trending at 2.6% year-on-year (Exhibit 3.1). The drop in unemployment was a little smaller than the increase in employment due to the decrease in the active population which in turn was driven mainly by the drop in the participation rate and, to a lesser extent, in the working-age population.

The downtrend in the latter, underway since 2010, eased significantly in 2017, reflecting an unexpected turnaround in the population aged between 16 and 24, which registered year-on-year growth, at least until the third quarter, for the first time since 1992. The average annual rate of unemployment is estimated at 17.1%, down 2.5pp from 2016.

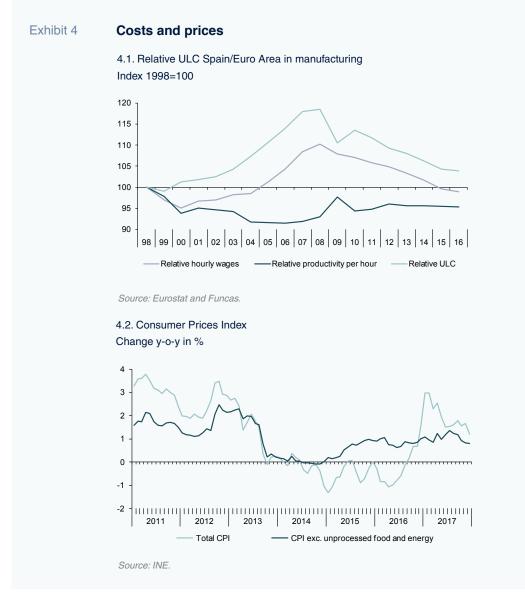
Average remuneration per wage-earner increased by 0.1%, according to the national accounts, which is considerably below the 1.4% agreed via collective bargaining. The growth in productivity is estimated at 0.2%, implying that unit labour costs across the economy as a whole fell by 0.1%. In the manufacturing sector, however, unit labour costs increased slightly for the first time since 2009.

The average annual rate of inflation was 2%, compared to -0.2% in 2016 (Exhibit 4.2). The uptick was driven by the higher cost of energy products, in turn shaped by the rise in oil prices which, in euros, were 22% higher on average in 2017 than in 2016. To a lesser extent, the headline rate was also influenced by the rate of core inflation which at an annual average of 1.1% nevertheless remained very moderate. The gap with respect to the eurozone average turned positive, *i.e.*, unfavourable for Spain, after three years in negative territory. This is because when energy product prices rise, they go up by proportionately more in Spain than in the rest of Europe on account of the smaller weight of taxes in end prices. The gap in core inflation with respect to the eurozone average was negligible.

The current account surplus stood at 14.1 billion euros to October, compared to 15.2 billion euros in the same period of 2016. This slight decrease is attributable to the increase in the goods trade deficit, driven above all by the rise in oil prices. The services trade surplus widened, while the income deficit narrowed year-on-year (Exhibit 2.2). The current account surplus is expected to come in at 1.8% of GDP, 0.1pp less than in 2016.

The fiscal deficit to September stood at 17.1 billion euros, 1.5% of annual GDP, down from 30.0 billion euros in September 2017. The reduction is the result of growth in revenues compared to virtual stabilisation in expenditure. Tax receipts from VAT, personal income tax and social security contributions stand out. In light of these results, and despite adverse seasonality

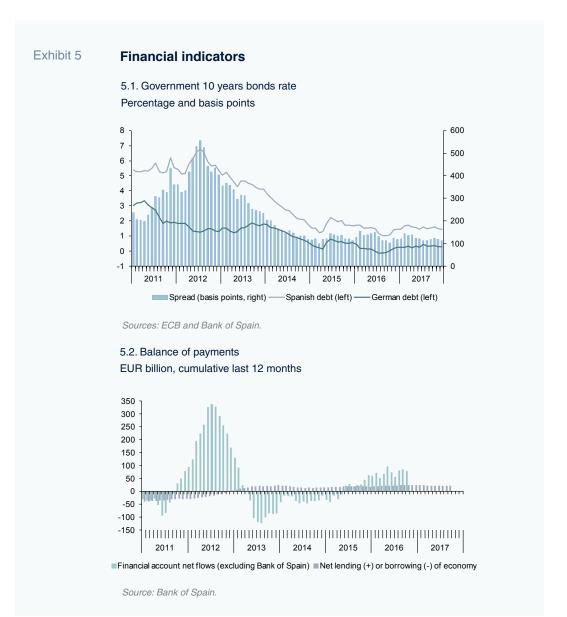
Prices have surged faster than in the eurozone, thus reverting the favourable inflation differential that has prevailed for the last three years.



in the latter months of the year, Spain is expected to deliver on its fiscal deficit target of 3.1% in 2017 (Exhibit 6.4). Debt as a percentage of GDP fell slightly. As for the Social Security system, it is worth highlighting the fact that the growth in revenue from contributions was higher than the growth in pension outlays, driving a reduction in its deficit.

Spanish households' gross disposable income (GDI) increased by 1.9% year-on-year in the first nine months of 2017, whereas nominal

final consumption expenditure was 4.3% higher. This implies a sharp erosion of savings, which dropped to 4% of GDI, compared to 6.2% in September of 2016. As a result, in the first nine months of the year, the household sector registered a net borrowing requirement -i.e., their savings were insufficient to finance their investments - for the first time since 2008. However, due to positive seasonality in the last quarter of the year, it is likely that the end result for the year will be one of financial surplus, albeit very tight compared to the levels observed since the start of the crisis.

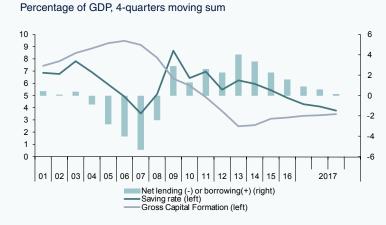


The amount of new credit extended to households to November of last year (excluding debt refinancing activity) increased by 17%, with house mortgages and consumer credit both registering growth. However, despite notching up four straight years of growth, the volume of new credit extended to households was barely a third of the amount being granted at the end of the last period of growth, such that repayments are still outstripping new loans. As a result, household borrowings have continued to come down in both absolute and relative terms, although at a considerably slower pace than in prior years, which is a reflection of their diminishing financial surplus. As of the third quarter of last year (the last for which there is available data), household borrowings accounted for 100.3% of their GDI, down from 103.4% a year earlier (Exhibit 6.3).

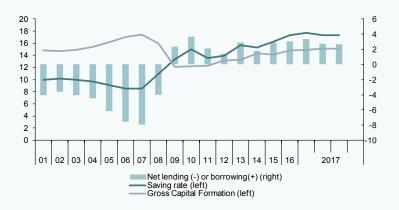
Spain's non-financial corporations saw their cumulate net lending capacity narrow slightly year-on-year in the first nine months of the year due to higher growth in their investments relative to their income (Exhibit 6.2). Growth

#### Exhibit 6 Saving and financial balances

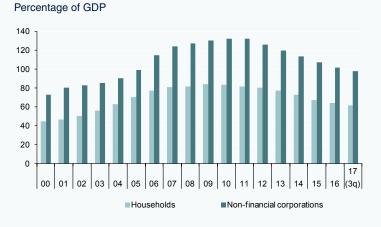
6.1. Households: saving and financial balance



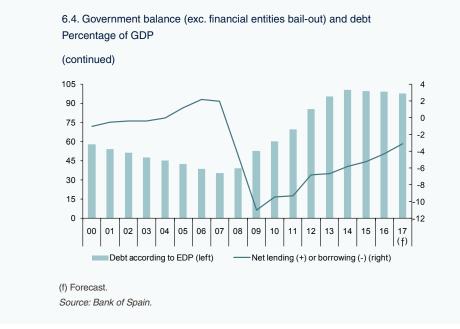
6.2. Non-financial corporations: saving and financial balance Percentage of GDP, 4-quarters moving sum



<sup>6.3.</sup> Private sector indebtedness



#### Exhibit 6 Saving and financial balances



in new loans to enterprises also rose in 2017, especially loans to SMEs, despite which their borrowings, according to the financial accounts, continued to fall in absolute and relative terms and stood at 98.1% of GDP as of September, 5.5pp down from a year earlier.

Against the backdrop of ultra-lax monetary policy, with the interest rate on the ECB's deposit facilities in negative territory and with the monetary authority continuing to repurchase long-term debt securities, the interest rate environment remained very propitious for economic activity in 2017. The short-term rate (3-month Euribor) was stable all year at -0.33%, while 12-month Euribor, which had already been in negative territory in 2016, continued its slide throughout the year, ending 2017 at -0.19%. As for 10-year bond yields, there was no major movement in 2017. In the initial months of the year, the yield stood at 1.70%, from where it went on to fluctuate around the 1.55% mark, falling somewhat towards the end of the year to 1.44%. The annual average was only slightly higher than that of 2016. The risk premium relative to the German sovereign bond narrowed slightly, from 140 basis points in the first months of the year to 110 in December, a trend interrupted in October when it increased a little as a result of the Catalan political tensions, going on to return to the pre-crisis levels (Exhibit 5.1).

In short, 2017 was marked by continued solid and balanced growth, driven significantly by investment, in both capital goods and construction, and the foreign sector. On the downside, however, it is worth highlighting the sharp drop in household savings and their net lending capacity, curbing the potential for growth in consumer spending in the near term and foreshadowing the end of this sector's deleveraging process.

#### **Outlook for 2018**

In 2018, the economy is expected to grow by 2.6%, a healthy pace, albeit slower than in the past three years. The slowdown reflects reduced expected momentum in domestic demand (estimated to grow by 0.2pp less in 2017), as well as a smaller contribution by foreign demand (Table 1).

The trend in national demand is in turn explained by the forecast slowdown in private consumption (Exhibit 7.3), which is expected to increase in line with household disposable income, implying a slight reduction in the savings rate, which is expected to hit a series low. In prior years, consumption had been growing faster than disposable income, as confidence rose, prompting households to dip into the safety nets they had built up during the worst years of crisis.

As for the other drivers of national demand, growth in public spending is expected to ease, while gross fixed capital formation is projected to take off, thanks to the improved outlook for residential investments. Growth in investment in capital goods and other products, meanwhile, should remain dynamic, underpinned by solid corporate profits and low interest rates.

The contribution by the foreign sector should be positive, albeit smaller than in 2017. Exports of goods and non-tourism services are expected to continue to gain market share, leveraging the buoyancy of the global economy and strong competitive positioning of Spanish firms. Revenue from tourism should also increase, although at a slower rate as some of the most popular destinations are becoming saturated. The recovery in imports is set to continue, in line with estimated elasticity (Exhibit 7.6).

Despite the fact that the economy is entering its fourth year of sustained growth, the foreign accounts are not showing any signs of tension. As has been the case since the start of the recovery, Spain will once again register a considerable current account surplus. The current expansion, marked by a combination of high growth and a sizeable surplus, is unprecedented in the country's recent economic history. Nor is the recovery expected to fuel inflation, in contrast to that observed in prior periods of growth. The private consumption deflator is expected to be 1.6%, which is clearly below the threshold the ECB views as compatible with price stability. The growth in the GDP deflator – which reflects the trend in core inflation – will be even lower (Exhibit 7.5).

Certain key imbalances are in the process of correction. Employment should continue to register intense growth, albeit lower than in 2017. The forecasts point to the creation of more than 400,000 jobs (in national accounting terms, which measure employment on the basis of full-time equivalent positions). The unemployment rate could fall to 15.1% on average in 2018 and 14.6% in the fourth quarter, which would mark the lowest level since the end of 2008 (Exhibit 7.4).

The improvement in the job market, coupled with the increase in the minimum wage, should kick-start a rise in wages. Average remuneration per wage-earner is forecast to grow by 1%, which remains below the estimated rate of inflation. In light of the weak forecast increase in productivity, unit labour costs could increase for the first time in three years, albeit at a low annual rate of 0.7%, which is less than half the level the ECB is forecasting for the eurozone. As result, the Spanish economy should continue to gain competitiveness and recover virtually all of the ground lost since the introduction of the single currency.

The public deficit is also expected to come down, to 2.2% of GDP, shaped by moderate growth in public expenditure coupled with growth in revenue, in line with the economic dynamism. The economic recovery unfolding, in addition to Spain's foreseeable release from the European excessive deficit procedure, should be reflected in the international credit

Spain's current expansion, marked by a combination of high growth and a sizeable current account surplus, is unprecedented in the country's recent economic history.

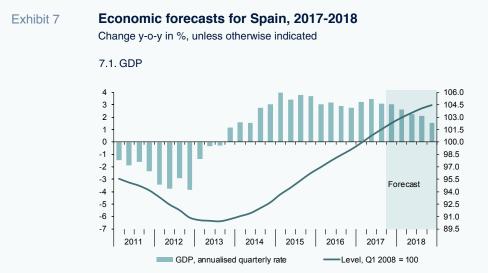
#### Table 1 Economic forecasts for Spain, 2017-2018

Annual rates of change in %, unless otherwise indicated

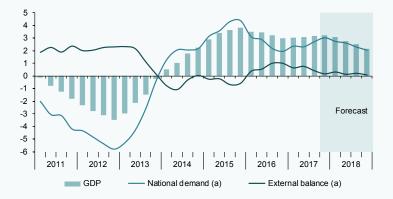
|   | Actual data          |                   |                   |            | Funcas<br>forecasts |       |
|---|----------------------|-------------------|-------------------|------------|---------------------|-------|
|   | Average<br>1996-2007 | Average 2008-2013 | Average 2014-2016 | 2016       | 2017                | 2018  |
| 1. GDP and aggregates, constant prices                                      | 2.0                  | 10                | 0.7               |            | 0.1                 |       |
| GDP   | 3.8                  | -1.3<br>-2.2      | 2.7<br>2.5        | 3.3        | 3.1                 | 2.6   |
| Final consumption households and NPISHs                                     | 3.6                  | -2.2              | 2.5               | 3.0        | 2.5                 | 2.2   |
| Final consumption general government  | 4.3<br>6.4           | -7.4              | 0.9<br>4.8        | 0.8<br>3.3 | 1.0<br>4.9          | 5.6   |
| Gross fixed capital formation   |                      |                   |                   |            |                     |       |
|   | 5.9                  | -10.7             | 3.5               | 2.4        | 4.3                 | 5.6   |
| Residential construction  | 7.8                  | -12.5             | 4.9               | 4.4        | 7.9                 | 8.0   |
| Non-residential construction  | 4.2                  | -8.7              | 2.6               | 0.9        | 1.1                 | 3.    |
| Capital goods and other products  | 7.5                  | -2.2              | 6.3               | 4.2        | 5.5                 | 5.5   |
| Exports goods and services  | 6.6                  | 1.7               | 4.4               | 4.8        | 5.2                 | 5.0   |
| Imports goods and services  | 8.7                  | -4.1              | 5.1               | 2.7        | 4.1                 | 4.9   |
| National demand (a)   | 4.5                  | -3.1              | 2.8               | 2.5        | 2.6                 | 2.4   |
| External balance (a)  | -0.7                 | 1.8               | -0.1              | 0.7        | 0.5                 | 0.2   |
| GDP, current prices: - € billion  |                      |                   |                   |            | 1,167.7             |       |
| - % change  | 7.4                  | -0.8              | 2.9               | 3.6        | 4.4                 | 3.8   |
| 2. Inflation, employment and unemploymen<br>GDP deflator                    | 3.5                  | 0.5               | 0.2               | 0.3        | 1.2                 | 1.1   |
| Household consumption deflator  | 3.1                  | 1.8               | 0.0               | 0.0        | 2.0                 | 1.6   |
| Total employment (National Accounts, FTEJ)                                  | 3.4                  | -3.3              | 2.4               | 3.0        | 2.9                 | 2.3   |
| Productivity (FTEJ)   | 0.4                  | 2.0               | 0.3               | 0.3        | 0.2                 | 0.3   |
| Wages   | 7.5                  | -1.1              | 3.2               | 2.9        | 3.2                 | 3.4   |
| Gross operating surplus   | 6.9                  | -0.3              | 2.3               | 4.9        | 5.6                 | 3.6   |
| Wages per worker (FTEJ)   | 3.3                  | 2.3               | 0.5               | -0.3       | 0.1                 | 1.0   |
| Unit labour costs   | 2.9                  | 0.3               | 0.2               | -0.6       | -0.1                | 0.7   |
| Unemployment rate (LFS)   | 12.5                 | 20.2              | 22.0              | 19.6       | 17.1                | 15.1  |
| 3. Financial balances (% of GDP)  | 12.5                 | 20.2              | 22.0              | 13.0       | 17.1                | 15.   |
| National saving rate  | 22.4                 | 19.8              | 21.4              | 22.4       | 22.7                | 23.2  |
| - of which, private saving  | 18.6                 | 23.0              | 24.2              | 24.6       | 23.7                | 23.3  |
| National investment rate  | 26.9                 | 23.1              | 20.1              | 20.5       | 20.9                | 21.6  |
| - of which, private investment  | 23.0                 | 19.2              | 17.9              | 18.6       | 19.0                | 19.7  |
| Current account balance with RoW  | -4.5                 | -3.3              | 1.3               | 1.9        | 1.8                 | 1.6   |
| Nation's net lending (+) / net borrowing (-)                                | -3.7                 | -2.8              | 1.8               | 2.1        | 2.0                 | 1.6   |
| - Private sector  | -2.8                 | 5.9               | 7.0               | 6.6        | 5.1                 | 3.9   |
| - Public sector (general government deficit)                                | -0.9                 | -8.6              | -5.3              | -4.5       | -3.1                | -2.2  |
| <ul> <li>General gov. deficit exc. financial instit<br/>bailouts</li> </ul> | -0.9                 | -7.9              | -5.1              | -4.3       | -3.1                | -2.2  |
| Public debt according to EDP  | 52.2                 | 67.2              | 99.6              | 99.0       | 97.8                | 96.4  |
| 4. Other variables  |                      |                   |                   |            |                     |       |
| Eurozone GDP  | 2.5                  | -0.3              | 1.7               | 1.8        | 2.3                 | 2.0   |
| Household saving rate (% of GDI)  | 10.2                 | 10.1              | 8.5               | 7.7        | 6.0                 | 5.8   |
| Household gross debt (% of GDI)   | 82.1                 | 127.3             | 107.0             | 102.4      |                     | 101.3 |
| Non-financial corporates gross debt (% of GDP)                              | 80.0                 | 128.0             | 107.5             | 101.7      | 95.9                | 91.1  |
| Spanish external gross debt (% of GDP)                                      | 90.8                 | 158.6             | 167.7             | 167.0      | 160.4               | 159.  |
| 12-month EURIBOR (annual %)   | 3.74                 | 1.90              | 0.20              | -0.04      | -0.14               | -0.04 |
| 10-year government bond yield (annual %)                                    | 5.0                  | 4.7               | 1.9               | 1.4        | 1.6                 | 1.    |

(a) Contribution to GDP growth, in percentage points.

Sources: 1996-2016: INE and Bank of Spain; Forecasts 2017-2018: Funcas.



7.2. GDP, national demand and external balance



(a) Contribution to GDP growth in percentage points.





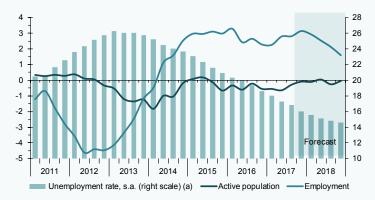
#### Exhibit 7

#### Economic forecasts for Spain, 2017-2018

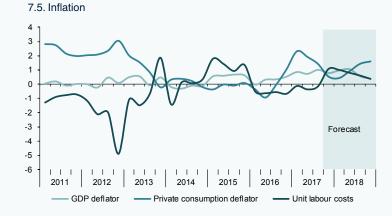
Change y-o-y in %, unless otherwise indicated

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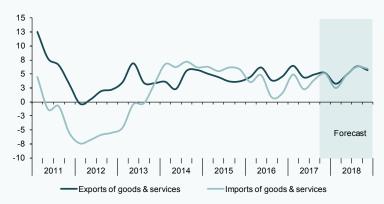
7.4. Employment and unemployment



(a) Percentage of working age population.



7.6. External trade



Source: INE (Quarterly National Accounts) and Funcas (forecasts).

<sup>44</sup> The announced 'normalisation' of monetary conditions will push up the cost of servicing the public debt and, in the absence of a long-term strategy for reducing the debt burden, increase the country's credit risk. <sup>77</sup>

ratings assigned to Spain's sovereign bonds in the months to come.

Nevertheless, despite the favourable global economic climate, public borrowings and the job market will continue to be the main challenges facing the Spanish economy in the years to come. Aggregate borrowings at all levels of government should fall to 96.4% of GDP in 2018, just 1.4pp down from 2017.

The current ultra-lax monetary policy is facilitating public debt servicing. At the rates prevailing in 2012, before the start of the ECB's debt security repurchase programme, the Spanish government (all levels) would have had to pay 16.66 billion euros more in interest than it did in 2017. The result would have been to wipe out the effort to cut the deficit: at 2012 rates, the public deficit would have been 4.6% in 2017, 0.1pp more than in 2016. It is unlikely that rates will return to the levels of 2012. However, the announced 'normalisation' of monetary conditions will push up the cost of servicing the public debt and, in the absence of a long-term strategy for reducing the debt burden, increase the country's credit risk.

This strategy needs to contemplate specific measures for tackling the main budget mismatches, starting with the structural deficit in the pension system. There is a lag, due to demographic factors, between inert growth in expenditure on pension benefits and the revenue collected via social security contributions. Short-term, the formula for updating pension payments (+0.25% per annum as long as the system is in deficit) is helping to contain the deficit. However, this measure is translating into a loss of purchasing power and increase in poverty on the part of Spain's pensioners, a situation that is not socially sustainable. On the revenue side, the various deductions being offered on the various classes of employment contracts are eroding the revenue base and are not necessarily proving efficient as a tool for stimulating hiring.

The job market, meanwhile, continues to suffer from two structural problems. First of all, the crisis has left a legacy of long-term unemployment that cannot be fixed by more economic growth. This issue requires specific measures targeted at helping to get these long-term job-seekers back to work. To get this done, the employment offices need to do a good job, while the government needs to design proactive policies. The good practices beginning to crop up in various regional governments are shining a light on the way forward. The state could induce these efforts, as governments in other countries with decentralised structures such as Germany, Canada and Switzerland are doing.

The precarious nature of many of the jobs being created is the other drag on the Spanish economy and social cohesion. Here

<sup>66</sup> The job market continues to suffer from two structural problems: a legacy of long-term unemployment and the precarious nature of many of the jobs being created.<sup>77</sup> the solution entails reforms that foster legal certainty, so that companies that have to downsize for legitimate economic or business reasons can do so availing of a faster procedure less exposed to random decision-making in the courts. The authorities also need to step up the effort to thwart hiring abuse (fake interns, self-employment and dependence claims and the arbitrary interruption of temporary contracts to avoid having to pay for holiday time off or maternity leaves, etc.). The idea is to minimise the hiring of interns and temporary workers when a business's needs are stable. An agreement between the government, employers and unions on this much-needed area of reform would help to improve the productive model and ready the country for digital transformation.

#### Main risks

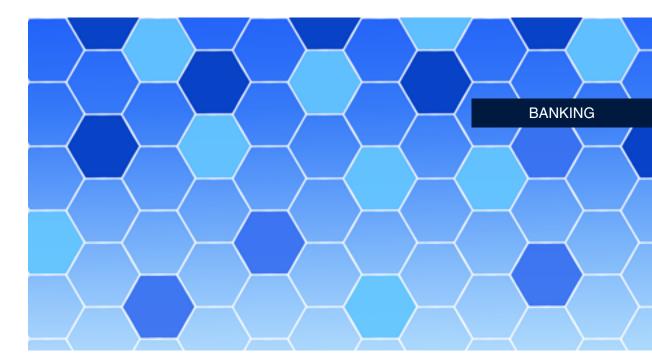
The forecasts have been articulated around three main assumptions. Firstly, as already mentioned, that the international environment will remain propitious. Secondly, that the current combination of macroeconomic policies (expansionary monetary policy and neutral fiscal policy) will continue. Lastly, the situation in Catalonia will gradually normalise. This implies that the Catalan economy will find its way back to the growth track from the second quarter. In 2018, the conflict is expected to erode Spanish GDP growth by between 0.2 and 0.3pp.

There is more upside than downside however. Recent indicators suggest that the world economy ended the year stronger than expected. The eurozone, which accounts for almost 60% of Spanish exports, is particularly dynamic, which could add a little to Spanish growth.

But there is also downside. Instability in the Middle East and tension between Saudi Arabia and Iran could push oil prices higher, which would have important repercussions for the Spanish economy. Domestically, the big question is what consequences the political crisis in Catalonia will have. If the crisis continues, the economy in this region could suffer by more than is currently being predicted. Moreover, this situation would reduce elbow room for undertaking new reforms and leave the economy more exposed to potential shocks, such as a faster than anticipated withdrawal of the ECB stimulus measures.

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### EU and Spanish banking landscape in 2018: Increased regulation and pressure to reduce NPLs

EU banks in 2018 will face an increased regulatory burden with three pieces of key regulation entering into force this year. In the meantime, progress on a European banking union has slowed due to political tensions over increased risk mutualisation prior to further reductions in NPL exposures.

Santiago Carbó Valverde and Francisco Rodríguez Fernández

Abstract: In 2018, EU financial service providers will face a particularly intense regulatory panorama comprised by three crucial pieces of new legislation: i) the second Markets in Financial Instruments Directive (known as MiFID II), ii) the second Payment Services Directive (PSD2); and, iii) the General Data Protection Regulation (the GDPR). Although there is substantial rationale underpinning the new measures, their simultaneous entry into force is also giving rise to excess bureaucratic burden, which will significantly hamper development of finance in the EU in 2018. In parallel, intense political debate is taking place between the countries that want to see completion of the banking union (with a single deposit insurance scheme and, possibly, a European Monetary Fund) and those that believe that before additional risks are mutualised, these risks should be first substantially reduced. In Spain, the recent effort to reduce non-performing assets has been very noteworthy. Indeed, non-performing loans declined by 91.27 billion euros between December 2013 and September 2017. Moreover, the latest forward-looking stress tests carried out by the Bank of Spain suggest that Spanish banks would prove highly resilient to even the most adverse scenarios.

#### Introduction

2018 will usher in a particularly hefty load of financial regulations on top of an already regulation-dense year-end 2017 with the application of Basel III. All of the legislation about to come into effect makes sense and has its own rationale, but its length, timing and probable impacts could spark controversy in some respects. The timing question is of particular relevance in a year in which in Europe alone three new major pieces of legislation are due: i) the second Markets in Financial Instruments Directive (known as MiFID II), ii) the second Payment Services Directive (PSD2); and, iii) the EU General Data Protection Regulation (the GDPR). All these pieces of legislation have a cross-cutting impact on customer service in the financial industry, as well as implying a plethora of transformations in the manner in which supply must interact with demand.

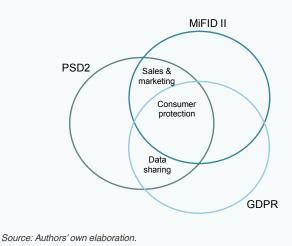
2018 should also have been a fundamental year for advancing towards the construction of banking union in Europe in terms of the mutualisation of risk by means of a single deposit insurance scheme and the articulation of a more powerful single resolution mechanism. However, these aspects have been redesigned and while remaining an important milestone, their application has been postponed, in some areas indefinitely. The main reason is that Europe's main net lenders, spearheaded by Germany, want to see a significant reduction in existing NPLs before sharing risks. It is hardly surprising, as is also shown in this paper, that many eurozone banks have accelerated their plans for selling their toxic assets or that we are witnessing a debate about how to manage non-performing loans in a country such as Italy, currently the focus of the main concerns in this arena. On this point, the live issue in this new year is the broad debate about how these kinds of writedowns should be carried out. There has been talk about creating a pan-European asset management company, a single 'bad bank'. But this idea has run up against the same reluctance to share risks before reducing exposure. In countries such as Spain, to which we pay particular attention in our analysis, considerable progress has already been made on reducing non-performing loans. In Spain and other markets what could loosely be termed a secondary market for impaired assets definitely remains active.

Some papers and stress tests carried out recently by the Bank of Spain and European Banking Authority also provide important insight into existing risks and their active management. Lastly, this paper also analyses the European Central Bank's recent proposal regarding how to implement a non-performing loan (NPL) transaction platform.

#### The perfect regulatory storm

At the top of the European financial and banking agenda is the simultaneous arrival of three new pieces of legislation, destined to exert additional pressure on the already overloaded compliance departments: i) the second Markets in Financial Instruments Directive (known as MiFID II), ii) the second Payment Services Directive (PSD2); and, iii) the EU General Data Protection Regulation (the GDPR). Although each of these pieces of legislation obviously boasts its own field of application, there are also areas of overlap, as shown in Exhibit 1. Consumer protection is particularly prominent as a concern underpinning all three standards but there are other areas of overlap such as the importance ascribed to how customers are pitched or marketed to (in MiFID II and PSD<sub>2</sub>) or what information can be shared with third parties (the GDPR and PSD<sub>2</sub>).

### Exhibit 1 Areas of intersection in the major pieces of legislation coming into effect in the eurozone in 2018



In addition to the sheer number of new laws coming into force at once, all of the new regulations are extremely detailed, in some cases providing exhaustive 'cataloguing' (particularly the PSD2). This implies a very substantial implementation burden for the financial service providers, with one set of new rules overlapping the next, which is bound to bring operational and compliancerelated difficulties.

As for the specific regulations, the new regulatory framework governing markets in financial instruments, based on MiFID II and its implementing regulation (the Markets in Financial Instruments Regulation, or MiFIR), came into effect on January 3<sup>rd</sup>, 2018. However, the European Commission has given an additional six-months for definitive implementation in each country, so that the new effective implementation deadline is July 3<sup>rd</sup>, 2018. What it regulates, in general terms, are the authorisation and operating requirements for investment firms, including the freedom of establishment and the freedom

to provide services in the EU and also the provision of services by third country firms; the conditions governing the authorisation and operation of regulated markets; position limits and position management controls in commodities derivatives; the codes of conduct and investment protection rules to be upheld by investment firms; data reporting services providers; and, the organisational and conduct requirements for market participants designed with the aim of enhancing investor protection.

With this broad scope of application, the directive attempts to achieve several objectives:

- Ensure the conduct of organised trading on regulated platforms.
- Introduce rules governing algorithmic and high frequency trading.
- Enhance financial market (including derivative market) transparency and oversight,

<sup>11</sup> The sheer number of new laws simultaneously coming into force and their exhaustive level of detail imply a substantial implementation burden for financial service providers. while addressing certain shortcomings in the commodity derivative markets.

 Reinforce investor protection, codes of conduct and conditions for competition in the trading and clearing of financial instruments.

Regulation EU 600/2014 (MiFIR) primarily addresses pre- and post-trade transparency in respect of the competent authorities and investors, the requirements and obligations of data service providers and the introduction of the obligation to trade derivatives on trading venues, as well as certain supervisory initiatives.

Customer data processing is a particular concern of the MiFIR. It regulates the public disclosure of data pertaining to trading activities and the reporting of transaction data to regulators and supervisors. MiFIR also attempts to give some private markets more 'official' status. For example, it stipulates that derivatives be traded in organised systems. It also promotes the elimination of obstacles between trading systems and clearing service providers in order to ensure greater competition.

Although it is highly probable that MiFID II and the MiFIR will attain most of their defined targets, it is unlikely to be without difficulty, simply on account of pure regulatory proliferation and overlap. Potential difficulties are anticipated in at least four areas:

- The first and most obvious one is the profuse 'cataloguing' of services. An attempt to harness the entire marketing and advisory supply side in a sort of manual that runs hundreds of paragraphs long.
- The new MiFID attempts to break down every step of the distribution and advisory

process in order to set an exact price for every service. One of the most talked about aspects is the research area. Most investment firms have opted to assume the costs of their research internally but this has in turn reduced the publication of proprietary research free of charge for interested investors. There are also substantial discrepancies in analyst remuneration, with much higher salaries for those who also perform advisory work.

- There is a good deal of confusion regarding the entry points that determine in which country a sale materialises. It is conceivable that very similar international transactions could be priced very differently by simply changing the geographic location of one of the links in the service chain. This creates the risk of regulatory arbitrage.
- Automation is part and parcel of MiFID II and will be very positive insofar as it triggers the digitalisation of processes, particularly in the compliance area; but this will also generate large volumes of often overlapping information that will be hard for investors and supervisors to digest.

As for the PSD2, its numerous provisions include new and very strict security protocols for the initiation of electronic payments and regarding the protection of consumers and their personal data. This directive also attempts to foster and provide legal coverage for the activities that consumers or small businesses may undertake in the digitalisation sphere. In general, this directive has implied and will continue to imply numerous initiatives in terms of consumer protection in areas such as ultimate liability for unauthorised payments and their refund and the ban on levying surcharges for certain transactions.

Although it is highly probable that MiFID II and the MiFIR will attain most of their defined targets, it is unlikely to be without difficulty, simply on account of pure regulatory proliferation and overlap. <sup>11</sup> Under PSD2, while a given credit institution will be able to develop the functions of a payment institution, the idea is to open up the market to a potentially large number of bank and non-bank providers.<sup>11</sup>

It is important to highlight that the PSD2 even attempts to provide a new list of payment service providers. Alongside the credit institutions, there are two other categories worthy of mention: (i) the 'electronic money institutions', those that attempt to provide an intangible payment service; and, (ii) 'payment institutions', the legal entities that will be authorised to initiate and execute payments throughout the entire European Union. While a given institution (e.q., a bank), albeit recognised as a credit institution, will be able to develop the functions of a payment institution, the idea is to open up the market to a potentially large number of bank and non-bank providers.

Another essential component of the PSD2 is the introduction of an authorisation regime by means of the so-called 'single license' for all payment service providers that do not take deposits or issue electronic money. This provision is an attempt to ensure a sufficiently level playing field for former and new providers, while guaranteeing that the latter are subject to regulatory control. Regardless, digitalisation is bound to introduce very significant complexity into the payments market as well as protracted periods of transition, consultation and probably competitive disputes. In fact, the PSD2 places the bulk of responsibility for payment institution oversight and control on the European Central Bank and the European Banking Authority. The latter body, among other duties, will have to keep an updated register of suppliers and make that register publicly available[1].

Albeit less profuse than MiFID II or PSD2, the EU's General Data Protection Regulation also poses important challenges for financial service providers. It takes effect on May 25<sup>th</sup>, 2018. It will affect all entities that offer user products or services in the EU member states. What's new is the fact that it will affect all entities that process the data of European citizens regardless of whether they do so within European borders. This attempt at thwarting regulatory arbitrage is particularly relevant to many suppliers within the world of FinTech. The new regulations also introduce new tools for helping consumers to manage their digital footprints, such as the ability to exercise their 'right to be forgotten'. Customers will be entitled to have their data removed when they are no longer needed for the purpose for which they were collected. It also allows for the unhindered 'portability' of data to another allocated manager/firm.

One of the ways in which this new standard will be frequently tangible is in the requests for data use consent, as blanket consents will be hard to give and specific consents required. This should enhance consumer protection but will also increase the red tape and bureaucracy involved in every transaction.

### Slow progress on banking union and economic policy

Along with the new regulations outlined above, the major challenge looming in 2018 remains that of making progress on the construction of full banking union. The key advances were discussed at the European Summit of December 14<sup>th</sup> and 15<sup>th</sup>, 2017. Although other important issues, such as the new guidelines for the Brexit negotiations, were addressed at this meeting, certain aspects of the future of banking union also came up. The economic policy shaping this process is now focused on four areas:

• There is broad consensus regarding the need for a European deposit insurance scheme but not on how to implement it. Since the crisis, the rules governing the management of non-performing loans have been tightened and the banks' liquidity and capital requirements reinforced. <sup>44</sup> The EU has explicitly acknowledged that the goal of setting up a single deposit insurance scheme by 2024 has been put on hold until there is consensus regarding how and when to mutualise the risk.<sup>97</sup>

However, some states, such as Germany and the Netherlands want to see substantial progress on the reduction of exposure to non-performing loans, especially in Italy. There is also consensus regarding the need for a more powerful Single Resolution Fund but here again the same countries want to see a reduction in non-performing loans before sharing future commitments or risks.

- One of the practical aspects that could give banking union a boost in Europe is the conversion of the stability mechanisms into a full-blown European Monetary Fund. However, how this fund would be funded from the European budget, without upfront liability on the part of each member state in the event of potential bailouts, has yet to be worked out.
- There are other requests from the net lender states which are running up against opposition from the net borrowers. These include Germany's request to create a sovereign debt restructuring mechanism. The idea would be that in the event of national bond crises, the debt would have to be restructured before initiating bank bailouts or allowing the debt to spiral unchecked. However, those that oppose this idea believe it would impinge upon each member state's ability to correct its own imbalances.

The EU has yet to update its working papers on the construction of the banking union published in 2015 but has explicitly acknowledged that the goal of setting up a single deposit insurance scheme by 2024 has been put on hold until there is consensus regarding how and when to mutualise the risk.

#### **Evidence of prevailing pressure** to reduce exposure: European practices and proposals

We are seeing practices and supervisory proposals that evidence this political and strategic pressure to reduce banks' exposure to non-performing loans before risks can be fully mutualised in Europe.

On November 11<sup>th</sup>, 2017, the European Banking Authority published the results of two assessments. Both analyse the consistency of risk weighted assets (RWAs) across all EU institutions authorised to use internal approaches for the calculation of capital requirements. One of the reports focused mainly on credit risk and the other on sovereign and market risk. They concluded that although there is risk weights variability, this is "explained by fundamentals."

In particular, in terms of credit risk, 61% of the variability observed in the treatment of riskweighted assets is due to fundamentals such as the proportion of defaulted exposures in the portfolio; the country of the counterparty; and the portfolio mix. The rest of the variability is explained by "differences in riskiness" and by "supervisory practices". It is perhaps on this latter aspect that further work is required in order to ensure progress towards the uniform treatment of bank exposures across the eurozone.

As for market risk, the general conclusion is that there is a degree of consistency and

<sup>11</sup> The element of uncertainty emphasised the most in these assessments is credit risk, to which the countries in Southern Europe, particularly Italy, are the most exposed.

homogeneity in the treatment of interestrate risk but "significant dispersion" in the estimation of more sophisticated internal measures, such as the 'incremental risk charge' (IRC) used in the models for measuring trading portfolios and in 'all price risk' (APR) models.

At any rate, given that the pressure to reduce risk exposure stems mainly from the core of 'creditor' nations, the element of uncertainty emphasised the most in these assessments is credit risk, to which the countries in Southern Europe, particularly Italy, are the most exposed. This is observed, by way of anecdotal evidence, in the synopsis of what the ECB dubs the "secondary market for NPLs" in the EU. Table 1 provides a compilation of the major transactions undertaken in these markets using calculations made by the ECB based on data sourced from Deloitte, by line of business, in a selection of member states. Some 67 such transactions took place in these countries between 2015 and 2017, with Italy standing out with 32 transactions. Italy was followed by Spain (18), Ireland and the Netherlands (13) and Germany (11). It is worth nothing that in Italy the risk exposures underpinning these

transactions came from a broad spectrum of business segments. In Germany and Ireland, they stemmed mainly from exposure to commercial real estate. In Spain, most of the transactions corresponded to the restructuring of real estate developments.

In all likelihood, aimed at the countries that still have the most work to do in terms of reducing their exposure to non-performing debt, the ECB included a special feature on how to structure these NPL transactions in its Financial Stability Review of November 2017. Exhibit 2 shows the working concept of what the ECB has coined a potential "NPL transaction platform".

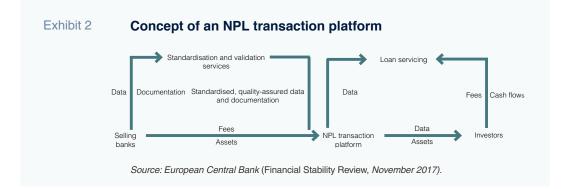
The concept could be considered the seed of what could be a single asset management platform, or 'bad bank'. To read Exhibit 2, one must go from left to right. Initially, the banks interested in selling non-performing assets gather the information and documentation that then has to pass through independent standardisation and validation filters, the idea being to transform the documentation into quality-assured information that upholds market standards. These assets and the related data would then pass to a trading

#### Table 1

# Number of buyers participating in secondary market transactions in loans, per country and asset class (2015 - 2017)

|                | Bulgaria | Germany | Spain | Greece | Croatia | Hungary | Ireland | Italy | Netherlands | Portugal | Romania | Slovenia | EU |
|----------------|----------|---------|-------|--------|---------|---------|---------|-------|-------------|----------|---------|----------|----|
| Asset finance  | 0        | 2       | 0     | 1      | 0       | 0       | 0       | 0     | 0           | 0        | 0       | 0        | 3  |
| Consumer       | 1        | 0       | 5     | 0      | 0       | 1       | 0       | 10    | 0           | 0        | 1       | 0        | 16 |
| Corporate      | 0        | 0       | 5     | 0      | 1       | 0       | 2       | 7     | 0           | 0        | 2       | 2        | 18 |
| Commercial RE  | 0        | 7       | 3     | 0      | 0       | 0       | 11      | 10    | 7           | 0        | 0       | 0        | 27 |
| Mixed          | 1        | 2       | 4     | 1      | 0       | 0       | 0       | 14    | 1           | 0        | 2       | 0        | 22 |
| Mortgage       | 0        | 0       | 2     | 0      | 0       | 2       | 4       | 3     | 5           | 0        | 1       | 0        | 17 |
| RE development | 0        | 0       | 11    | 0      | 0       | 1       | 0       | 0     | 0           | 1        | 0       | 0        | 12 |
| TOTAL          | 2        | 11      | 18    | 2      | 1       | 4       | 13      | 32    | 13          | 1        | 5       | 2        | 67 |

Source: ECB based on Deloitte data.



platform that would manage them by offering them for sale along with similar assets to potential investors. The advantage lies in the fact that the platform would offer assurance with respect to the valuation practices and standards used, guaranteeing standard terms of sale for the various impaired assets traded on it.

#### Evidence of prevailing pressure to reduce exposure: The case of Spain

In Spain, the pressure to reduce exposure remains, despite the fact that the NPL reduction effort has already been considerable. As shown in Exhibit 3A, the overall volume of non-performing loans has fallen significantly since December 2013; specifically, by 91.27 billion euros by September 2017. NPL exposure also came down previously, in September 2012, in what could be viewed as a one-off recalibration of the series, as this was when a significant volume of non-performing assets were sold to Spain's so-called bad bank, the SAREB.

Exhibit 3B shows the year-on-year rate of change in the Spanish banks' NPL exposures. The greatest increases were observed during the second half of 2008, when the rates were triple and even quadruple the precrisis rates. However, since December 2014, the total volume of non-performing loans has been continuously decreasing at double-digit rates.

There are prevailing practices and regulatory developments that bode for continued acceleration of this risk reduction effort. One such development is Bank of Spain Circular 4/2017 on credit institutions and their public and confidential financial reporting rules and templates. The goal of this Circular is to adapt the Spanish banks' accounting regime for incoming changes to European accounting standards deriving from the adoption of two new International Financial Reporting Standards, IFRS 15 and IFRS 9, which, from January 1st, 2018, introduce new criteria for accounting for revenue and financial instruments, respectively, the second standard being of particular relevance for the banks.

It is worth noting that the Circular continues to offer alternative solutions to the development of internal calculation methods by the banks for the purpose of estimating their collective loan-loss provisions with a dual purpose: i) to facilitate the application of the new expected loss model, which is more complex than the outgoing incurred loss model; and, ii) to facilitate the comparison of the estimates made by the banks themselves with the results that would be obtained by applying those alternative solutions. These solutions have been updated to include the Bank of Spain's

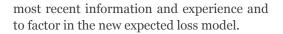
<sup>11</sup> The ECB's concept of an NPL transaction platform would offer assurance over valuation practices and standards used, guaranteeing standard terms of sale for the various impaired assets traded on it.

#### Exhibit 3 Trend in non-performing loans in Spain: Long-term perspective (2005 - 2017)

A. Total volume of non-performing loans (billions of euros)







Sep-06

Mar-07 Sep-07 Mar-08 Sep-08 Mar-09 Sep-09

Mar-06

Another of the exercises undertaken that suggests that the risk reduction effort has not only increased but is effective are the stress tests performed by the Bank of Spain under the scope of its Forward-Looking Exercise on Spanish Banks (FLESB) Framework. The Bank of Spain's Financial Stability Report of November 2017 presented the main results to date. Note that this constitutes an effort by the Bank of Spain to increase transparency and is an exercise it has been undertaking since 2013. The tests contemplate a baseline case in which the Spanish economy registers growth in 2018 and 2019 and an adverse scenario in which GDP contracts by 1.9% and 3% in those years, respectively.

Sep-15 Mar-16 Sep-16

Mar-17 Sep-

Sep-12

Mar-13 Sep-13 Mar-14 Sep-14 Mar-15

Mar-12

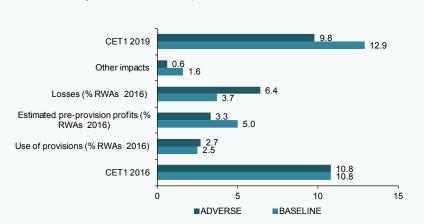
Mar-11 Sep-11

Mar-10 Sep-10

Source: Bank of Spain and authors' own elaboration.

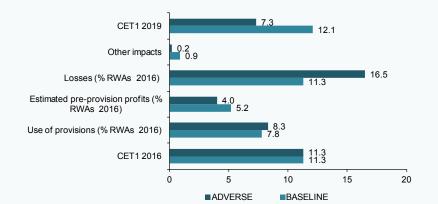
The stress tests first contemplate the banks with significant international operations (Exhibit 4A). In the baseline scenario, these entities' CET1 ratio increases from 10.8% in 2016 to 12.9% in 2019. In the adverse scenario, the CET1 drops by one percentage point.

## Exhibit 4 The Bank of Spain's Forward-Looking Exercise on Spanish Banks (FLESB)

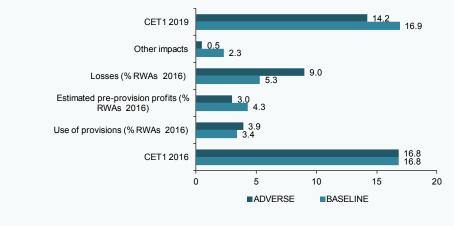


A. Banks with significant international operations









Source: Bank of Spain and authors' own elaboration.

The impact of these scenarios on the other entities under the direct supervision of the Single Supervisory Mechanism (SSM) is illustrated in Exhibit 4B. In the baseline scenario, the CET1 ratio increases by 0.8 percentage points between 2016 and 2019, while in the adverse scenario, it declines by 4 percentage points over the same time horizon to 7.3%.

Lastly, the analysis looks at the group of socalled 'less significant institutions' (in terms of systemic risk) (Exhibit 4C). In the baseline scenario, the CET1 ratio remains virtually flat, increasing a scant 0.1% to 16.9% by 2019. As noted by the Bank of Spain, "the adverse scenario does lead to a larger volume of losses (9% of RWAs), exceeding the volume of resources capable of absorbing them". Although this would result in the depletion of reserves, the capital ratio would remain well above the regulatory minimum at the end of the test time horizon.

# Conclusions: Greater regulatory burden and demonstrated resilience

The analysis undertaken in this paper suggests that 2018 starts off under the shadow of a dense regulatory agenda for financial service providers. The looming regulations are set to have a cross-cutting impact on several core aspects of their business activities, above all, how they interact with their customers, how they mind their data and the rules for marketing a large number of products. This pressure stems primarily but not exclusively from the entry into effect of the second Markets in Financial Instruments Directive (MiFID II), the second Payment Services Directive (PSD<sub>2</sub>) and the EU General Data Protection Regulation (the GDPR). As analysed throughout this paper, although the reasons for these regulations and some of their implementing initiatives respond to logical criteria, their abundance, overly zealous 'cataloguing' of procedures and overlap in time pose real challenges for the development of finance in the EU in 2018.

From the European perspective, we are seeing intense political debate between the countries that want to see completion of the banking union (with a single deposit insurance scheme and, possibly, a European Monetary Fund) and those that believe that before additional risks are mutualised these risks should be first reduced substantially.

There is evidence that bank assets are still not being treated on a harmonised basis across Europe, marked by different capital requirements in respect of risk-weighted assets that are not always attributable to business or market fundamentals.

Specifically in Spain, the recent effort to reduce exposure has been very considerable and the latest forward-looking stress tests carried out by the Bank of Spain suggest that the Spanish banks would prove very resilient to even the most adverse scenarios.

#### Notes

 For a more detailed analysis of the PSD2, refer to Carbó, S. and F. Rodriguez (2016), "Digitalización y preferencias por los medios de pago en España" [Payment instruments in Spain: digitalisation and preferences], *Papeles de Economía Española*, 149, 115-126.

Santiago Carbó Valverde. CUNEF and Funcas Francisco Rodríguez Fernández. University of Granada and Funcas This page was left blank intentionally.



# Basel III reforms and implications for European and Spanish banks

The conclusion of Basel III reforms will, on the whole, increase capital requirements for European banks. Nevertheless, the reduction of regulatory uncertainty and the resulting increased resilience for the EU banking system should support a more constructive outlook for the sector over the medium to longer-term.

Fernando Rojas, Esteban Sánchez and Francisco José Valero

Abstract: On December 7<sup>th</sup>, 2017, the oversight body of the Basel Committee on Banking Supervision (BCBS) announced the finalisation of the Basel III reforms, initiated in December 2010, which mainly affect three major classes of bank risk: credit, operational and Credit valuation adjustment (CVA). The changes are set to have an impact on European

banks as they are expected to increase the Tier 1 minimum capital requirements by 12.9%. The increased capital adequacy implied by the new regulations for European banks, and above all the dissipation of certain sources of uncertainty, has been welcomed by the stock markets, as evidenced by the increase in banks' shares in the main EU economies by 3% on average in the days immediately following the announcement of endorsement.

#### Introduction

On December 7<sup>th</sup>, 2017, the Basel Committee on Banking Supervision's oversight body, the Group of Central Bank Governors and Heads of Supervision (GHOS), announced the completion of the global reform of the banking regulation framework known as Basel III (BIII), which began in December 2010, when two documents key to this process were issued, one addressing capital requirements (BCBS, 2010a) and the other, liquidity (BCBS, 2010b) (note that the latter is not affected by the conclusion of the process).

Against that backdrop, this paper attempts to achieve two fundamental objectives:

- Outline the key characteristics of the changes to international banking regulations implied by the completion of BIII.
- Estimate the influence that conclusion of the process will have on the European banks as a whole, without focusing on any institution in particular.

Both objectives are complex on account of, on the one hand, the scope and depth of the changes prompted by the completion of BIII, as depicted in Exhibit 1, provided in the next section of this paper, and the need for information that is not publicly disclosed by Spanish banks affected, on the other.

However, given that the length of this paper is limited, in both instances we rely on the documents published by the BCBS and by the European Banking Authority (EBA) for the second objective. Indeed:

- The BCBS has published a formal document regarding the finalisation of BIII (BCBS, 2017a: 162 pages) and a summary thereof (BCBS, 2017b: 20 pages).
- The BCBS has also published a quantitative impact assessment (BCBS, 2017c: 49 pages), based on a sample of 248 entities across 25

countries, almost all of which are members of the BCBS (23 of the 27 members), and the EBA has published a similar analysis (EBA, 2017: 28 pages), using a sample of 149 banks from 17 EU countries.

Note that credit risk tends to be the most significant area of change for the banks as a whole and this is certainly the case in Spain, as is evident in the Bank of Spain's analysis (2017, on page 69), which states that credit risk is responsible for 87% of risk-weighted assets (RWA), followed by operational risk (9%) and position, and exchange and commodity risk (3%), sometimes termed market risk. The other risks account for around 1%. This means that we are well justified in focusing on credit risk, the area subject to the greatest change upon completion of BIII [1].

The changes in the treatment of credit risk would in all likelihood have been more significant had there been any substantial change in the risk weights assigned to sovereign exposures, the standardised approach to which, as the final report confirms, has been left unchanged with respect to the Basel II reforms of June 2006, having failed to secure a consensus as to how to change them.

Instead, the BCBS has issued a discussion paper (BCBS, 2017d: 45 pages) on the subject. That document, which will not be referred to again in this paper, sums up in a manner we view as very holistic and comprehensive the issues raised by these exposures, while also weighing up potential ideas, albeit without putting forward any specific proposals, pending responses from stakeholders which are due by March 9<sup>th</sup>, 2018.

Notwithstanding the foregoing, it is very likely that the treatment of sovereign exposures was used as a bargaining chip among the various parties when it came to defining the scope of the so-called output floor.

This paper does not take into consideration the fact that the final terms of BIII must be incorporated into EU regulations on capital requirements for credit institutions, essentially Directive 36/2013 (the Capital Requirements Directive IV or CRD IV) and Regulation 575/2013 (CRR), which do not always echo what is decided by the BCBS word for word but do tend to stay close to script on the important points. The capital requirements package is in the process of undergoing several modifications, not all of which are related with BCBS initiatives.

#### What's new in Basel III

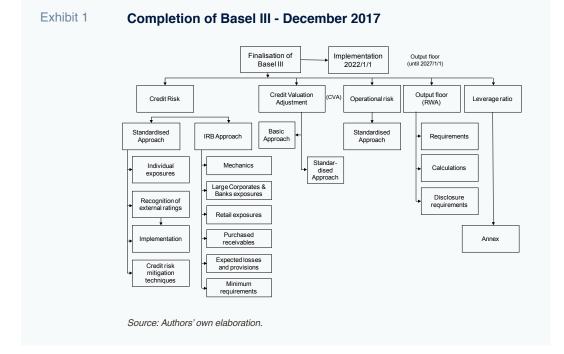
Exhibit 1 synthesises the contents of the final BIII report. It illustrates how three major sources of bank risk are affected:

- Credit risk
- > Operational risk
- Credit valuation adjustment (CVA) risk

The BIII reforms were undertaken with one overriding objective in mind, namely reducing the excessive observed variability in the risk weights applied across the various entities, variability which undermines the validity of the regulatory approach and impedes comparability across entities. This objective is achieved in three ways:

- Fortifying the solidity and risk sensitivity of the standardised approach to credit and operational risk;
- Restricting the use of internal ratings-based models, whose use is not obligatory. In fact, a jurisdiction that only uses standardised approaches is BIII compliant.
- Rounding out the capital ratio with a leverage ratio, which is ultimately the unweighted capital ratio, and establishing a new RWA floor.

In the spirit of the philosophical approach taken by the BIII reforms since they were embarked on in December 2010, which calls for staggered implementation, the changes analysed in this paper are in general due to take effect on January 1<sup>st</sup>, 2022, *i.e.*, in four years' time, which would seem more than enough headroom for any banks needing to make adjustments. The RWA floor adds another five years to the transition arrangement, as it will



### Table 1 RWA output floor phase-in schedule

| Date                | January 1 <sup>st</sup><br>2022 | January 1 <sup>st</sup><br>2023 | January 1 <sup>st</sup><br>2024 | January 1 <sup>st</sup><br>2025 | January 1 <sup>st</sup><br>2026 | January 1 <sup>st</sup><br>2027 |
|---------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| % Output floor      | 50                              | 55                              | 60                              | 65                              | 70                              | 72.5                            |
| Source: Authors' ov | vn elaboratior                  | ٦.                              |                                 |                                 |                                 |                                 |

be introduced on a staggered basis starting in 2022:

#### Credit risk

Standardised approach

As for individual exposures, the final document contemplates the following classes of exposures:

- Exposures to sovereigns, whose risk weights are unchanged since 2006 as already noted above
- > Exposures to non-central government public sector entities (PSEs), also unchanged from the Basel II framework
- ➢ Exposures to multilateral development banks (MDBs)
- > Exposures to banks
- > Exposures to covered bonds
- > Exposures to securities firms and other financial institutions
- > Exposures to corporates
- Subordinated debt, equity and other capital instruments

- ≻ Retail exposures
- ➢ Real estate exposure (residential and commercial)
- ≻ Exposures with currency mismatch
- ≻ Off-balance sheet items
- ➢ Defaulted exposures
- ≻ Other assets

The most important changes to this approach are summarised in BCBS's high-level summary (2017b), specifically Table 1 thereof, which we have reproduced as an appendix, as it is not our work. This table clearly depicts the increased risk weight sensitivity.

This phenomenon is perhaps most evident in secured residential real estate exposures, which are very important to Spanish banks as a whole, where the regulatory capital requirement has been revised from a flat weight of 35% to a range that goes from 20% and 70%, depending on the loan-to-value (LTV) ratio obtained by dividing the amount of the loan by the value of the property, subject to compliance with certain criteria, when repayment of the loan does not depend significantly on the cash flows generated by the property. That ratio will tend to fall as

<sup>11</sup> The main changes in Basel III affect three key banking risks: credit, operational and CVA. The reforms were prompted primarily by excessive variability in risk weights across entities.<sup>11</sup>

the loan is repaid, with the corresponding reduction in exposure for the lender bank.

Looking beyond individual exposures, another very significant change is the reduction in the mechanical use of external credit ratings (gleaned from rating agencies) which not all jurisdictions necessarily recognise. Where they are relied upon, the banks must carry out due diligence, appropriate to the size and complexity of the banks' activities, to ensure that they have an adequate understanding, at origination and thereafter on a regular basis (at least annually), of the risk profile and characteristics of their counterparties so as to assess whether the risk weights applied are appropriate and prudent.

This requirement has important implications for the management of credit risk, such as the need to develop internal policies, systems and controls that may be subject to inspection by the supervisors as well as the unquestionable need to collect more information on banks' counterparties on a regular basis.

### Internal ratings-based (IRB) approaches

These ratings, where permitted, relate to the following classes of exposures, in some cases with sub-categories:

- ≻ Exposures to corporates
- Exposures to sovereigns
- > Exposures to banks
- ≻ Retail exposures
- ≻ Equity exposures

In this instance, the above-mentioned objective (with even more reason insofar as we are talking about ratings obtained using methods that can be highly complex and, above all, scantly transparent on account of being internal) is to achieve two things, aside from other technical refinements:

• Elimination of the advanced IRB (A-IRB) method which allows banks to estimate

all the relevant parameters for certain exposures, specifically for:

- > Exposures to large and mid-sized corporates
- > Banks and other financial institutions
- > Exposures to equities (for which only the standardised approach will be permitted)
- Specification of input floors for certain key variables:
  - ≻ Probability of default (PD)
  - Loss given default (LGD)
  - ≻ Exposure at default (EAD)

These changes, which we do not believe warrant describing in detail, made way for elimination of the 1.06 scaling factor currently applied to RWAs determined by the IRB approach to credit risk.

#### CVA risk framework

The adjustment for this risk, which falls somewhere between credit and market risk, applies to derivative instruments and securities financing transactions (SFTs) and constitutes a capital charge for potential mark-to-market losses as a result of the deterioration in the creditworthiness of a counterparty.

It is a complex risk which is why the option of measuring it using IRB models has been removed. Instead, it will be measured using either a standardised approach or a basic approach. Whereas the first requires supervisory approval, in contrast to the standardised approaches for other risks, the second is the default option available to banks.

As with the other risks whose treatment has been revised, the CVA risk framework has also been the subject of technical refinements we do not believe are necessary to itemise.

#### **Operational risk**

The approach taken to operational risk, which is the result of internal processes, inadequate or failing human resources or systems and external events, including legal risk but not strategic or reputational risk, is in line with the revisions already outlined, going perhaps even further in this instance.

The approach to this risk has been drastically streamlined, with a renovated risk-sensitive standardised approach replacing the existing three standardised approaches as well as the advanced measurement approaches (AMA) for calculating operational risk capital requirements. The new standardised approach can be summarised as follows:

#### BIC x ILM,

where:

BIC is the business indicator, gleaned from the financial statements, and is the sum of three components:

- > The interest (net), rentals and dividends component
- $\succ$  The services component
- > The financial component, which includes the banking business itself and the trading portfolio

ILM is the internal loss multiplier, which takes into account the bank's average historical losses over the preceding 10 years.

#### Leverage

Leaving aside the technical adjustments made to how this ratio is calculated, which affect derivative instruments and off-balance sheet exposures, and the fact that a given jurisdiction can opt to exclude reserves at central banks from the ratio on a temporary basis under exceptional macroeconomic circumstances, the most eye-catching change is the buffer for global systemically important banks (G-SIBs), such as Banco Santander in Spain. As with other buffers, this buffer must be met with Tier 1 capital and is set at 50% of a G-SIB's risk-weighted higher-loss absorbency requirements. As a result, for Banco Santander, which is at the lowest level of G-SIBs, to be totally free to pay out dividends, it must report:

- ➤ A capital conservation buffer of: 4.5% + 2.5% + 1% = 8%
- ➤ And a leverage ratio of: 3% + 0.5% = 3.5%

#### Output floors

When the Basel II framework was introduced in June 2004, a floor equivalent to 80% of Basel I capital requirements was introduced; this floor inevitably lost its rationale when the Basel I requirements, which dated to July 1988, ceased to be used.

The Basel III reforms replace it with a floor based on the revised Basel III standardised approaches to:

- ≻ Credit risk
- > Counterparty credit risk
- ≻ CVA risk
- ➤ Securitisation
- ≻ Market risk
- > Operational risk

The revised floor places a limit on the regulatory capital benefits that a bank using internal models can derive relative to the standardised approaches. It has been set at 72.5% of RWA, albeit subject to the extended implementation timeline referred to earlier in this report.

Banks are required to report their RWAs calculated using standardised approaches, which will enable verification of compliance with the floor.

<sup>44</sup> The impact assessment performed by the EBA estimates an increase in Tier 1 minimum required capital of 12.9%. The increase is mainly attributable to a higher requirement on the part of the banks that use internal models as a result of the changes to credit risk weights and the new output floor.

## Estimating the impact on European banks

To assess the impact of the new Basel III framework on the European banks, we start from the full impact assessment report published by the EBA on December 20<sup>th</sup>, 2017. The EBA's sample included 149 banks from 17 countries, divided into two groups. Group 1 banks are those with Tier 1 capital in excess of 3 billion euros and internationally active. All other banks are categorised as Group 2 banks. These criteria put 44 banks in Group 1 and 105 in Group 2. Of the 149 banks, just 88 provided sufficient data to perform the analysis (36 from Group 1 and 52 from Group 2).

The impact, without factoring in the changes to the securitisation or CVA frameworks, shown in Table 2 below, can be summed up as follows:

- An estimated 14.5% increase in the minimum capital requirement as a result of the risk-based elements, which in turn is broken down into:
  - a 4.3% increase for banks that use internal models (IRB); 1.0% for the banks that use standardised approaches; 2.5% in respect of operational risk; 6.6% on account of the introduction of a new output floor; partially offset (-1.6%) by the negative impact of the new leverage ratio.
- The Group 1 entities are more affected by the above changes (+14.1%) than their Group 2 counterparts (+3.9%), given that the former make greater use of internal models and the introduction of the RWA floor of 72.5% limits the extent to which banks can lower their capital requirements relative to the standardised approaches.

#### Table 2

Change in total T1 MRC

Percentage

|           | То          | tal                     | Cred | it risk |     |                 |      |
|-----------|-------------|-------------------------|------|---------|-----|-----------------|------|
|           |             |                         |      |         | OpR | Output<br>floor | LR   |
|           | All factors | of which:<br>risk-based | IRB  | SA      |     |                 |      |
| All banks | 12.9        | 14.5                    | 4.3  | 1.0     | 2.5 | 6.6             | -1.6 |
| Group 1   | 14.1        | 15.6                    | 4.5  | 1.5     | 2.7 | 6.9             | -1.6 |
| G-Slls    | 15.2        | 14.1                    | 5.1  | 1.6     | 2.9 | 4.5             | 1.1  |
| Group 2   | 3.9         | 5.3                     | 2.7  | -2.4    | 0.8 | 4.2             | -1.3 |

Source: EBA (2017) and Afi.

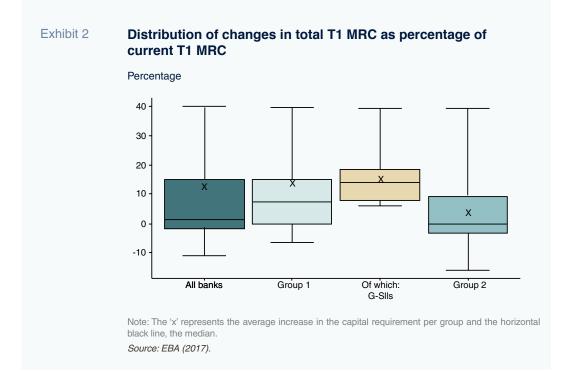


Exhibit 2 illustrates the dispersion among the entities analysed in the EBA's assessment, evidencing the heterogeneity across Europe's banks prior to finalisation of BIII. It shows that while some entities will see their Tier 1 minimum capital requirement increase by as much as 40%, others will see it fall by 12%.

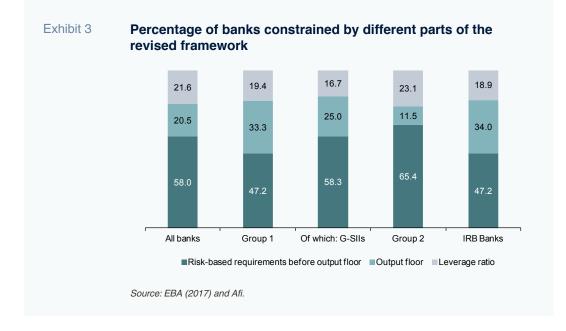
This heterogeneity derives from the use of internal models at some banks and not others and evidences how the new reforms have tightened up the capital required of the entities that rely heavily on those models.

To wrap up our description of the estimated impact, refer to Exhibit 3, in which the EBA illustrates the percentages of banks affected more considerably by the three key areas of reform analysed: (i) risk-based requirements before the output floor; (ii) the output floor; and, (iii) the leverage ratio. The conclusions could not be clearer: 58.0% of the entities analysed will be affected by the revised risk-based requirements, whereas 42% will be constrained by the other two reforms (specifically, 20.5% by the introduction of the output floor and 21.6% by the leverage ratio).

However, the heterogeneity observed across entities above is once again apparent. If we analyse only the banks that use internal models, the percentage constrained by the introduction of the new floor rises to 34%, with the other percentages falling as a result.

This may well discourage the entities whose ratios are nearer the limits introduced by the BIII framework from using IRB approaches.

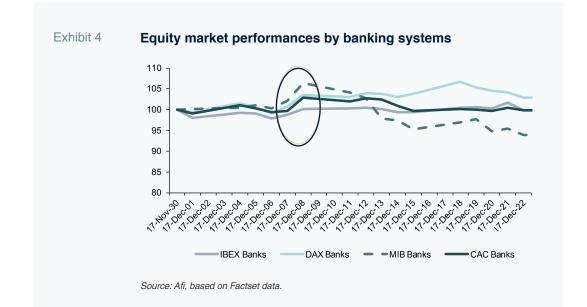
<sup>66</sup> The percentage of banks that will be constrained by the new riskbased requirements (without the floor) is 58%. However, singling out the entities that use internal models, the impact of the introduction of the floor is higher than in the overall sample, at 34%.



# Stock market response to completion of Basel III

As stated previously, the regulatory reforms were prompted by excessive RWA variability among entities with similar business models and attempt to advance on defining RWAs in order to prevent that variability. Against this backdrop, completion of the Basel III framework was initially welcomed by the markets: banks saw their share prices rally in the wake of publication of the final report, as shown in Exhibit 4.

In the case of the listed Spanish banks, publication of the document meant making up the 3% lost between November 30<sup>th</sup>



<sup>11</sup> The market responded favourably to publication of the final Basel III reforms, with some national systems rallying by as much as 3%, boosted mainly by the reduction of regulatory uncertainty.<sup>11</sup>

and December 7<sup>th</sup> (rebased: November 30<sup>th</sup> =100).

Following the initial bounce that followed publication of the report, the Italian banks' share prices fell, evidencing other problems intrinsic to that banking system (high NPLs, political risk, etc.), while the other major banking systems (Germany, Spain and France) headed into the holiday period at levels very similar to those at which they had started the month.

As we have noted on previous occasions, regulatory uncertainty has been one of the factors shaping the banking systems' equity market performance. Completion of the BIII reforms marks the reduction of one source of regulatory uncertainty, reinforcing capital in the banking sector.

#### Conclusions

We believe that completion of the BIII reforms brings a series of noteworthy implications:

- They dissipates some of the uncertainty that may have been hanging over some of the banks' share prices, as evidenced by the rally in the days following the announced endorsement of the new framework.
- They step up regulatory capital requirements for both the banks that use standardised approaches and those that use internal models, a change from earlier assessments that placed all of the spotlight on the banks using internal models.
- That being said, the new requirements are more onerous for banks using internal models than those using standardised approaches.

- Indirectly, looking to the medium term, an increased ability to withstand episodes of crisis should help to reduce wholesale and retail funding costs and bring down the cost of capital itself.
- The reforms increase the risk sensitivity of the standardised approaches, thereby introducing greater discrimination in RWA calculation as a function of the business model pursued.
- They may well discourage the use of internal models to calculate RWAs on the part of entities whose metrics are closer to the thresholds introduced by BIII.
- The new standardised approach to calculating RWAs implies a challenge in terms of the information needed to be able to discriminate between risks, while the new approach for estimating operational risk will mean having to create and keep records of historical losses on account of this risk factor.
- We do not believe that the new framework will imply the abandonment of internal models for managerial use to estimate economic capital or the risk-adjusted returns generated by the various business units.

#### Notes

[1] 106 pages of the BIII finalisation document are devoted to the two credit risk measurement approaches, the standardised approach and internal ratings-based methods, which is 65% of the total.

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### Appendix

Table 1

### Overview of revised standardised approach to credit risk

#### Percentage

| Risk weights in  | junsuiction w  | Risk weights in jurisdiction where the ratings approach is permitted<br>External rating AAA to A+ to BBB+ BB+ to B- Below B- Unrated |   |  |   |  |                                  |   |  |                        |  |
|--|--|--|---|--|---|--|----------------------------------|---|--|------------------------|--|
| External rating  | J AAA to<br>AA-  | A+ to<br>A-  | BBB-<br>to BB   |  | BB+ t   | o B  | в                                | elow B                                    | - Un   | ated                   |  |
| Risk weight  | 20   | 30   | 50  |  | 10  | 0  |                                  | 150                                       |  | · SCRA<br>Ilow         |  |
| Short-term exp   | osures   |  |   |  |   |  |                                  |   |  |                        |  |
| Risk weight  | 20   | 20   | 20  |  | 50  | )  |                                  | 150                                       |  | SCRA                   |  |
| Risk weights wh  | nere the rating  | approa   | ach is not  | per  | rmitte  | d an   | d fo                             | or unra                                   | ted exp  | osures                 |  |
| Standardised (<br>Approach (SC   |  | ssessn   | nent  | (  | Grade   | Α  | G                                | Grade E                                   | 3 Gra  | ade C                  |  |
| Risk weight  |  |  |   |  | 40 <sup>1</sup>   |  |                                  | 75  | 1  | 50                     |  |
| Short-term expe  | osures   |  |   |  | 20  |  |                                  | 50  | 1  | 50                     |  |
| Exposures to   |  |  |   |  |   |  |                                  |   |  |                        |  |
| Risk weights for<br>External issue<br>Risk weight  |  |  |   | - A  | <b>A+ to</b><br>20  |  | 8-                               | <b>BB+ to</b><br>50                       | B- Be  | <b>low B</b> -<br>100  |  |
| Risk weights fo  | r <u>unrated</u> cove  | ered bor   | nds   |  |   |  |                                  |   |  |                        |  |
| Risk weight of   | issuing banl   |  |   |  | 40  | 50   |                                  | 75  | 100  | 150                    |  |
| Risk weights   |  | 1  | 0 15  |  | 20  | 25   | 5                                | 35  | 50   | 100                    |  |
| Exposures to   | <u> </u>   |  |   |  |   |  |                                  |   |  |                        |  |
| Risk weights in  |  |  |   |  |   |  |                                  |   |  |                        |  |
| External rating<br>of counterparty   | •  | A+ to<br>A-  | BBB-<br>to BB   | -  | BB+ to Below<br>BB- BB-   |  | Unrated                          |   |  |                        |  |
| Risk weight  | 75   |  | 100   | 0 150 c  |   | 100 or 85 if<br>orporate SM                      |                                  |   |  |                        |  |
| Risk weights wi  | Risk weights where rating approach is not permitted  |  |   |  |   |  |                                  |   |  |                        |  |
|  |  | is not per   | miti  | icu  |   |  | _                                |   |  |                        |  |
| SCRA grades  |  |  |   |  | nent g  | grac   | e                                |   | All othe   | er                     |  |
| General corpor   |  | )  |   |  |   | grac   |                                  |   | All othe<br>100  | er                     |  |
| General corpor<br>SME general co   | orporate   | ,  | Inve  | estn   | nent g<br>65  |  | 8                                | 5   | 100  | er                     |  |
| General corpor<br>SME general co<br>Exposures to   | orporate<br>project financ   | ce, obje   | Inve<br>ct finance  | estn   | nent g<br>65<br>Ind co  | omn  | 8                                | 5<br>lities fi                            | 100<br>nance   |                        |  |
| General corpor<br>SME general co<br>Exposures to<br>Exposures (ex  | orporate<br>project financ<br>cluding real s   | ce, obje<br>state)   | Inve<br>ct finance  | estn   | nent g<br>65  | omn  | 8                                | 5<br>lities fi<br>Obje                    | 100  | com-                   |  |
| General corpor<br>SME general co<br>Exposures to   | orporate<br>project financ<br>cluding real s   | ce, obje<br>state)   | Inve<br>ect finance<br>Proj<br>Same   | estn<br>ee a<br>ject<br>as f                                       | nent g<br>65<br>Ind co<br>finan   | omn<br>i <b>ce</b><br>nera                       | 8<br>100                         | 5<br>lities fi<br>Obje<br>mod             | 100<br>nance<br>ct and                                 | com-<br>ance           |  |
| General corpor<br>SME general co<br>Exposures to<br>Exposures (ex<br>Issues - Specifi                                      | proporate<br>project finance<br>cluding real s<br>c ratings avail  | ce, obje<br>state)<br>able   | Same<br>130 p   | estn<br>ce a<br>ject<br>as fr<br>re-o<br>pha<br>erat               | nent g<br>65<br>ind co<br>finan<br>or ger<br>operati<br>ase<br>ional                        | omn<br>i <b>ce</b><br>nera                       | 8<br>100<br>1 cc<br>1<br>5e      | 5<br>lities fi<br>Obje<br>mod             | 100<br>nance<br>ct and<br>dity fina                    | com-<br>ance           |  |
| General corpor<br>SME general co<br>Exposures to<br>Exposures (ex<br>Issues - Specifi<br>and permitted                     | proporate<br>project finance<br>cluding real s<br>c ratings avail  | ce, obje<br>state)<br>able   | ct finance<br>Proj<br>Same<br>130 p<br>100 opi<br>80 opi                          | estn<br>ce a<br>ject<br>as f<br>re-o<br>pha<br>erat                | nent g<br>65<br>ind co<br>finan<br>or ger<br>operati<br>ase<br>ional                        | omn<br>ce<br>nera<br>ona<br>ohas                 | 8<br>100<br>1 cc<br>1<br>5e      | 5<br>lities fi<br>Obje<br>mod             | 100<br>nance<br>ct and<br>lity fina<br>e (see a        | com-<br>ance           |  |
| General corpor<br>SME general co<br>Exposures to<br>Exposures (ex<br>Issues - Specifi<br>and permitted                     | orporate<br>project finance<br>cluding real s<br>c ratings avail<br>able or not pe                                   | ce, obje<br>state)<br>able<br>rmitted  | ct finance<br>Proj<br>Same<br>130 p<br>100 op<br>80 ope<br>(hi                    | estn<br>ce a<br>ject<br>as f<br>re-o<br>pha<br>erat                | nent g<br>65<br>ind co<br>finan<br>or ger<br>operati<br>ase<br>ional p<br>onal p            | omn<br>ce<br>nera<br>ona<br>ohas                 | 8<br>100<br>1 cc<br>1<br>5e      | 5<br>lities fi<br>Obje<br>mod             | 100<br>nance<br>ct and<br>lity fina<br>e (see a        | com-<br>ance           |  |
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| General corpor<br>SME general co<br>Exposures to<br>Exposures (ex<br>Issues - Specifi<br>and permitted<br>Rating not avail | orporate<br>project finance<br>cluding real s<br>c ratings avail<br>able or not pe<br>res excluding                  | ce, obje<br>state)<br>able<br>rmitted<br>g real st   | ct finance<br>Proj<br>Same<br>130 p<br>100 op<br>80 ope<br>(hi<br>tate            | estn<br>ce a<br>ject<br>as fi<br>re-o<br>pha<br>eration<br>gh cory | nent g<br>65<br>ind co<br>finan<br>or ger<br>operati<br>ase<br>ional p<br>quality<br>retail | omn<br>ice<br>nera<br>iona<br>ohas<br>i)<br>(rev | 8<br>noc<br>I cc<br>I<br>se<br>e | dities fi<br>Obje<br>mod                  | 100<br>nance<br>ct and<br>lity fina<br>e (see a<br>100 | com-<br>ance<br>Ibove) |  |

#### Table 1 Overview of revised standardised approach to credit risk

#### Percentage

(continued)

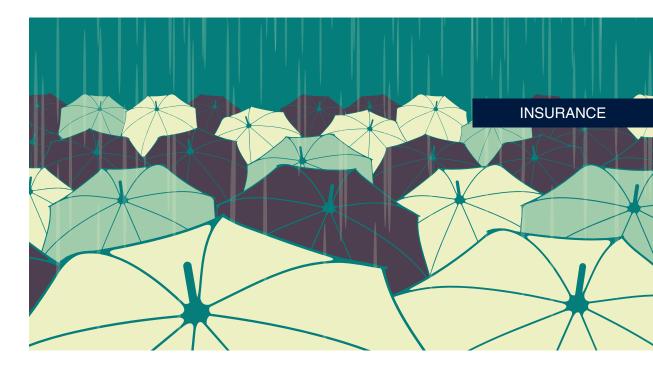
| $ \begin{array}{ c c c c c } LTV \ bands & Bellow \\ 50 & 60 & 70 & 70 & 80 & 90 & 100 & 100 & 100 \\ \hline \mbox{Mole loan approach RW } 20 & 25 & 30 & 40 & 50 & 70 & RW \ of \ \mbox{counterparty} \\ \mbox{Loan-splitting approach RW } 20 & 25 & 30 & RW \ of \ \mbox{counterparty} \\ \mbox{Loan-splitting approach RW } 20 & 35 & 45 & 60 & 75 & 105 & 150 \\ \hline \mbox{Mole loan approach RW } 30 & 35 & 45 & 60 & 75 & 105 & 150 \\ \hline \mbox{Commercial real estate (CRE) exposures} \\ \hline \mbox{General CRE } \\ \hline \mbox{Mole loan approach RW } 30 & 35 & 45 & 60 & 75 & 105 & 150 \\ \hline \mbox{Commercial real estate (CRE) exposures} \\ \hline \mbox{General CRE } \\ \hline \mbox{Mole loan approach RW } & 30 & 35 & 45 & 60 & 75 & 105 & 150 \\ \hline \mbox{Commercial real estate (CRE) exposures} \\ \hline \mbox{General CRE } \\ \hline \mbox{Mole loan approach RW } & $100 & 100 & 100 & $ | Residential                                     | real e                 | state | exp     | osure           | es                               |                                  |                                 |                  |  |                                     |            |  |
|---|---|------------------------|-------|---------|-----------------|----------------------------------|----------------------------------|---------------------------------|------------------|--|-------------------------------------|------------|--|
|   | LTV bands                                       |                        |       |         | -               |                                  |                                  |                                 |                  |  |                                     |            |  |
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|   | approach <sup>2</sup>                           | g                      | 20    |         |                 | F                                | RW o                             | f cou                           | nterp            | arty                                       |                                     |            |  |
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| $\begin{tabular}{ c c c c c } \hline counterparty & LTV \leq 55 & LTV > 55 & Criteria not met & Min (60 RW of counterparty) & counterparty & counter$  |   |                        |       |         | LT۱             | /≤6                              | 0                                |                                 | LT۱              | / > 60                                     |                                     | Cr         | iteria not met                                   |
| $\begin{tabular}{ c c c c }  Income-producing conversion of the set of$  | Whole loan a                                    | approa                 | ch    |         | ``              |                                  |                                  | C                               |                  | unterparty                                 |                                     |            |  |
| $\begin{tabular}{ c c c c } \hline Counterparty & for the counterparty & counterparty & counterparty & for the counterpart & for the counter$   |   |                        |       |         | LTV             | ′≤ 55                            | 5                                |                                 | LTV              | > 55                                       |                                     | Cri        | iteria not met                                   |
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| Whole loan approach       70       90       110       150         Land acquisition, development and construction (ADC) exposures       Loan to company/SPV       150       Image: construction (ADC) exposures         Loan to company/SPV       150       Image: construction (ADC) exposures       Image: construction (ADC) exposures         Residential ADC loan       100       Image: construction (ADC) exposures       Image: construction (ADC) exposures         Subordinated debt and equity (excluding amounts deducted)       Equity exposures to certain legislated programmes       Speculative un listed equity" exposures       All other equity exposures         Risk weight       150       100       400       250         Credit conversion factors for off-balance sheet exposures         UCCs       Commit- unst except UCCs       NIFs and RUFs, and certain transaction- related contingent items of credit arising from the goods       Direct credit substitutes and other off balance sheet exposures  | Income-producing commercial real estate (IPCRE) |                        |       |         |                 |                                  |                                  |                                 |                  |  |                                     |            |  |
| To       90       110       150         Land acquisition, development and construction (ADC) exposures       Loan to company/SPV       150         Loan to company/SPV       150       100         Subordinated debt and equity (excluding amounts deducted)       100         Subordinated debt and capital other than equities       Equity expo-sures to certain legislated programmes       Speculative unlisted equity" exposures         Risk weight       150       100       400       250         Credit conversion factors for off-balance sheet exposures       ST self-liquidating trade letters of credit and other off balance sheet exposures       Direct credit substitutes and other off balance sheet exposures         UCCs       Commit- UCCs       NIFs and RUFs, and certain transaction-related contingent items       ST self-liquidating trade letters of credit arising from the goods       Direct credit substitutes and other off balance sheet exposures   | Whole leap approach $LTV \leq 60$               |                        |       |         | ′≤ 60           | $60 < LTV \le 80$ $LTV > 80$     |                                  |                                 | 80               | Criteria not met                           |                                     |            |  |
| Loan to company/SPV       150         Residential ADC loan       100         Subordinated debt and equity (excluding amounts deducted)       Equity expo-<br>sures to certain<br>legislated<br>programmes       "Speculative un-<br>listed equity"       All other<br>equity<br>exposures         Risk weight       150       100       400       250         Credit conversion factors for off-balance sheet exposures       VIFs and RUFs,<br>and certain<br>transaction-<br>related<br>contingent<br>items       ST self-<br>liquidating trade<br>letters of credit<br>arising from the<br>movement of<br>goods       Direct credit<br>substitutes<br>and other<br>off balance<br>sheet<br>exposures   | WHOle IDall a                                   | whole loan approach 70 |       |         |                 |                                  |                                  |                                 |                  |  | 150                                 |            |  |
| Image: The second seco   |   |                        |       | opmei   | nt and          | d con                            | struc                            | ction (                         | ADC              | c) expos                                   | sures                               | ;          |  |
| Subordinated debt and equity (excluding amounts deducted)         Subordinated debt and capital other than equities       Equity expo-<br>sures to certain legislated programmes       Speculative un-<br>listed equity"       All other equity exposures         Risk weight       150       100       400       250         Credit conversion factors for off-balance sheet exposures       ST self-liquidating trade letters of credit arising from the UCCs       Direct credit substitutes and other off balance sheet exposures         UCCs       Commitments except UCCs       NIFs and RUFs, and certain transaction-related contingent items       ST self-liquidating trade letters of credit arising from the movement of goods       Direct credit substitutes and other off balance sheet exposures   |   | • •                    |       |         |                 |                                  |                                  |                                 | -                |  |                                     |            |  |
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| UCCs Commit-<br>UCCs UCCs UCCs UCCs UCCs UCCs UCCs UCCs   | Risk weight                                     |                        | 15    | 0       |                 |                                  | 100                              |                                 |                  | 400  |                                     |            | 250  |
| UCCs Commit-<br>ments except<br>UCCs UCCs and certain<br>related<br>contingent<br>items goods up of balance<br>goods up of balance  | Credit conv                                     | ersion                 | fact  | ors fo  | or of           | f-bala                           | ance                             | shee                            | et ex            | posure                                     | s                                   |            |  |
|   |   | UCCs                   | mer   | nts ex  | cept            | aı<br>tra                        | nd ce<br>ansao<br>relat<br>ontin | ertain<br>ction-<br>ted<br>gent | lia<br>- la<br>a | quidatir<br>etters o<br>rising fi<br>movem | ng tra<br>f cree<br>rom t<br>ient c | dit<br>the | substitutes<br>and other<br>off balance<br>sheet |
|   | CCF   | 10                     |       | 40      |                 |                                  | 50                               | )                               |                  | •  |                                     |            |  |

Notes: <sup>1</sup> A risk weight of 30% may be applied if the exposure to the bank satisfies all of the criteria for Grade A classification and in addition the counterparty bank has (i) a CET1 ratio of 14% or above; and (II) a TIER1 leverage ratio of 5% or above.

<sup>2</sup> Under the loan-splitting approach, a supervisory specified risk weight is applied to the portion of the exposure that is below 55% of the property value and the risk weight of the counterparty is applied to the remainder of the exposure. In cases where the criteria are nor met, the risk weight of the counterparty is applied to the entire exposure.

Source: EBA (2017) and Afi.

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# Spain's insurance sector: Profitability, solvency and concentration

Spain's insurance sector currently outperforms the country's banking sector, as well as the EU average. That said, challenging conditions are bound to trigger further concentration, particularly affecting the smallest players.

Abstract: Spain's insurance sector has proven far more robust than its banking sector since the crisis. However, although returns have remained above the 10% mark on average, profitability has been clearly trending lower, driven primarily by the low interest rate environment in recent years. This factor is likely to exert even more pressure on the sector's margins during the next few years, mainly due to the impact rates are having on

#### Daniel Manzano

investment portfolios in the life insurance segment. Despite this, the Spanish insurance sector's margins continue to compare very favourably with those of its European counterparts. The sector has also reinforced its solvency substantially, once again comparing favourably with the European average and that of the major EU economies, other than Germany. As has been the trend in the financial sector, the insurance business has undergone concentration, albeit to a far lesser degree than the banks. Concentration has been more pronounced in the life insurance segment, closely correlated with concentration in the banking sector, which is the main distribution channel for this insurance product. M&A activity will foreseeably continue, marked by the takeover of small and very small players.

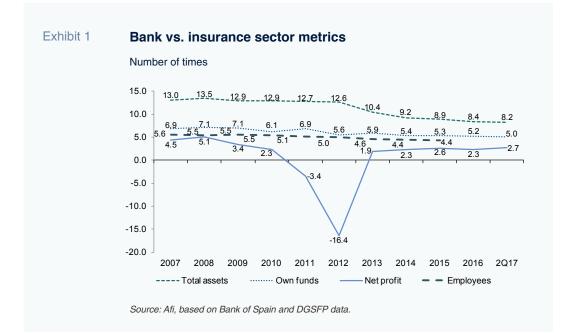
#### Introduction

As analysed in detail in an earlier paper (Manzano, 2017), the Spanish insurance sector's bill of financial health looks very good compared with that of the Spanish banking sector. This phenomenon is illustrated in Exhibit 1, updated and enhanced from our previous publication. At present, even assuming a certain degree of 'normalisation' in the banking sector (we exclude the recent adverse impact of the failure of Banco Popular), the following holds: in order to generate around two-and-a-half times the earnings

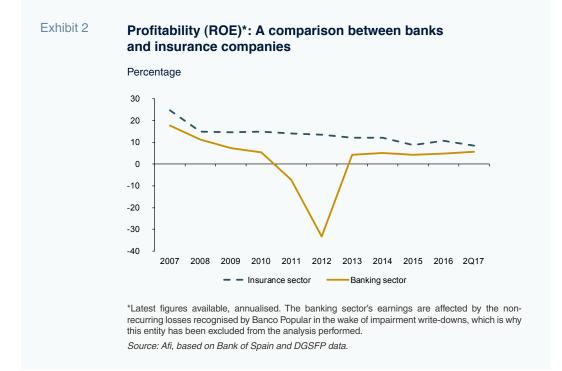
generated by the insurance sector, Spanish banks need eight times more assets, five times more equity and around four-and-ahalf times more direct employees. Moreover, today the banks are generating only two-anda-half times the insurance sector's earnings (in both instances looking at their businesses in Spain), compared to five times as much before the crisis.

It is hardly surprising, therefore, that profitability in the insurance sector - around 10% in terms of ROE - is currently a little over twice that of the banks, as evidenced by Exhibit 2.

It is also true, however, that despite its strong relative performance, the insurance sector's profitability has narrowed over the course of the last decade. Having peaked at 25% in 2007, it stayed flat at 15% until 2011 and in recent years has been struggling to defend the double-digits. The reasons are many, but



Profitability in the insurance sector — around 10% in terms of ROE – is currently a little over twice that of the banks.



the drop in returns on the sector's investments in recent years has played a significant part. This, in turn, is being affected by the ultra-low interest rate environment [1].

In this paper, in addition to providing a more in-depth analysis of the breakdown of the insurance players' earnings in Spain (for the sector as a whole, as well as individually for the life and non-life insurers), we also contrast their position with that of their European counterparts in terms of profitability and solvency and look at the unfolding phenomenon of concentration.

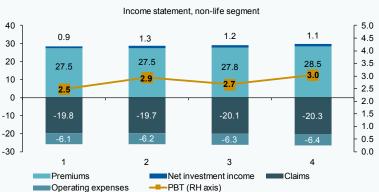
### Investments less profitable, but still-robust ROE and solvency levels

The insurance sector generates profits in two ways. Firstly, its so-called underwriting profit, which is calculated as earned premiums less payouts for claims. Secondly, finance income from the management of its investments. In order to assess the relative relevance of these two sources in the recent earnings trend, Exhibit 3 provides for each of the last four years, the contribution to the sector's income statement of the major headings (earned premiums, investment income, claims and operating expenses), positive or negative as appropriate. The orange line represents overall profit, expressed as profit before tax (PBT).

This analysis tells us that profits in the nonlife segment have been growing at a relatively stable and modest rate, in line with the trend in premiums and claims throughout the period as a whole. Although finance income in this segment has been trending slightly lower in the last three years, its weight is relatively small (a little over 1 billion euros of the roughly 3 billion euros this sub-segment has been consistently earning).

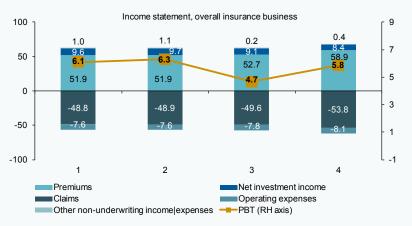
Overall profit in the life insurance segment has been marked by a pronounced decline during the same period (with the exception of the uptick in 2016). Note that this segment's finance income has been falling almost continuously (7.3 billion euros contribution in 2016, down from 8.7 billion euros in 2013) in parallel and in this instance, accounts for a much higher percentage of total earnings. The investment portfolios in this sub-segment are much bigger than those of the non-life

### Exhibit 3 Breakdown of the insurance sector's income statement (Spanish businesses)\*



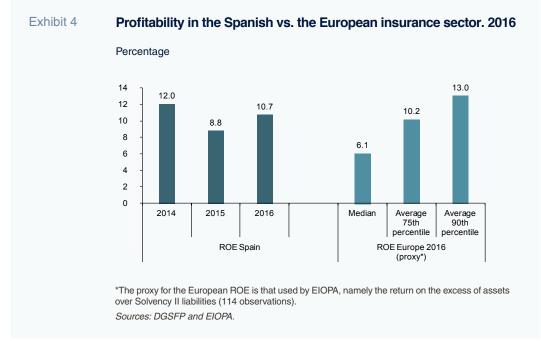
Income statement, life insurance segment 50 3.5 7.3 40 3.0 87 8.4 7.9 30 2.6 2.5 2.4 20 24.9 2.2 30.3 2.0 10 24.4 24.4 1.8 0 1.5 -10 -29.0 -29.1 1.0 -29.5 -33.5 -20 -1.4 -1.4 -1.6 0.5 -30 1.7 0.0 -40 2013 2014 2015 2016 Claims





\*Non-life: stable, moderate growth in premiums, claims, opex and profits. Life: systematic decline in finance income, which translates into a decline in overall profits. *Ad-hoc*, one-off trend in premiums-claims in 2016. *Source: Afi, based on DGSFP data.* 

## Billions of euros



business as a result of the accumulation of premiums collected (savings) on this side of the business.

Note that the significant spike in PBT in 2016 is attributable to exceptional growth in premiums earned that year [2], which substantially outstripped growth in claims incurred that year. Stripping out that one-off, PBT in this segment (which surpassed the 2 billion euros of the prior year, which is smaller than the contribution by the non-life segment) would have fallen by more due to the adverse trend in finance income[3].

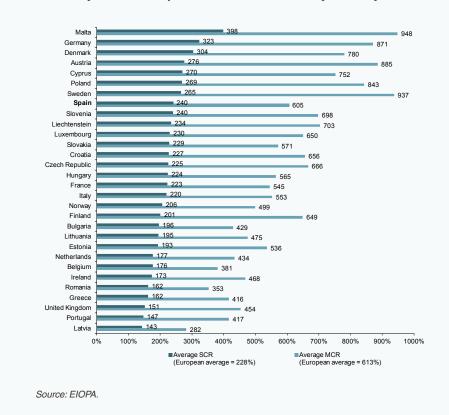
In other words, it looks as if in the absence of substantial growth in premium volumes in the life insurance business (as was the case in 2016), the burden implied by the low interest rate scenario is set to continue to exert downward pressure on earnings in the life insurance business and, by extension, profitability in this segment and, inevitably, that of the overall insurance business.

Despite the downtrend in profitability, the industry compares favourably with the European insurance sector as a whole, as illustrated by Exhibit 4. The ROE of 10.7% posted by the sector in 2016 is significantly higher than the European sector median of 6.1%. In fact, it is even higher than the 10.2% posted by the  $75^{\text{th}}$  percentile.

All of which despite the fact that the Spanish sector boasts, as a whole, a position of relative strength in terms of solvency, as can be observed in Exhibit 5. Its solvency ratio of 240% exceeds the European average of 228% and, with the exception of Germany, the ratios of the other major European economies.

<sup>11</sup> The low interest rate scenario is set to continue to exert downward pressure on earnings in the life insurance business and, by extension, profitability in this segment and, inevitably, that of the overall insurance business.

#### Exhibit 5 Solvency in the European insurance sector by country. 2016

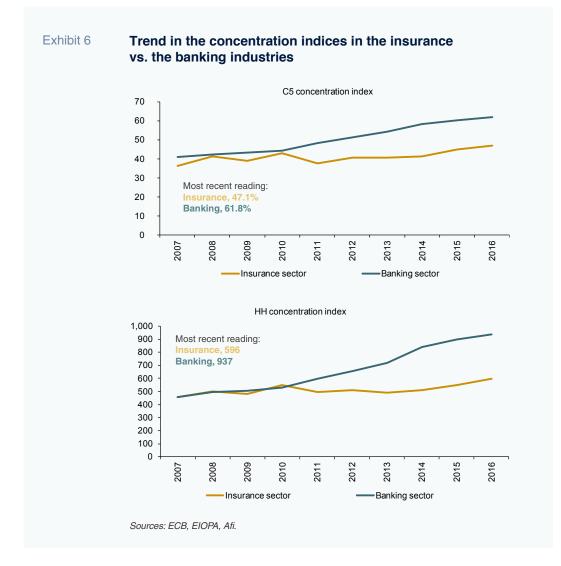


#### Still moderate sector consolidation

The improvement in solvency and the slight downward trend in profitability has gone hand in hand with sector concentration, which has been, nevertheless, far more contained than in the banking sector. Exhibit 6 contrasts the C5 index (aggregate market share commanded by the top five players) and the traditional Herfindahl index for the banking and insurance industries.

The reduction by nearly half in the number of players in the banking sector and the increase of 20 percentage points in the market share commanded by the five largest banks[4] is clearcut evidence (being the largest increase among the four largest eurozone economies) of this fairly widespread concentration phenomenon. However, in the insurance sector, this concentration process has been significantly less intense. This is partially attributable to its far greater resilience to the crisis, having managed to keep its margins considerably higher. The increase in the C5 concentration index is 12 percentage points, from a share of 35% to 47%. Comparing the Herfindahl index only serves to further highlight the dual speeds at which the two sectors are concentrating.

<sup>11</sup> The improvement in solvency and the slight downward trend in profitability has gone hand in hand with sector concentration, which has been, nevertheless, far more contained than in the banking sector.

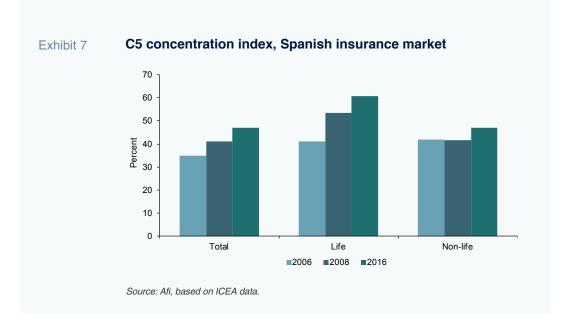


It is also worth highlighting the fact that within the insurance sector, concentration has been more pronounced in the life insurance segment than in the non-life segment, as shown in Exhibit 7. The fact that the channel overwhelmingly used to distribute life insurance is the now far more concentrated bank network is sufficient to explain this divergence. The above-mentioned increase of 12 percentage points is mainly the result of growth and increased concentration in the life insurance segment, in which the top five players corner 60% of the market, almost 20 percentage points more than in 2006.

Elsewhere, it is interesting that the increase in concentration in the Spanish market has been

accompanied by very substantial changes in the players' relative rankings. This is largely due to the restructuring and concentration of the banking sector (whose network is the main outlet for life insurance), in addition to the bancassurance agreements struck prior to the crisis; however, it is also a sign of the strategic commitment made by certain specific entities, such as CaixaBank, to the life insurance segment and by others, such as Mutua Madrileña, to the non-life segment, in the latter instance also in the form of M&Aled growth.

Factors remain that are destined to continue to foster concentration in the sector, specifically the persistence of low rates, the costs of growing



regulatory pressure, the transformation required by emerging technologies and an increasingly intense competitive landscape. Combined, these business factors are bound to trigger a significant reduction in the number of small-sized insurers, still plentiful today. It is highly likely that the concentration process, particularly the unfolding decline in the number of players, will continue, with the smallest entities being the most affected.

#### **Notes**

- [1] This topic was also the subject of analysis in a prior paper published in this same journal (Galdeano and Aumente, 2016).
- [2] A one-off phenomenon concentrated among a few entities which posted sharp growth in life-savings products and life and temporary annuities, primarily, which is not expected to be sustained going forward.
- [3] Indeed, the growth in premiums from these products offsets the underwriting loss posted by this segment.
- [4] Nearly 30 percentage points factoring in the merger of Banco Popular into the Santander Group in 2017.

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# Spain's VAT tax burden in the wake of the recent economic crisis

Spain is among the EU-15 countries that has increased its standard VAT rate the most between 2002-2016. However, the high percentage of items still taxed at the reduced and super reduced VAT rates pose an obstacle to increasing VAT revenues as a percentage of GDP.

Desiderio Romero-Jordán and José Félix Sanz-Sanz

Abstract: As a result of the crisis, VAT revenues plummeted by 40% in Spain between 2007 and 2009. The reforms undertaken in 2010 and 2012 attempted to shore up VAT revenues by increasing the standard rate by five points and the reduced rate by three. These hikes, the most significant implemented across the EU-15 during the crisis, meant that by 2014, revenues from VAT receipts were once again above pre-2008 levels. In macroeconomic terms, the above-mentioned reforms pushed the VAT tax burden back up to the 2006 level (6.2%), albeit still well below that of other countries, such as France (6.9%), Germany (7.0%) and Portugal (8.5%). The cyclical effect is set to continue to drive VAT receipts higher although the high percentage of items taxed at the reduced and super-reduced rates of VAT pose a serious obstacle to increasing revenues from this tax relative to GDP. In macroeconomic terms, a comparison between 2007 and 2015 suggests that the effective average rate borne by Spanish households has increased by 1.5 points. The results of the analysis also reveal that VAT is, in terms of permanent income, progressive, albeit becoming less progressive between 2007 and 2015.

#### Introduction

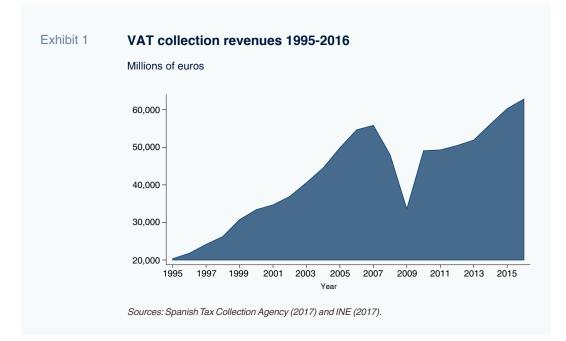
In 2016, Spain collected 62.85 billion euros of value-added tax (VAT) (AEAT, 2017), which was less than the 72.42 billion euros contributed by personal income tax (PIT), but very significantly more than the amount collected via corporate income tax and the various special duties, which generated revenues of 21.68 billion euros and 19.87 billion euros, respectively. It is fair to say that VAT is a pillar of the Spanish tax system even though the recent economic crisis shook its revenuegeneration capacity to the core.

Prior to the crisis, VAT receipts had peaked in 2007 at 55.85 billion euros, which was equivalent to 28% of all tax collected by the state. The economic crisis had a dramatic effect on the collection of this tax, which dropped to 33.57 billion in 2009. In short, the first two years of crisis translated into a cumulative reduction in VAT revenues of 22.28 billion euros. In other words, VAT revenues dropped by 40% between 2007 and 2009. This collapse in tax revenues played an important part in the public deficit of 2009 which hit a record high in recent Spanish history of 10.9% of GDP.

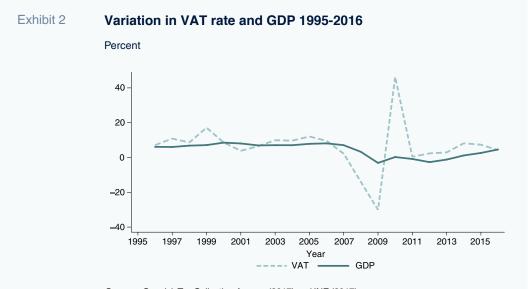
The slump in VAT collection sparked intense debate about what measures were needed to structurally improve this tax's revenue generation capacity. The OECD, the IMF and the European Commission presented alternatives for reconfiguring the rate structure (between 1995 and 2010, there were three VAT rates in Spain: the standard rate of 16%; a reduced rate of 7% and a superreduced rate of 4%. Precisely, lower-income households consume a greater proportion of goods taxed at the reduced and super-reduced rates. As a result, as we show below, the VAT is a progressive tax.) [1]. Firstly, those proposals consisted of raising the standard rate of 16%, which at the time was one of the lowest in the European Union (15% in Luxembourg). The second proposal was to restructure - and even eliminate - the reduced rate structure, given its cost in terms of foregone revenues [2]. For illustrative purposes, the general state budget for 2017 estimated that the reduced and super-reduced rate of VAT would imply a tax cost of 11.09 billion euros, equivalent to 16.4% of budgeted VAT revenues (Spain's Ministry of Finance and Civil Service, 2017) [3] [4].

In the context of high public deficits, the governments of Zapatero and Rajoy proceeded to raise the standard and reduced rates twice in a row, while leaving the super-reduced VAT rate intact [5]. The first of the abovelisted reforms took effect in September 2010, whereas the second was implemented less than two years later, in July 2012. The reforms of 2010 had the effect of increasing the reduced rate from 7% to 8% and the standard rate from 16% to 18%. Those of 2012, meanwhile, hiked the reduced rate to 10% and the standard rate to 21%. In short, as a result of these changes, VAT rates in Spain rose sharply: by 3 points in the case of the reduced rate and by 5 in the case of the standard rate. In fact, between 2008 and 2013, Spain was the EU-15 state in which both reduced and standard rates were increased the most (for more details, refer to Romero and Sanz, 2013). Spain's prevailing rate of 21% is very close to the EU-15 average, which is 21.6%; in 10 of these 15 countries, the standard VAT rate ranges between 20% and 23% (European Commission, 2016).

<sup>66</sup> The collapse in VAT tax revenues as a result of the crisis played an important part in the public deficit of 2009, which hit a record high in recent Spanish history of 10.9% of GDP.



The reforms of 2010 and 2012 helped replenish the revenue level observed prior to the crisis. As shown in Exhibit 1, VAT receipts topped those of 2007 for the first time again in 2014, at 56.17 billion euros, having fallen by 14% and 30%, respectively, in 2008 and 2009 (Exhibit 2). By 2016, VAT revenues had risen to 62.85 billion euros, up 12.5% from the alltime high of 2007 [6]. Against this backdrop, this paper focuses on two matters. Firstly, from a macroeconomic perspective, it analyses the VAT tax revenue-to-GDP in the wake of the reforms of 2010 and 2012. We attempt to show how much this tax's incidence has increased in comparative terms. Secondly, taking a microeconomics approach, we analyse the



Sources: Spanish Tax Collection Agency (2017) and INE (2017).

way the effective VAT tax burden has been borne by Spanish households before and after the reforms. To this end, we compare how the situation has evolved between 2007 and 2015.

#### Trend in VAT tax revenue-to-GDP: A comparative analysis

The VAT tax incidence is estimated by relating the revenues effectively collected in respect of that tax to gross domestic product (GDP). The resulting ratio gives us an idea of the revenues the tax is capable of generating in terms of the country's output during one vear. The ratio itself, whether high or low, is not sufficient to tell us whether or not the tax is progressive; this task requires micro data to map the distribution of effective rates by income brackets. VAT revenues, the numerator in our formula, depend on the rates levied and the weight of the various products or services charged at the various rates with respect to the taxpaver's total end consumption. The higher the weight of products carrying reduced rates (or exempted from VAT entirely), the higher the associated tax cost and the lower the corresponding tax receipts [7].

Table 1 compares the VAT revenue-to-GDP in Spain with the EU-15 average using the most recent statistic available (2002 - 2014). The countries included in that table have been classified into three groups: (i) those with lower tax burdens, including Spain; (ii) the Nordic countries which bear the highest tax burden; and, (iii) countries with intermediate tax burdens (separating the UK and Ireland from the rest as these countries unusually apply a rate of zero to a high number of goods and services). Table 2 provides additional insight by illustrating the changes in VAT rates in the EU-15 member states. Coinciding with the crisis of 2008, most of the EU-15 member states increased their VAT ratesstandard and reduced - in order to maintain or replenish their revenue levels. Along with Greece, Spain was the EU-15 country that increased its standard rate the most between 2002 and 2016: by 5 points in total. Next came Portugal, which increased its standard rate by 4 points over the same timeframe. In the other countries, the standard rate was increased as follows: by 0.4 points in France; 2 points in

Finland, Italy, Ireland, Luxembourg and the Netherlands; 2.5 points in the UK; and 3 in Germany.

The prevailing Spanish rate of 21% coincides exactly with that in effect in the Netherlands and Belgium, and is slightly higher than that of Germany (19%) and Austria (20%). In 2014, these last four countries presented higher tax revenue-to-GDP ratios than Spain (6.2%), particularly Belgium (6.9%), Germany (7.0%) and Austria (7.7%). As with the standard rate, Spain topped the increases in the reduced rate in the EU-15, raising it by 3 points.

As shown in Table 1, the average VAT revenueto-GDP ratio stood at 5.6% in Spain between 2002 and 2014. That ratio is 1.7 points below the EU-15 average of 7.3%. After the two VAT reforms, the difference in the tax burden with respect to the EU-15 average has diminished: from 3 points in 2009 to 1.2 points in 2014 (which coincides with the gap prevailing from 2004 until 2006). According to the Table, the group of countries presenting the lowest average tax burden between 2002 and 2014 was that comprising Spain (5.6%), Italy (5.8%) and Luxembourg (6.4%). At the other end of the spectrum are the Nordic countries, which present the highest tax burdens. This ranking is topped by Denmark, with an average of 9.6%, followed by Sweden and Finland, with ratios of 8.7% and 8.5%, respectively. The information presented in Table 1 shows that between 2002 and 2014, the VAT tax burden in the Nordic countries was an average of 3 points higher than that observed in the group comprising Spain, Italy and Luxembourg. The countries included in these two groups share certain characteristics with respect to how the tax is designed that are useful in understanding the sharp prevailing differences in their respective tax burdens.

As for the VAT characteristics of the EU-15 countries with the lowest tax burdens – Spain, Italy and Luxembourg – we would highlight three traits: Firstly, these countries present the lowest percentage of goods and services taxed at the standard rate: 46% in Spain compared to an EU-15 average of 69% (European Commission, 2004). Secondly, Spain and Luxembourg are the EU-15 member states with the lowest standard rate. In Spain,

VAT tax revenue-to-GDP in the EU-15, 2002-2014

Table 1

Percentage

| Year  | 2002        | 2003                          | 2004    | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | Average<br>02-14 |
|---|-------------|-------------------------------|---------|------|------|------|------|------|------|------|------|------|------|------------------|
| 1. Countries with the lowe                  | lest aver   | st average tax burdens        | urdens  |      |      |      |      |      |      |      |      |      |      |                  |
| Spain                                       | 5.6         | 5.8                           | 6.1     | 6.3  | 6.3  | 5.9  | 5.0  | 3.9  | 5.4  | 5.3  | 5.5  | 6.0  | 6.2  | 5.6              |
| Italy                                       | 5.9         | 5.7                           | 5.6     | 5.7  | 6.0  | 5.9  | 5.7  | 5.5  | 6.1  | 6.0  | 6.0  | 5.8  | 6.0  | 5.8              |
| Luxembourg                                  | 5.6         | 5.7                           | 6.0     | 6.3  | 5.7  | 6.1  | 6.2  | 6.8  | 6.5  | 6.8  | 7.2  | 7.3  | 7.3  | 6.4              |
| 2. Countries with the high                  | hest avei   | est average tax burdens       | ourdens |      |      |      |      |      |      |      |      |      |      |                  |
| Finland                                     | 7.9         | 8.2                           | 8.2     | 8.4  | 8.4  | 8.2  | 8.1  | 8.4  | 8.3  | 8.8  | 9.0  | 9.3  | 9.2  | 8.5              |
| Sweden                                      | 8.4         | 8.4                           | 8.3     | 8.5  | 8.5  | 8.6  | 8.8  | 9.1  | 9.2  | 9.0  | 8.9  | 9.0  | 9.0  | 8.7              |
| Denmark                                     | 9.2         | 9.3                           | 9.4     | 9.7  | 9.9  | 10.0 | 9.7  | 9.8  | 9.5  | 9.6  | 9.6  | 9.5  | 9.6  | 9.6              |
| 3. Other countries                          |             |                               |         |      |      |      |      |      |      |      |      |      |      |                  |
| 3.1. Countries that appl                    | >           | a rate of zero <sup>(1)</sup> | (       |      |      |      |      |      |      |      |      |      |      |                  |
| United Kingdom                              | 6.3         | 6.5                           | 6.5     | 6.3  | 6.2  | 6.2  | 6.1  | 5.4  | 6.2  | 6.9  | 6.8  | 6.8  | 6.8  | 6.4              |
| Ireland                                     | 6.7         | 6.7                           | 7.0     | 7.3  | 7.4  | 7.3  | 7.0  | 6.1  | 6.1  | 5.6  | 5.8  | 5.8  | 6.1  | 6.5              |
| 3.2. Countries without a                    | a zero rate | ate                           |         |      |      |      |      |      |      |      |      |      |      |                  |
| Germany                                     | 6.2         | 6.2                           | 6.1     | 6.1  | 6.1  | 6.8  | 6.9  | 7.2  | 7.0  | 7.0  | 7.0  | 7.0  | 7.0  | 6.7              |
| Netherlands                                 | 6.8         | 6.9                           | 6.8     | 6.8  | 6.9  | 7.0  | 6.8  | 6.5  | 6.8  | 6.5  | 6.5  | 6.5  | 6.4  | 6.7              |
| Belgium                                     | 6.8         | 6.6                           | 6.7     | 6.9  | 6.9  | 6.9  | 6.8  | 6.8  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.8              |
| France                                      | 6.9         | 6.9                           | 7.0     | 7.1  | 7.1  | 7.0  | 6.9  | 6.7  | 6.8  | 6.8  | 6.8  | 6.8  | 6.9  | 6.9              |
| Greece                                      | 7.3         | 6.7                           | 6.5     | 6.7  | 6.8  | 7.1  | 7.0  | 6.3  | 7.1  | 7.3  | 7.2  | 7.0  | 7.1  | 6.9              |
| Austria                                     | 7.9         | 7.7                           | 7.7     | 7.7  | 7.4  | 7.4  | 7.5  | 7.7  | 7.7  | 7.6  | 7.7  | 7.7  | 7.7  | 7.6              |
| Portugal                                    | 7.5         | 7.6                           | 7.6     | 8.2  | 8.3  | 8.2  | 8.1  | 6.8  | 7.5  | 8.1  | 8.3  | 8.1  | 8.5  | 7.9              |
|   |             |                               |         |      |      |      |      |      |      |      |      |      |      |                  |
| EU-15 average                               | 7.2         | 7.2                           | 7.3     | 7.5  | 7.5  | 7.5  | 7.2  | 6.9  | 7.1  | 7.2  | 7.3  | 7.3  | 7.4  | 7.3              |
| Difference between<br>Snain and the FI J-15 | -1.6        | -1.4                          | -1.2    | -1.2 | -1.2 | -1.6 | -2.2 | -3.0 | -1.7 | -1.9 | -1.8 | -1.3 | -1.2 | -1.7             |

#### Table 2

### Changes made to VAT rate in the EU-15

|                | Rate structu                    | re in 2016 | Changes to reduced rates   | Changes to standard rates  |
|----------------|---------------------------------|------------|--|--|
|                | Reduced<br>rates <sup>(1)</sup> | Standard   | 2002-2016  | 2002-2016  |
| Germany        | 7                               | 19         | None   | +3 points<br>(in 2007)   |
| Austria        | 10                              | 20         | None   | None   |
| Belgium        | 6 12                            | 21         | None   | None   |
| Denmark        |                                 | 25         |  | None   |
| Spain          | (4) 10                          | 21         | +3 points<br>(+1.0 points in 2010;<br>+2.0 points in 2012)   | 5 points<br>(+2.0 points in 2010;<br>+3.0 points in 2012)                  |
| Finland        | 10 14                           | 24         | <ul> <li>+ 2 points in the lower<br/>reduced rate</li> <li>(+1.0 points in 2010;</li> <li>+1.0 points in 2013)</li> <li>-3 points in the higher<br/>reduced rate</li> <li>(-4.0 points in 2010;</li> <li>+1.0 points in 2013)</li> </ul> | 2 points<br>(+1.0 points in 2010;<br>+1.0 points in 2013)                  |
| France         | (2.1)<br>5.5l10                 | 20         | In 2012, France introduced a reduced rate of 7% which it increased to 10% in 2014  | +0.4 points<br>(in 2014)   |
| Greece         | 6 13                            | 23         | The super-reduced rate<br>of 4.5% was eliminated in<br>2010. The reduced rate<br>of 9% was split into two<br>reduced rates, one of 5.5%<br>and the other of 11%. In<br>2011, those rates were<br>increased to 6.5% and 13%               | +5 points<br>(+1.0 points in 2005;<br>+4.0 points in 2010)                 |
| Ireland        | (4.8)<br>9 13.5                 | 23         | In 2003, the reduced rate<br>was increased from 12.5%<br>to 13.5%. There have been<br>two reduced rates, of 9%<br>and 13.5%, since 2011  | +2 points<br>(+0.5 points in 2009;<br>+1.5 points in 2012)                 |
| Italy          | (4) 10                          | 22         | None   | +2 points<br>(1.0 points in 2012;<br>1.0 points in 2014)                   |
| Luxembourg     | (3) 8 14                        | 17         | +2 points in both reduced<br>rates<br>(in 2015)  | +2 points<br>(in 2015)   |
| Netherlands    | 6                               | 21         | None   | 2 points<br>(in 2013)  |
| Portugal       | 6 13                            | 23         | + 1 point in both rates<br>(in 2010)   | + 4 points <sup>(2)</sup><br>(+2.0 points in 2005;<br>+2.0 points in 2011) |
| Sweden         | 6 12                            | 25         | None   | None   |
| United Kingdom | 5                               | 20         | None   | +2.5 points <sup>(3)</sup><br>(in 2013)                                    |

(1) Super-reduced rates in brackets; (2) The rate was increased and reduced during the period under analysis. In 2011, it was set at 23%. (3) The rate was 17.5% from 2002 until 2010 except for 2009 when it was 15%. In 2011, it was set at 20%.

Source: European Commission (2016) and authors' own elaboration.

<sup>11</sup> The combination of a low standard rate coupled with the existence of one or more reduced rates applicable to a higher percentage of goods and services pose an insurmountable barrier to pushing VAT revenue-to-GDP towards the 7% mark.<sup>11</sup>

the standard rate was 16% until the reforms of 2010, just one point above the 15% minimum allowed in Community law. Luxembourg had a rate of 15% until 2015, when it increased it to 17%. Thirdly, Luxembourg, Italy and Spain have super-reduced rates of VAT. This rate is 3% in Luxembourg and 4% in Spain and Italy. In Luxembourg a very wide variety of goods are covered by the superreduced rate, including food, non-alcoholic beverages, children's clothing and footwear, water, certain pharmaceutical products, certain medical equipment for disabled persons, domestic passenger transport, books and newspapers, cultural events, hotels and restaurants (excluding alcoholic beverages), telephony services and cultural services. The list of goods that carry the super-reduced rate is much smaller in Spain and Italy and mainly includes certain foods, some medical equipment for disabled persons, books and newspapers.

As for the characteristic traits of the EU-15 states with the highest tax burdens - Denmark, Sweden and Finland – we highlight two: First, those states are among the EU-15 countries with the highest percentage of goods and services taxed at the standard rate: 100% in Denmark and very close to 80% in Sweden and Finland (European Commission, 2004). Secondly, these countries' standard VAT rates are the highest in the EU-15. Since 2016, this rate is 25% in Denmark and Sweden and 24% in Finland. Denmark is an exception in the EU-15 as it applies a single standard rate of 25% to the purchase of all goods and services [8]. Finland and Sweden, however, each have two reduced rates (10%|14% and 6%|12%, respectively). In those two countries, the reduced rates apply to cultural services, hotels, restaurants, passenger transportation, books, water, food [9] and, in the case of Finland, medicines.

In short, the combination of a low standard rate coupled with the existence of one or more reduced rates applicable to a higher percentage of goods and services pose an insurmountable barrier to pushing VAT revenue-to-GDP towards the 7% mark [10]. That level is indeed the 2002-2014 average for the group of countries denominated "Other countries without a zero rate" in Table 2. This group includes Central European countries such as Germany, Netherlands and Austria which present tax burdens ranging from 6.7% in Germany and Netherlands to 7.6% in Austria. Those three countries present standard rates ranging from 19% to 21% (close to the prevailing rate in Spain) but just one reduced rate of between 6% and 10%. One of the factors that explains the difference in tax burden in Spain compared to these Central European countries is that fact that the goods taxed at the super-reduced rate in Spain - food, medicine, books and newspapers are taxed at reduced or standard rates in Germany, Austria and Netherlands (refer to Romero and Sanz, 2013).

### Changes in the effective VAT rate borne by Spanish households

The VAT reforms of 2010 and 2012 were undertaken against the backdrop of a deep economic crisis. Suffice it to say that the unemployment rate went from 8.6% in 2007 to peak at 26.1% in 2013 (since which time it has been trailing lower, ending 2017 at 17.2%). The severest crisis in Spanish democracy has coincided with the highest VAT hikes since the tax was introduced into the Spanish tax system back in 1986. In this section, we use the micro-data from the Household Budget Survey (HBS) to analyse the change in the distribution of the effective VAT rates borne by Spanish households between 2007 and 2015. We will describe the changes in the

#### Table 3

#### Effective VAT rates borne between 2007 and 2015 by income quintiles

| Quintiles       | 2007 | 2015  | Difference | Change (%) |
|-----------------|------|-------|------------|------------|
| 1. Low          | 5.95 | 7.68  | 1.7        | 29.1       |
| 2. Low-medium   | 7.21 | 8.78  | 1.6        | 21.8       |
| 3. Average      | 7.76 | 9.29  | 1.5        | 19.7       |
| 4. Medium-high  | 8.20 | 9.73  | 1.5        | 18.7       |
| 5. High         | 8.84 | 10.19 | 1.4        | 15.3       |
| Overall average | 7.57 | 9.05  | 1.5        | 19.6       |

Source: Authors' own elaboration using data taken from the HBSs population values.

effective tax burden borne by households during this period and estimate the effects on the progressivity of this tax by calculating the so-called Kakwani index.

The HBS is a representative sample of Spanish households containing disaggregated information about their shopping baskets current expenditure on goods and services and the purchase of certain durable goods such as home appliances. The corresponding VAT rate (and excise duties) has been allocated to each of these goods in accordance with the legislation in effect in each year. We use this information to compute the effective rate per household by dividing the VAT tax burden by the total household expenditure gleaned from the HBSs. We use total expenditure as a proxy for permanent income (for a discussion, refer, for example, to Poterba, 1991). It is assumed that the VAT tax burden so calculated is that effectively paid by households in the absence of tax fraud or evasion – we assume the full passing on of the tax.

Table 3 presents the breakdown of the effective VAT rate by income interval. Table 4 complements this information by adding insight into the progressive nature and redistributive capacity of this tax using the so-called Kakwani and Reynolds-Smolensky indices. The effective VAT rate borne in 2007 was 7.57%; this had increased to 9.05% by 2015. This means that in eight years, the average VAT burden borne by Spanish households had increased by 1.5 points (19.6%). The rate structure reveals a higher burden the higher the income level in both 2007 and 2015. These results tell us that VAT was, in terms of permanent income, a progressive tax in both 2007 and 2015. In 2007, the average effective rate ranged from 5.95% for lowincome households to 8.84% for high-income households. In 2015, the average went from 7.68% for low-income households to 10.19% for the wealthiest households. As a result, the average effective rate increased by 1.7 points for the households in the first quintile and by 1.4 points or the wealthiest households.

#### Table 4

#### VAT progressivity and redistributive capacity indices, 2007 and 2015

| Progressiveness indices | 2007   | 2015   | Difference | Change (%) |
|-------------------------|--------|--------|------------|------------|
| Kakwani                 | 0.0549 | 0.0432 | -0.0117    | -21.3      |
| Reynolds-Smolensky      | 0.0047 | 0.0043 | -0.0004    | -8.5       |

Source: Authors' own elaboration using data taken from the HBSs population values.

Over the eight years to 2015, the average VAT burden borne by Spanish households had increased by 1.5 points (19.6%). The rate structure reveals a higher burden the higher the income level in both 2007 and 2015.

In relative terms, the effective rate increased by 29.1% in the first quintile, compared to an increase of 15.3% in the last quintile. In both absolute and relative terms, the lowest-income households were accordingly the hardest hit by the increased VAT tax burden. The results of the Kakwani index calculations show that VAT is progressive. However, it becomes less progressive between 2007 and 2015 (the index declines from 0.0549 to 0.0432). The results also show that the redistributive capacity of VAT is very limited, as shown in readings in the Reynolds-Smolensky index. Moreover, that redistributive capacity decreases between 2007 and 2015.

#### Conclusions

Following the reforms of 2010 and 2012, the reduced and standard VAT rates in Spain increased by 3 and 5 points, respectively. The reforms had the effect of increasing VAT revenue-to-GDP to 6.2% by 2014. In microeconomic terms, the tax reforms increased the effective rate of VAT borne by Spanish households by 1.5 points. The available empirical evidence shows that the elasticity of VAT revenues to household income is approximately one (Sanz et al., 2016). For this reason, it is likely that VAT revenues will increase relatively intensely in the coming years, assuming the Spanish economy continues to display the vigour anticipated for 2018 (2.6%); however, the VAT revenue-to-GDP ratio will not increase in tandem. To increase the ratio would require reducing the percentage of goods and services taxed at the super-reduced and reduced rates. Lastly, the results of this paper show that VAT is a progressive tax in permanent income terms.

#### Notes

[1] The super-reduced rate is levied on bread, milk, eggs, fresh fruit and vegetables, medicines for

human consumption, books and newspapers, among other items. The reduced rate is levied on meat, fish, processed goods, hospitality services, transportation and water, among other goods and services. Lastly, the standard rate is levied on all other goods, including energy goods, clothes, footwear, alcoholic beverages and tobacco products.

- [2] Offset, for example, by a reduction in Social Security contributions.
- [3] This figure should be grossed up by 7.85 billion euros of tax expense generated by the exemptions contemplated in tax legislation.
- [4] For example, the European Commission estimated that the elimination of the superreduced rate in 2011 would allow Spain to reduce the standard rate from 18% to 12.7% (European Commission, 2011).
- [5] The reforms of 2012 also modified the taxes levied on certain services, which went from being taxed at the reduced rate to the standard rate; these services included tickets for cultural events (cinema, theatre, dance shows, concerts), veterinary services, funeral services, hairdressing services and the purchase of fresh flowers. In 2017, the rate levied on performing arts shows was once again switched back to the reduced rate.
- [6] From the budget standpoint, the growth in VAT collection is good news for a country such as Spain which has been going to lengths since 2008 to bring its deficit within the required 3% threshold. Note that there is consensus among the analyst community in Spain that the country's public deficit will fall to 2.2% in 2018 (Funcas, 2018).
- [7] The size of the shadow economy and its incidence on the scale of tax fraud is a key factor in VAT collection. On average between 2002 and 2014, the EU-15 countries with the smallest shadow economies were Austria (8.9%),

Luxembourg (8.9%), Netherlands (10.5%) and the UK (10.8%), while those with the biggest were Spain (19.8%), Portugal (19.9%), Italy (22.6%) and Greece (25.4%) (Schneider *et al.*, 2015). It is also worth considering the impact on tax collection of tax evasion and corporate bankruptcies.

- [8] With the exception of newspapers, magazines and passenger transport, which are exempted.
- [9] Some foods in the case of Sweden.
- [10] The effect that a small-sized shadow economy has on the VAT tax burden is clear if we compare Spain with the UK: the weight of the black economy in these two countries is 19.8% and 10.8%, respectively (Schneider et al., 2015). The UK taxes a high number of goods and services at a rate of zero (most food, medicines, medical equipment for the disabled, water, new houses, passenger transport, books, newspapers and children's clothing and footwear). It also taxes a high number of goods and services at the reduced rate of 5%, including electricity, gas and gas-oil for domestic use. Nevertheless, the average tax burden in the UK between 2002 and 2014 was 0.8 points more than that of Spain.

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# European economic governance reform: Moving past power politics

Analysis of European economic governance reform often focuses primarily on who wins and who loses in the intergovernmental bargaining. Unfortunately, this perspective tends to leave out the ideas, assumptions, and underlying principles that are crucial to making the system work. Successful reform is more than just power politics.

Abstract: European governments disagree on how to reform their shared institutions for economic governance. Moreover, that disagreement is substantive. It rests on different assumptions about what caused the recent crisis, about who is responsible for crafting a solution, and about what are the most important obstacles standing in the way of success. These competing visions are difficult to reconcile; a compromise solution, borrowing elements from different positions, would lead to contradiction and Erik Jones

vulnerability. Hence, the challenge is not to land the negotiations according to some diplomatic calendar, it is to find some way to foster a meaningful consensus on which of the competing visions should be adopted for what should be done and why.

#### Introduction

The institutions and processes that shape European economic governance need reform. The reasons are well known. The fiscal rules are complicated. The 'imbalances' procedures are asymmetrical. The banking union is incomplete. So is the monetary union. And the various national welfare state regimes have complex pathologies of their own. As a result, European leaders cannot manage their economies comfortably and stably within a single market; European-level economic governance remains largely aspirational. This problem will not disappear as a function of political compromise or power politics. European political leaders can agree on what to do, but that agreement will not ensure the new institutions will function to plan (Jones, Kelemen, and Meunier, 2016). On the contrary, any agreement may still mask lasting contradictions in how policymakers understand European economic performance and what they require to achieve their domestic objectives.

#### **Too pessimistic?**

It is too pessimistic to simply say that a compromise solution cannot work either politically or economically. A more optimistic, 'constructive approach' would be to focus on the points of complementarity. The raft of proposals made on December 6<sup>th</sup> by European Commission President Jean-Claude Juncker and his team might be a good starting point. The Juncker team has called for a wide array of reform measures – both large and small – to improve the process of macroeconomic policy coordination while at the same time strengthening response to crisis and clarifying lines of accountability and control. These proposals include:

- Naming a European Finance Minister who would be Vice President of the European Commission and chair of the Eurogroup;
- Incorporating the 'fiscal compact' treaty into European Union law;
- Transforming the European Stability Mechanism into a European Monetary

Fund that could be brought into the Treaty-based framework of Institutions;

 Allocating specific financial resources as a budget line for the European Union that could be used to incentivize reforms at the member state level (European Commission, 2017).

The Commission's approach focuses on institutions. An alternative approach might focus on specific goals. Recently, fourteen French and German economists put forward a comprehensive proposal along those lines (Bénassy-Quéré et al., 2018). Throughout that proposal, they argue that 'market discipline and risk-sharing should be viewed as complementary pillars of the euro-area financial architecture' (p. 2), that '[a] choice between crisis mitigation and crisis prevention is generally a false alternative' (p. 3), that it is possible to 'improve discipline and risk sharing in the euro area' simultaneously (p. 4), and that 'the key to success is to ensure that risk reduction, market discipline, and risk sharing go hand in hand' (p.5). Moreover, these are laudable ambitions and they frame a concrete set of six proposals. These proposals are worth enumerating both because they have been debated for a long time in various forms and because - as a package - they provide a good summary of the many dimensions of policy debate. In summary form, Bénassy-Quéré *et al.* (2018: 20-21) argue that:

- Banks across the euro area need to be given very strong incentives to reduce the risks on their balance sheets before they can be plugged into pan-European deposit and resolution schemes.
- Governments need to be given simple instructions for stabilizing their fiscal accounts and strong incentives to ensure that takes place.
- Investors need to be locked into a transparent framework for absorbing losses

<sup>11</sup> The Commission's approach focuses on institutions. An alternative approach might focus on specific goals.<sup>77</sup>

<sup>44</sup> Although it is possible for European policymakers to arrive at consensus around a specific view of how macroeconomic policy coordination should function, it has not been possible to construct a compromise of competing visions that has survived the test of time.<sup>77</sup>

both on their exposure to banks and on their exposure to sovereign debt instruments in case of need.

- New financial instruments need to be created to help stabilize national economic performance with clear conditions being placed on governments both to participate in the scheme and should they ever need to benefit from it.
- New financial instruments also need to be created to offer a common safe-haven for European investors and to minimize the distortions that arise in the regulation of sovereign debt holdings by bans and other financial institutions.
- Enforcement of the rules regarding fiscal policy, financial stabilization, and macroeconomic stabilization should be better insulated from political interference.

Bénassy-Quéré *et al.* (2018) back each of these points with specific initiatives that they have been developing over the past several years and flank them with new and often very subtle suggestions for how these reforms might be designed or implemented to ensure that they arrive at a balanced outcome. As such comprehensive reform packages go, this is about as good as it gets. Hence the only question is whether it will be adopted. The authors have a clear perspective in their last sentence: 'Our leaders should not settle for less' (p. 21).

#### We have been here before

That conclusion is hopeful but challenging. Although it is possible for European policymakers to arrive at consensus around a specific view of how macroeconomic policy coordination should function (McNamara, 1998), it has not been possible to construct a compromise of competing visions that has survived the test of time. This bitter observation is the fruit of long experience. The difficulty in governing Europe's economies is not a new problem. Its origins stretch at least as far back as the period of eurosclerosis in the 1970s and arguably to the currency crises of the mid-to-late 1960s. At different points in the intervening decades, European leaders have leapt forward in terms of institution-building. That process started with the first plan to form an economic and monetary union as part of the 'Spirit of The Hague' and culminated most recently in the raft of measures introduced during the recent economic and financial crisis, including the two-pack, the six pack, and the single supervisory mechanism.

Different actors have played crucial roles in this institutional development. Many of these did not come from national governments or large member states. Nevertheless, the conventional narratives focus on the Franco-German partnership (Brunnermeier, James, and Landau, 2016). Only these two countries were strong enough to push Europe forward, so the argument runs. Hence, most of the great innovation occurred when France and Germany worked together under likeminded leaders who were willing and able to cooperate. Famous pairings run from Georges Pompidou and Willy Brandt to Nicolas Sarkozy and Angela Merkel. Each of these couples, in their own way, followed in the footsteps of Charles De Gaulle and Konrad Adenauer (McCarthy, 2001).

This Franco-German partnership was not always harmonious. French and German perspectives often differed. At the start of the monetary integration process in the early 1970s, the French were 'monetarist' and believed that currency union would lead to economic convergence while the Germans were 'economist' and so believed that economic convergence should be prerequisite for monetary union (Tsoukalis, 1977). Their joint initiatives therefore built on compromise. In the conventional narrative, the French 'won' concessions from the Germans that only the Germans have the power to give. The running theme in this narrative is that whichever of the two was more powerful at the time was also more likely to have a greater influence on the design of common rules and institutions (Brunnermeier, James, and Landau 2016). The reference value for an 'excessive' deficit written into the protocols of the 1992 Maastricht Treaty is an iconic illustration: the Germans wanted something close to two percent of gross domestic product while the French wanted something closer to four percent; they agreed on three percent, which the French believed meant 'declining towards' and the Germans insisted was three percent or less.

With this background, it is unsurprising that prominent journalists like Wolfgang Munchau have concentrated on the current political leadership of France and Germany to anticipate the next step in the economic governance reform process. European Commission President Jean-Claude Juncker has launched and sustained a comprehensive agenda, but ultimately the heads of state or government will decide. During the summer and early autumn of 2017, French President Emmanuel Macron played into that narrative with a raft of bold proposals. Now all eyes are focused on German Chancellor Angela Merkel to see whether and how she will respond. Much will depend upon the coalition she brings together. Power politics, conventional wisdom concedes, is a game played on many different levels.

#### **Power without purpose?**

This conventional narrative misses a critical dimension in the reform process. Power without purpose lacks direction; only by understanding the goals of the reforms can we anticipate where that process will go. Such goals are hard to read from the ups and downs in the Franco-German relationship. They are also hard to decipher from the proposals made by various actors. Too often the names, rules and procedures sound interchangeable. A European Finance Minister, a European Monetary Fund, or a budget line for the euro zone are all good examples. The name says very little about the content of the proposal, which could come as easily from the Germans as the French. Such fungibility would be welcome from a power-political perspective. Interchangeable components are easy to mix and match depending upon the balance of influence. Purposive goals are more constraining. They imply fixed assumptions about what is wrong, who can fix it, and how competing proposals might work at crosspurposes.

Once the purpose behind the reform agenda is considered, compromise becomes more difficult and less effective. That is why the fourteen French and German economists are at such pains to insist that their six-point plan strikes a substantive balance (Bénassy-Quéré et al., 2018). Policymakers can still mix and match institutions, but that does not mean those institutions will achieve the goals for which they were created. Worse, they may contradict each other or leave important vulnerabilities unaddressed. The current reform process is particularly prone to such limitations. The goals and understandings of the various participants are mutually exclusive both in terms of what they think lies at the heart of the economic governance problem and in terms of what Europeans should do about it. Denying this fundamental tension will not make it disappear; looking for subtle engineering solutions is likely to make the conflict worse. One way for European leaders to move forward would be to agree on a coherent vision of what a completed monetary union should offer and then to assemble those institutions and facilities best suited to achieve that common goal. Hence the way forward leads not through a collection of piecemeal compromises on specific institutional arrangements, but rather through a more fundamental consensus around what a single currency entails.

#### **Dichotomies and diagnoses**

To recognize the distinctions, it helps to start with two dichotomies framing the recent economic and financial crisis. Depending upon the perspective, the crisis had very different origins. For example, it is possible to argue that the crisis emerged out of aberrant behavior or poorly designed institutions; similarly, the crisis was a problem of finance or of real economic performance (Jones, 2015). In combination these dichotomies result in four different scenarios, each of which has been prominent in crisis narratives: excessive risk-taking, weak government accounts, competitiveness, and 'sudden stops' (Table 1).

The excessive risk-taking story focuses on bad behavior in finance. Both banks and bank regulators ignored the build-up of leverage and failed to provide sufficient loss absorbing capital. The crisis emerged when these failings became apparent. Iceland, Ireland and Cyprus are good examples of relatively small national economies that were jeopardized by disproportionately large banks.

The government accounts story is where bad behavior meets the real economy. The problem is that public indebtedness increases no matter what the level of economic performance. Governments tax too little and spend beyond their means. This problem can be hidden in a low interest rate environment but will resurface once the cost of borrowing increases. Belgium, Greece and Italy are good examples of countries that would struggle if they faced a sudden spike in government borrowing costs.

The competitiveness story is about the structure of real economic performance. The problem has less to do with banks or governments, than with the more general notion of external indebtedness. Total factor productivity must increase to pay back money from abroad. Alternatively, foreign investors will lose confidence and provoke a balance of payments crisis. Here the putative examples are Portugal and Spain, but just about any country that accumulated a current account deficit could be accused of misallocating capital.

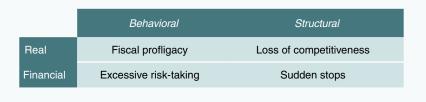
Finally, the 'sudden stop' account is about the structure of financial markets. What matters is not so much the behavior of financial market participants as the fact that they are interdependent. It also matters that financial institutions transform short-term savings into longer-term investments. Should everyone try to liquidate their assets at once in a 'flight to liquidity', the financial economy could disintegrate in ways that would bring one or more of the member-state economies to a sudden stop. Any of the countries that suffered from the crisis could illustrate this potential. The challenge is to distinguish between capital flight that takes place because of general fear in the markets from a more justifiable concern for the solvency or liquidity of the national economy that is abandoned.

#### **Overdetermination**

These stories are not mutually exclusive. As is often the case in public policymaking, the economic crisis is overdetermined. European economies can suffer from any mix of bad institutions and behavior. The different crisis narratives do, however, suggest different solutions — many of which can be found in the economic reform proposals currently under discussion. The problem of excessive financial risks can be tackled, at least in

#### Table 1

#### Two dimensions of the recent crisis



Source: Authors' own elaboration.

part, through dynamic provisioning against losses on risky assets and through ceilings on exposure to home-country sovereign debt instruments. Excessive government spending can be addressed through close supervision by a European Finance Minister and binding conditions on financial assistance from a European Monetary Fund.

On the surface, some solutions could encompass different problems. Closer European supervision of national policymakers and tighter regulations on financial institutions could drive the process of market-structural reform as well. Other proposals could buy time for problems to be addressed. The re-insurance of national unemployment compensation could smooth over any temporary losses in national competitiveness as could a euro-area budget line for fiscal stabilization. Finally, the solution to sudden-stop dynamics is to complete the European banking union with common resolution funding and a European deposit system. If possible such a solution would also include a common European safe asset.

The proposals emerging from the Juncker Commission sketch out this kind of comprehensive agenda. The reflection papers published in spring 2017 echo the many factors that were taken into consideration from a range of different perspectives. The state of the union address Juncker delivered in September announces the priorities for action and the order of operations; meanwhile, the documents accompanying that speech show how even those policies not prioritized by the European Commission President will not be left behind. Finally, the specific proposals delivered on December 6<sup>th</sup> confirm the European Commission's formal right to initiate European legislation by providing precise legal texts to be considered in the reform process. In other words, the fourteen French and German economists are hardly alone in looking for a compromise that meets the goals of the major stakeholders.

#### **Changing perspectives**

The difficulty for the Juncker Commission and for Bénassy-Quéré *et al.* (2018) is that the solutions do not fit well together even if the diagnoses of the underlying problems are compatible (or at least not mutually exclusive). To understand why, it is useful to look at the fundamental dichotomies from a different perspective. For example, it is possible to characterize the distinction between real economies and financial economies as more a matter of scale than substance. Real economies tend to be framed by national regulations and market institutions; this makes them somewhat idiosyncratic. It is possible to imagine sharing best practices and trying to improve national performance, but it is unlikely that national institutional arrangements will ever be the same. Indeed, that assumption is baked into the European market-structural reform processes that constituted the Lisbon Strategy and the various attempts to coordinate marketstructural reforms that have flowed from that, up to and including the macroeconomic imbalances procedure that prevails at the moment.

By contrast, financial markets tend to operate at a European level. This is by choice and not by accident. European policymakers made a series of decisions over the previous half century to make it possible for capital to flow across national boundaries (Helleiner, 1996). They also made decisions to encourage financial institutions to take advantage of the opportunities created by this capital market liberalization and to adapt to the competitive environment it generates. Almost immediately, European policymakers realized that capital market liberalization would change their financial institutions fundamentally – giving them a scale and complexity beyond the national level. Given the deep ties across the Atlantic, however, they did not turn initially to a European solution. Instead they enlisted the support of global institutions to manage the interdependence between national regulatory authorities (Story and Walter, 1997). European institutions only came to prominence as those more global arrangements for managing interdependence proved ineffective at stabilizing integrated financial markets (Mügge, 2010).

This change in perspective to focus on idiosyncrasy and interdependence does not

offer a clean dichotomy like the theoretical division between the real economy and financial markets. Real economies are deeply inter-connected and so also interdependent even as financial institutions retain the influence of their national regulators and countries of origin and so remain somewhat idiosyncratic. Nevertheless, the two sides of the economy sit at different ends of the spectrum that runs from idiosyncrasy to interdependence and the crisis narratives that focus on these differences between finance and the real economy share that tendency. That is why explanations that focus on government accounts or national competitiveness tend to emphasize the cultural dimension of individual cases (think of Greece) while explanations that focus on risk-taking or sudden stops tend to look for more common factors (think of Iceland).

It is possible to change perspectives on the dichotomy between behavior and structure as well. The behavioral problem is essentially a matter of moral hazard, with the emphasis on the word 'moral'. People will take advantage of any system or institutional arrangement. The only way to stop that prospect is through clear rules backed by the political will to enforce them. Sometimes the rules proscribe certain behavior and sometimes they proscribe specific consequences for transgression. What matters is that the rules are followed. This perspective places the emphasis on 'moral' because it infuses rule-abiding with an ethical dimension: following the rules is 'right'; breaking the rules is 'wrong'. When breaking the rules imposes a cost on others, the 'wrongness' of the act is compounded. Hence the moral hazard here is not so much taking on risks that are incommensurate with potential losses, because it is possible to do that while following the prevailing rules. Problematic behavior is taking on risks that are incommensurate with potential losses only in ways that are not allowed.

The problem of structure is different. Structure is about technical engineering and the incentives that flow from institutional design. This notion of engineering is complicated by the fact that institutions do not exist in isolation (Ostrom, 2005). On the contrary, they are nested in complex systems and overlapping incentives (Meadows 2008). Worse, these systems are constantly evolving with changes in technology and social norms. Hence, the challenge is to design institutions that are fit for purpose but also resilient enough to absorb unforeseen shocks and flexible enough to adapt to changes over time.

Here again the dichotomy is not as clean as that between behavior and structure. The rules that define appropriate behavior are institutions, for example, and so is the norm that the rules should be enforced. Similarly, only people can give institutions 'purpose' or make them function. Even the best institutional engineering requires commitment from those who staff, use, or interact with institutions to make them work as intended. The tendencies are nevertheless distinctive, with those who worry about aberrant behavior more likely to look for ways to constrain moral hazard and those who worry about dysfunctional institutions looking for ways to engineer a solution to the problem.

#### **Contrasting implications**

This change in perspectives reveals contrasting implications that arise from the various crisis narratives. By combining notions of idiosyncrasy and interdependence with moral hazard and institutional engineering, the principal themes that have emerged in the economic governance reform debate become apparent. Specifically, these new perspectives highlight the role of risk reduction and conditionality, but also national ownership and risk sharing (Table 2).

<sup>11</sup> The challenge is to design institutions that are fit for purpose but also resilient enough to absorb unforeseen shocks and flexible enough to adapt to changes over time.<sup>17</sup>



The emphasis on 'risk reduction' comes at the interface between moral hazard and interdependence. Hence the goal is not to reduce risks per se. Some risk is inescapable and risk-seeking behavior is important for innovation. Rather the goal is to ensure that the consequences of risk taking can be contained either within that group which engaged in risk-seeking in the first place or, in extremis, within the national community responsible for ensuring that the rules for engaging in risk-seeking behavior are obeyed. The structure of loss-absorption flows from the view that the worst kind of rule-breaking is that which imposes costs on others. That structure is also contained by the logic of collective action (Olson, 1965): as the groups grow larger, the incentives for any individual to abide by the rules decrease which raises the prospect not only of free-riding on the system but also of encouraging moral hazard. For many advocates of this view, national boundaries constitute a convenient - and politically justifiable - stopping point for aggregation, even at the expense of market integration.

The emphasis on 'conditionality' arises where moral hazard overlaps with idiosyncrasy. There is no denying that different countries have different institutional environments. According to this view, however, such idiosyncrasies are no excuse for putting the costs of bad practices onto others. Hence, wherever it is clear that moral hazard is at work - meaning whenever a national government cannot absorb risks through its own resources - then it is necessary to take remedial action. That action can be tailored to suit national idiosyncrasies, yet it cannot be avoided. Ideally, such action should be adopted prophylactically, meaning once the prospect of future losses become apparent. In this way, conditions could be attached to the threat of sanctions before crisis unfolds rather than only to assistance offered after things have turned out badly. In the best-case scenario, assistance would never be required because moral hazard could be avoided.

The overlap between technical engineering and idiosyncrasy is very different. The reason is the importance of getting 'buy-in' from the national population. It is not enough to propose a well-designed institutional arrangement or even to tailor that institution to local circumstances. The real challenge is to get people to integrate any reforms into the many other things that make up their social and economic existence (Ostrom, 2005). Part of this challenge can be addressed through local political leadership, but that leadership needs to stay in office long enough for the reforms to take effect. Hence the goal is to encourage national ownership of the reform process so that both political leaders and

If the goal is to support market integration – and accept the interdependence that comes with it – there has to be some mechanism for risk-sharing.

the rest of society lay the foundations for a long-term commitment to change. Often this means adapting both the process and the priorities for the reform effort to meet national circumstances. This is true particularly where governments expect to face entrenched opposition from one or more powerful interest groups opposed to change.

Pan-European solutions emerge where technical engineering combines with interdependence. Some of these solutions revolve around rules and enforcement. In that sense, the engineering solution tends to look a lot like to solution to moral hazard. The difference is the emphasis in the logic of interdependence. The presumption is that some risks simply cannot be eliminated or contained within national boundaries in integrated markets. Therefore, if the goal is to support market integration - and accept the interdependence that comes along with it there has to be some mechanism for risksharing. Moreover, this mechanism has to be extensive enough to underwrite market integration in the face of unforeseen shocks. This is true particularly given that European markets are not self-contained and so remain subject to external influences. Alternatively, there is a danger that a common external shock will have different implications for different participants in the European marketplace and so expose them to losses that they can neither absorb nor contain.

#### Institutional progress

This change in perspectives is not meant to deny that significant institutional progress has been made. The creation of a Single Supervisory Mechanism was a major step forward in the construction of a banking union, for example. So was the elaboration of the mechanisms through which banking resolution decisions are made. This framework is not perfect, and the recent banking resolution programs undertaken in Italy show that there is still work to be done in building out the new system. Nevertheless, they are a step in the right direction.

Moreover, we can use the experience of national financial market integration to map out roughly where this progress should be headed. Through an analysis of the completion of domestic financial market integration in the United Kingdom, the United States, and Canada (Jones and Underhill, 2014), we discover that all three countries experimented with institutional reforms in different domains until they came up with a framework that included six different elements as a sort of greatest common factor:

(i) a common risk-free asset (currency and debt instruments) to use as collateral for liquidity access and clearing as well as a refuge for capital 'fleeing to quality' in times of distress; (ii) a central system of sovereign debt management; (iii) centralized counterparties such as exchanges, clearing agents, and depositories; (iv) a common framework for prudential oversight; (v) emergency liquidity provision that includes lender-of-last-resort facilities for the financial system and the sovereign; and, (vi) common procedures and orderly resolution mechanisms for financial institutions and public entities (Jones and Underhill, 2014: 5).

There are good reasons why Europe has not moved forward with the common risk free asset, although it is clear that there is a strong desire to bring that item back onto the agenda (Jones, 2017a). Recent efforts to reform the stability and growth pact and to strengthen the European semester address the centralized debt management issue to some extent. The capital markets union agenda tackles some of the issues related to centralized counterparties, although there are lender-of-last-resort or backstop questions that have gained prominence during the British negotiations to exit the European Union and that remain to be addressed. The single supervisory mechanism and resolution authorities touch on some of the remaining agenda, as does the European Stability Mechanism - whether or not that gets transformed into a European Monetary Fund.

European leaders have made significant progress and yet they remain at an impasse. The reason is not for want of an appropriate institutional blueprint or engineering solution. Rather it is due to a more basic disagreement as to whether the problem Europeans face is a matter of engineering or ethics.

#### **Fundamental conflicts**

The implications of this change in perspectives are hard to reconcile with each other. This is particularly true across the divide between moral hazard and technical engineering. Conditionality is more likely to foster a backlash against European institutions than to create a sense of national ownership. The more enforcement of conditionality is separated from political accountability, the greater that sense of powerlessness will be. That is why the sixth proposal made by (Bénassy-Quéré et al., 2018) is going to be very hard for many member state governments to accept. The tension between conditionality and national ownership also explains why the details framing the constitution of a European Monetary Fund or the allocation of a eurozone budget line will take on exaggerated significance. A slight tweak in one direction or the other will make the difference between a carrot and a stick.

Of course, that tension between conditionality and political accountability is not always predominant. Italy is a classic example of a country that sought external constraints as a means of driving its domestic reform process. Nevertheless, it is worth considering what goals made it worthwhile for Italians to accept the imposition of those European constraints. Joining the single currency was a powerful motivation; now Italians lack that kind of overriding objective. Moreover, 'becoming a better Italy' is hard to use as a substitute when non-Italians appear to be dictating both the content of the reforms and the pace of change. The point is not to criticize well-intentioned and carefully considered reform proposals for the Italian economy; rather it is simply that an external constraint is not always welcome and may prove counter-productive. Indeed, that is the problem in Italy today and it explains why popular attitudes toward Europe in Italy have diverged so significantly from those in

other countries (Jones, 2017b). It is also (at least partly) why the only unashamedly pro-European Union and pro-reform political party is losing popularity in public opinion polling.

The tension between risk-reduction and risksharing is less obvious but still important. What is at issue is whether the threat of irreducible risks from external shocks or hidden features of market integration are more dangerous than the threat that market participants will use common institutions to take on risks that will result in losses they can neither absorb nor contain. As an empirical matter, this issue is almost impossible to resolve. Irreducible risks are largely unquantifiable and hidden features are, by definition, hidden until they are found. These are the domains of Knightian uncertainty. As Frank Knight (1921) argued, such uncertainty can only be mitigated through experience and insurance. They cannot be accommodated before the fact. By contrast with this empirical ambiguity, the moral calculation is clear. Moral hazard is wrong and so should be addressed; anything that threatens to increase moral hazard should be avoided. That is why the fourth and fifth proposals - to have a macroeconomic stabilization fund and to introduce a common safe asset - made by Bénassy-Quéré et al. (2018) are problematic. They treat moral rectitude as an engineering problem; for those who worry about moral hazard, it is not.

Reconciliation of the division between idiosyncrasy and interdependence is less complicated but still challenging. The process of European integration has long wrestled with the combination of unity with diversity and that tension is still unresolved. Moreover, it continues to have familiar political implications. The European Commission's proposal of a supranational European Finance Minister did not find warm

<sup>44</sup> The process of European integration has long wrestled with the combination of unity with diversity and that tension is still unresolved.<sup>77</sup>

reception in the finance ministries of the member states; the initial German proposal to reconstitute the European Stability Mechanism as a European Monetary Fund with an apolitical, intergovernmental mandate did not find much support at the European Commission or the European Central Bank. It would be easy to put these conflicts down as a matter of institutional self-interest. In fact, they rest on serious arguments about what are the vulnerabilities in the economic governance framework and how they should be addressed.

The first three proposals made by Bénassy-Quéré et al. (2018) fall under this rubric as well. The authors take great pains to show how the adjustment costs to a common regime can be mitigated for those member states who face the greatest challenges in moving toward less holdings of home-country sovereign debt in their national banking system and more rapid disposal of non-performing loans, large-scale fiscal consolidation, and higher charges to float new sovereign debt (or bank bonds) with private investors. Moreover, there are sound reasons to make those adjustments. Nevertheless, there is no way to guarantee that governments who take these steps and pay the high adjustment costs will be rewarded with pan-European deposit insurance, resolution funding, or direct recapitalization of their banks. That trade-off was made already once in June 2012 at the start of the first serious banking union discussions when the introduction of a single supervisory mechanism was required as a precondition for the direct recapitalization of distressed banks. It took less than a year for the President of the Eurogroup to make it clear that the goal was to ensure that such 'direct recapitalization' would never happen (Jones, 2013). The argument he made was on principled grounds. That argument has found a constant refrain - most recently in the October 2017 German 'non-paper' on macroeconomic governance reform.

Europe's heads of state or government are unlikely to forge a consensus around a single vision for design of the EU's economic governance. The reason is not power politics, or even a failure to reach agreement between the French and German governments. There are deep, principled divisions between the different stakeholders across the member states and in each of the main institutions. Those divisions must be acknowledged and addressed. Compromise is not an option. The only option is choice. Europeans must come to some kind of meaningful consensus around the substance of economic governance reforms. That means choosing among the coherent visions that are on offer. More specifically, it means choosing between the belief that macroeconomic governance is an ethical matter that pivots around the threat of moral hazard or an engineering problem that can be solved with appropriately-designed fiscal and financial institutions. Recognizing the different perspectives and their implications is only the first step in making such a selection. Addressing those divisions and forging that consensus will be the hard part. Bénassy-Quéré et al. (2018) have made a detailed and very constructive proposal. The Juncker Commission's proposals are even more substantive. But the real conversation about what a completed monetary union should accomplish and how it should be structured has yet to take place.

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# Recent key developments in the area of Spanish financial regulation

Prepared by the Regulation and Research Department of the Spanish Confederation of Savings Banks (CECA)

#### Spanish Royal Decree-law amending the Code of Commerce, Corporate Enterprises Act and Audit Act with respect to non-financial and diversity disclosures (RDL 18/2017, published in *Spain's Official State Gazette* on November 25<sup>th</sup>, 2017)

This piece of legislation, which took effect the day after its publication, essentially transposes **Directive 2014/95/EU** on disclosure of non-financial and diversity information by certain large undertakings and groups.

It will have the effect of amending the abovelisted laws; the following aspects stand out:

- Public-interest entities that issue consolidated financial statements are now obliged to include in their consolidated management reports a consolidated nonfinancial statement when the following conditions are met:
  - an **average number of employees** at the group companies during the financial year of **500 or more**; and
  - at two consecutive year-ends, at least two of the following circumstances have been met: total consolidated assets of over 20 million euros; consolidated revenue for the year of over 40 million euros; and/or an average headcount during the year of more than 250 people.
- This new non-financial statement must include the information to the extent necessary for an understanding of the group's development, performance, position

and the **impact of its activity**, relating to, as a minimum, environmental, social and employee matters, respect for human rights, anti-corruption and bribery matters, including a description of the related policies.

- The obligation to formulate the consolidated non-financial statement **shall be deemed discharged if the enterprise issues a separate report** in which it indicates that the relevant information is part of the management report and which includes the required disclosures and is subject to the **same approval, filing and publication criteria** as the management report.
- Similar obligations are contemplated for corporate enterprises considered of public interest.
- The stipulated contents of the **annual corporate governance report** are amended to include a description of the undertaking's **diversity policy** applied in relation to the board of directors and the requirement, should an entity not have one, to provide a reasoned explanation as to why not.
- As for the **audit report**, it is not compulsory to include an opinion on the consistency between the management report and financial statements for the same financial year and on whether the contents and presentation of the management report meets the undertaking's regulatory obligations with respect to the non-financial statement.

The changes introduced by this Royal Decreelaw apply in financial years beginning **on or after January 1**<sup>st</sup>, **2017.** 

#### Spanish Royal Decree-law on payment accounts with basic features, payment account switching and the comparability of fees (Royal Decreelaw 19/2017, published in *Spain's Official State Gazette* on November 25<sup>th</sup>, 2017)

Royal Decree-law 19/2017 partially transposes Directive 2014/92/EU [1] (PAD) in Spanish law. It will enter into force the day after its full publication in the *Official State Gazette*.

The goal of this legislation is to **boost a single internal market in the retail banking sector** and give effect to the objectives of the EU Directive it transposes, specifically regulating:

- The right for customers or potential customers to **open and use payment accounts with basic features**;
- The **transparency and comparability** of the fees charged to customers or potential customers for payment accounts;
- The **switching of payment accounts** within Spain and facilitation of crossborder payment account opening for customers or potential customers.
- Payment accounts with basic features

Credit institutions offering payment accounts shall be obliged to offer payment accounts with basic features to potential customers who: (i) reside legally in the European Union, including those with no fixed address; (ii) are seeking asylum; (iii) are not granted a residence permit but whose expulsion is impossible for legal or factual reasons.

The Royal Decree-law stipulates the reasons for entitlement to **refuse** access to such accounts and the grounds for **unilateral termination** of the framework contract.

Payment accounts with basic features **must** offer the following services: (i) the opening, operating and closing of a payment account; (ii) the deposit of funds; (iii) cash

withdrawals; and (iv) direct debits, payment transactions through a direct debit of prepaid card and transfers, including online payments.

The **fees charged** for those services shall be negotiated freely between the parties although the Spanish Ministry of Economy, Industry and Competitiveness is empowered to set ceilings for these fees.

This same ministry is charged with specifying the **general information on payment accounts with basic features** regarding the measures credit institutions must take to ensure awareness about the availability of these accounts, the procedures for getting access to one and the alternative dispute resolution procedures.

Access to one of these accounts shall not condition the ability to purchase other services or acquire shares or similar securities.

#### Switching payment accounts

Payment service providers are obliged to facilitate an effective and speedy payment account switching service. At the request of their customers, payment service providers must accordingly facilitate the account switch, providing certain information in the process.

This Royal Decree-law stipulates the switching procedure payment service providers must follow, including time limits for its provision.

#### Comparability of fees

Payment service providers must provide customers or potential customers, free of charge, and in good time before entering into a contract for a payment account with a consumer, a **fee information document** containing the standardised terms in the final list of the most representative services linked to a payment account and the corresponding fee for each service.

As for **fee comparison websites**, the Bank of Spain must provide a website which

consumers can use, free of charge, to compare fees charged by payment service providers for at least the most representative services linked to a payment account. The law also provides for the creation of other such websites by operators other than the Bank of Spain.

#### Royal Decree-law on urgent measures for adapting Spanish legislation for EU regulations on securities markets (Royal Decree-law 21/2017, published in *Spain's Official State Gazette* on December 30<sup>th</sup>, 2017)

Royal Decree-law 21/2017 partially transposes Directive 2014/65/EU on markets in financial instruments (hereinafter, MiFID II) with the overriding goal of transposing the **provisions regarding trading venues** whose immediate effectiveness is necessary for the due functioning of the affected financial institutions and investment service firms and of the trading hubs themselves. It took effect on January 3<sup>rd</sup>, 2018.

The following aspects stand out:

- It stipulates the authorisation and organisational requirements for **regulated markets**, as well as the functions and responsibilities of the **bodies that govern** those markets.
- It regulates the creation of multilateral trading facilities (MTFs) and organised trading facilities (OTFs), which will have to first obtain a permit from and agree to be supervised by the Spanish securities market regulator, the CNMV; these platforms will be managed by a governing body subject to a series of requirements.
- The term "SME growth market" is introduced so that the CNMV can register MTFs that meet certain requirements, at the request of their management bodies, including the requirement that at least 50% of the issuers whose securities are admitted to trading on the MTF be SMEs.
- The maximum penalty for very serious **infringements** is raised to the higher of 5 million euros or 10% of total annual

revenue and for serious **infringements** to the higher of 2.5 million euros or 5% of annual revenue.

- The **CNMV is named as the competent authority** with respect to the powers of authorisation, supervision, inspection and imposition of penalties contemplated in MiFIR and MiFID II, notwithstanding the remit of the Autonomous Communities with respect to purely regional securities markets.
- The Stock Exchanges of Madrid, Barcelona, Bilbao and Valencia, including the Electronic Trading Platform (SIBE for its acronym in Spanish) and the other regulated markets in existence at the date of effectiveness of the Royal Decree-law **are deemed automatically authorised.**
- The legislation has the effect of **repealing and amending** certain articles of Spain's Securities Market Act, which are now covered in the new Royal Decree-law.
- The Government is empowered to issue the implementing regulations needed to enact the provisions of the Royal Decree-law.

The **full transposition of MiFID II** into Spanish law requires a far-reaching overhaul of the consolidated text of the Securities Market Act which is currently in the **bill drafting** stage.

#### Bank of Spain Circular on public and confidential financial reporting requirements and financial statement templates (Bank of Spain Circular 4/2017, published in *Spain's Official State Gazette* on December 6<sup>th</sup>, 2017)

Circular 4/2017 adapts the accounting regime of Spanish credit institutions to the changes in the European accounting system resulting from the adoption of IFRS 15 and IFRS 9, which are applicable as of January 1<sup>st</sup>, 2018.

The main novelties introduced by Circular 4/2017, which repeals Circular 4/2004, are the amendments derived from **IFRS 9** in respect of the following:

- The financial asset impairment model changes from an incurred loss to an **expected loss** model.
- It introduces changes to the portfolios into which financial assets are classified for measurement purposes.
- It regulates **accounting hedges**.

The amendments deriving from the adoption of **IFRS 15** in turn imply a new **revenue recognition model**, based on: (i) identification of the performance obligations in each contract; (ii) determination of the transaction price; (iii) allocation of the price to the identified performance obligations; and, (iv) the recognition of revenue when control over the assets is transferred or as that transfer takes place, depending on whether this takes place at once or over time, respectively.

As for the Annexes to the Circular, changes are made to the public financial statements (Annexes 1, 2 and 3 of the Circular) and to the confidential statements (Annexes 4, 5 and 6) leaving unchanged the amendments made to Annex IX by virtue of Circular 4/2016 in respect of credit risk management, the classification of transactions, provisioning for individual and collective exposures and the measurement of foreclosed assets. However, the alternative solutions to the development of internal methodologies by the banks in order to collectively estimate provisions (the new expected loss model and back-testing against internal estimates) have been updated to factor in the Bank of Spain's most recent data and experience.

As for the **first-time application of the Circular to the banks' annual financial statements**, the transitional arrangement stipulates the **retrospective application** of the new financial instrument recognition and measurement rules (other than with respect to accounting hedges), fee and revenue recognition rules, subject to certain simplifications, and the **prospective application** (with the odd exception) of the hedge accounting rules, the new requirements regarding the derecognition of tangible assets and non-current assets held for sale and any other items not specifically covered in transitional provision one.

The **first set of public and confidential statements** which must be presented to the Bank of Spain using the new criteria are those corresponding to **January 31**<sup>st</sup>, **2018**. Exceptionally, the deadline for their presentation will coincide (except for the individual confidential statement known as the FI 103) with the **deadline for presenting the statements corresponding to February 28**<sup>th</sup>, **2018**. Elsewhere, the financial disclosures corresponding to **2017** will continue to be prepared using the criteria stipulated in Bank of Spain Circular 4/2004.

#### Notes

[1] Directive 2014/92/EU of the European Parliament and of the Council of July 23<sup>rd</sup>, 2014, on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features.

# Spanish economic forecasts panel: January 2018\*

Funcas Economic Trends and Statistics Department

#### 2017 GDP growth estimated at 3.1%

The consensus forecast for GDP growth in 2017 stands at 3.1%, unchanged with respect to the last Panel. Domestic demand is expected to contribute 2.5 percentage points and foreign demand the remaining 0.6 percentage points. According to these estimates, the Spanish economy will have grown by 0.7% during the fourth quarter of 2017 (Table 2).

## The forecast for 2018 is unchanged at 2.6%

There have been no changes in the average estimate for GDP growth in 2018, at 2.6%, or in any of its drivers. In this instance, domestic demand is expected to contribute 2.2 percentage points and foreign demand 0.4 percentage points. Growth is expected to be very even from one quarter to the next at around 0.6%, slowing slightly only in the last quarter.

## Inflation projections raised due to oil prices

In 2017, the annual rate of inflation averaged 2%, compared to -0.2% the previous year. The uptick was shaped primarily by the turnaround in energy prices, which went from falling by 8.6% in 2016 to registering growth of 8% in 2017, driven by higher oil prices. A barrel of Brent oil was 25% more expensive on average in 2017, offset only slightly by euro appreciation.

Oil prices have risen further throughout December and the initial weeks of January, pushing towards the 70 dollar-mark. As a result, the Panel analysts have raised their average forecast for annual inflation in 2018 by 0.1 percentage points, to 1.6%. The forecast for core inflation has been reduced by 0.2 percentage points since the last Panel to 1.2% The forecasts imply a year-on-year inflation rate in December of 1.5% (Table 3).

#### Slight slowdown in job creation in 2018

According to the Social Security contributor numbers, job creation once again registered strong growth in the fourth quarter, after having slowed in the third. Growth was 3.6% in 2017 as a whole, which is equivalent to 626,000 new contributors, one of the best performances in the series, which dates to 2000, and only surpassed in 2005 and 2006 due to the legalisation of undocumented workers.

In terms of full-time equivalent jobs, the growth in 2017 is estimated at 2.8% (unchanged from the last Panel) and is expected to slow to 2.3% in 2018 (up 0.1 percentage point relative to the last set of forecasts).

Based on the projections for growth in GDP, job creation and wage remuneration, it is possible to estimate growth in labour productivity and unit labour costs: the former is expected to register growth of 0.3% in both 2017 and 2018, while ULCs are expected to increase by 0.1% and 0.8% in 2017 and 2018, respectively.

The average annual unemployment rate fell to 17.1% in 2017 and is expected to decline to 15.3% in 2018 (no change from the last Panel).

## Another solid current account surplus expected in 2018

The current account surplus stood at 14.1 billion euros to October, compared to 15.2 billion euros in the same period of 2016. This slight decrease is attributable to the higher deficit in the goods trade balance, reflecting the rise in oil prices. The services trade surplus widened, while the income deficit narrowed year-on-year.

Consensus forecasts point to a surplus equivalent to 1.8% of GDP in 2017 and 1.6% in 2018.

## Spain will meet its public deficit target in 2017

In the first 10 months of 2017, the combined deficit of all levels of government (except for the local corporations) stood at 18.9 billion euros, down from 30.3 billion euros over the same period of 2016. Public revenues increased by 4.4%, while expenditure was virtually flat. The improvement is especially strong at the state level, but also at the regional level: on aggregate, the autonomous regions recorded a surplus in the first 10 months. By contrast, the Social Security Fund's deficit widened, albeit due to a reduction in the transfers received from the state's public employment service (SEPE for its acronym in Spanish). The Social Security System's deficit declined slightly, by close to 1 billion euros, despite intense growth in contributions, which barely outpaced the growth in benefits.

The consensus forecast for 2017 is for a fiscal deficit of 3.1% of GDP, *i.e.*, the analyst community is expecting Spain to deliver on its target. For 2018 panellists are forecasting a deficit of 2.4% of GDP, which is 0.2 percentage points above the target.

#### Bright prospects for the global economy

The international environment is favourable. The IMF is forecasting global growth of 3.6% in 2017 and of 3.7% in 2018, having raised its last estimates by 0.1 percentage points for both years. Moreover, growth was recorded in all of the major economies in 2017, with Argentina, Brazil, Nigeria and Russia emerging from recession. The European economy, particularly the eurozone, was one of the most surprising areas of growth. Prevailing momentum is expected to extend into this year, despite the uncertainty deriving from Brexit. The tensions evident in the commodities markets, particularly the gas, oil and metals markets, are not expected to significantly impact global growth.

Overall, virtually all of the Panel members expect the international climate to remain favourable in the months to come, both within the EU and outside it. Just one analyst is forecasting a downturn in the non-European environment (as was the case in the last Panel).

#### Long-term rates expected to move higher

There have been no major changes in monetary policy. The European Central Bank has decided to continue apace with its purchases of sovereign debt and corporate bonds. In addition, its key benchmark rates – the rates on the deposit facility, the main refinancing operations and the marginal lending facility – remain at the historically-low levels attained in March 2016. As a result, 3-month Euribor (the interest rate that serves as a reference for the cost of short-term interbank lending) also remains at an all-time series low of around -0.33%. All Panel members view this level as low and the majority believe that these favourable credit conditions will continue in the months to come (no change from the last Panel).

The yield on the 10-year Spanish bond has fallen slightly since our last publication, to around 1.5%. The risk premium over the German Bund has narrowed slightly, to 100 basis points. Nearly all the Panel members consider that long-term interest rates remain low. However, the majority expect bond yields to rise in the coming months (as was the case in our last publication).

#### Euro appreciation against the dollar

The euro has appreciated considerably against the US dollar, trading at close to 1.23 dollars, up from 1.18 dollars at the date of the last publication. The improved outlook for the European economy, the expectation that the ECB might scale down its expansionary policies slightly earlier than previously thought and the dissipation of political risk in the eurozone may well be behind this trend.

Most of the analysts believe that the euro is trading at close to equilibrium levels and that it will stay steady in the months to come. However, whereas some analysts are forecasting further appreciation, no panellists expect depreciation.

# Neutral fiscal policy and expansionary monetary policy

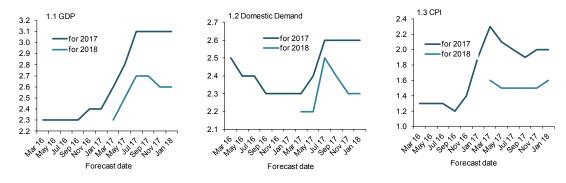
The analysts' assessment of prevailing macroeconomic policies is unchanged since our last publication. The majority believe that fiscal policy is neutral and that this is the correct stance. Some call for a more restrictive fiscal policy.

As for monetary policy, all of the analysts continue to view it as expansionary. None of the analysts are expecting monetary tightening in the coming months, as was the case in our last Panel publication.

#### Exhibit 1

#### Change in forecasts (Consensus values)

Percentage annual change



Source: Funcas Panel of forecasts.

\* The Spanish economic forecasts panel is a survey run by Funcas which consults the 17 research departments listed in Table 1. The survey, which dates back to 1999, is published bi-monthly in the first fortnights of January, March, May, July, September and November. The responses to the survey are used to produce a "consensus" forecast, which is calculated as the arithmetic mean of the 17 individual contributions. The forecasts of the Spanish Government, the Bank of Spain, and the main international organisations are also included for comparison, but do not form part of the consensus forecast.

# Spanish economic forecasts panel: January 2018\*

Funcas Economic Trends and Statistics Department

#### Table 1

#### **Economic Forecasts for Spain – January 2018**

Average year-on-year change, as a percentage, unless otherwise stated

|   | GDP  |      | Household consumption |      | Public<br>consumption |      | Gross fixed capital formation |      | GFCF<br>machinery and<br>capital goods |      | GFCF<br>construction |      | Domestic<br>demand |      |
|---|------|------|-----------------------|------|-----------------------|------|-------------------------------|------|--|------|----------------------|------|--------------------|------|
|   | 2017 | 2018 | 2017                  | 2018 | 2017                  | 2018 | 2017                          | 2018 | 2017                                   | 2018 | 2017                 | 2018 | 2017               | 2018 |
| Analistas Financieros<br>Internacionales (AFI)            | 3.1  | 2.8  | 2.4                   | 2.0  | 1.0                   | 1.0  | 4.8                           | 4.4  | 5.6                                    | 5.5  | 4.5                  | 4.2  | 2.5                | 2.2  |
| Axesor  | 3.1  | 2.5  | 2.5                   | 2.0  | 1.2                   | 1.6  | 3.9                           | 2.6  | 4.9                                    | 2.0  | 3.3                  | 3.2  | 2.6                | 2.1  |
| Banco Bilbao Vizcaya Argentaria<br>(BBVA)                 | 3.1  | 2.5  | 2.6                   | 2.1  | 1.3                   | 1.8  | 4.7                           | 3.6  | 5.6                                    | 2.8  | 4.5                  | 3.8  | 2.6                | 2.3  |
| Bankia  | 3.2  | 3.0  | 2.5                   | 2.5  | 1.1                   | 1.4  | 4.8                           | 4.5  | 5.8                                    | 5.1  | 4.5                  | 4.3  | 2.7                | 2.7  |
| CaixaBank   | 3.1  | 2.4  | 2.4                   | 2.0  | 1.2                   | 1.0  | 4.8                           | 3.2  | 5.8                                    | 3.4  | 4.3                  | 2.9  | 2.6                | 2.1  |
| Cámara de Comercio<br>de España                           | 3.1  | 2.4  | 2.5                   | 2.5  | 1.1                   | 0.8  | 4.3                           | 3.6  | 5.9                                    | 5.3  | 3.8                  | 3.0  | 2.6                | 2.4  |
| Cemex   | 3.1  | 2.7  | 2.5                   | 2.6  | 1.0                   | 1.1  | 4.9                           | 3.9  | 5.9                                    | 4.0  | 4.6                  | 4.2  | 2.6                | 2.5  |
| Centro de Estudios Economía de<br>Madrid (CEEM-URJC)      | 3.1  | 2.5  | 2.4                   | 2.1  | 1.0                   | 1.2  | 4.4                           | 4.2  | 4.9                                    | 4.1  | 4.3                  | 4.8  | 2.6                | 2.3  |
| Centro de Predicción Económica<br>(CEPREDE-UAM)           | 3.1  | 2.5  | 2.4                   | 2.1  | 1.0                   | 1.2  | 4.9                           | 4.1  | 5.8                                    | 4.1  | 4.4                  | 3.5  | 2.6                | 2.3  |
| CEOE  | 3.1  | 2.5  | 2.4                   | 2.1  | 1.0                   | 0.9  | 4.7                           | 2.8  | 5.5                                    | 3.3  | 4.3                  | 2.3  | 2.5                | 2.0  |
| Funcas  | 3.1  | 2.6  | 2.5                   | 2.2  | 1.0                   | 1.0  | 4.9                           | 5.6  | 5.9                                    | 5.4  | 4.3                  | 5.6  | 2.7                | 2.5  |
| Instituto Complutense de Análisis<br>Económico (ICAE-UCM) | 3.1  | 2.5  | 2.6                   | 2.3  | 1.1                   | 0.8  | 4.5                           | 3.7  | 5.5                                    | 3.8  | 4.2                  | 3.9  | 2.6                | 2.3  |
| Instituto de Estudios Económicos<br>(IEE)                 | 3.2  | 2.7  | 2.5                   | 2.6  | 1.2                   | 1.0  | 5.0                           | 4.3  | 5.5                                    | 4.1  | 4.4                  | 4.6  | 2.8                | 2.7  |
| Intermoney  | 3.1  | 2.6  | 2.5                   | 2.2  | 1.2                   | 0.9  | 5.0                           | 3.5  | 5.5                                    | 3.9  | 4.6                  | 3.1  | 2.6                | 2.2  |
| Repsol  | 3.1  | 2.4  | 2.5                   | 2.0  | 1.2                   | 0.9  | 4.9                           | 3.6  | 6.1                                    | 6.1  | 4.3                  | 1.6  | 2.6                | 2.1  |
| Santander   | 3.1  | 2.7  | 2.5                   | 2.4  | 1.1                   | 0.9  | 5.1                           | 4.1  | 6.4                                    | 4.8  | 4.5                  | 3.6  | 2.7                | 2.5  |
| Solchaga Recio & asociados                                | 3.1  | 2.6  | 2.5                   | 2.1  | 1.0                   | 0.8  | 4.6                           | 4.2  | 5.3                                    | 4.6  | 4.3                  | 4.5  | 2.7                | 2.3  |
| CONSENSUS (AVERAGE)                                       | 3.1  | 2.6  | 2.5                   | 2.2  | 1.1                   | 1.1  | 4.7                           | 3.9  | 5.6                                    | 4.2  | 4.3                  | 3.7  | 2.6                | 2.3  |
| Maximum   | 3.2  | 3.0  | 2.6                   | 2.6  | 1.3                   | 1.8  | 5.1                           | 5.6  | 6.4                                    | 6.1  | 4.6                  | 5.6  | 2.8                | 2.7  |
| Minimum   | 3.1  | 2.4  | 2.4                   | 2.0  | 1.0                   | 0.8  | 3.9                           | 2.6  | 4.9                                    | 2.0  | 3.3                  | 1.6  | 2.5                | 2.0  |
| Change on 2 months earlier <sup>1</sup>                   | 0.0  | 0.0  | 0.0                   | 0.0  | 0.0                   | 0.0  | 0.4                           | 0.2  | 0.4                                    | 0.2  | 0.3                  | 0.0  | 0.0                | 0.0  |
| - Rise <sup>2</sup>                                       | 2    | 3    | 0                     | 2    | 2                     | 2    | 13                            | 8    | 12                                     | 9    | 9                    | 6    | 6                  | 5    |
| - Drop <sup>2</sup>                                       | 3    | 0    | 7                     | 4    | 4                     | 5    | 0                             | 4    | 0                                      | 2    | 2                    | 5    | 1                  | 2    |
| Change on 6 months earlier <sup>1</sup>                   | 0.0  | -0.1 | -0.1                  | -0.2 | 0.2                   | 0.0  | 0.4                           | -0.3 | 0.4                                    | -0.5 | 0.7                  | -0.2 | 0.0                | -0.2 |
| Memorandum items:   |      |      |                       |      |                       |      |                               |      |  |      |                      |      |                    |      |
| Government (October 2017)                                 | 3.1  | 2.3  | 2.5                   | 1.8  | 0.9                   | 0.7  | 4.2                           | 3.4  |  |      |                      |      |                    |      |
| Bank of Spain<br>(December 2017)                          | 3.1  | 2.4  | 2.4                   | 1.9  | 1.1                   | 0.9  | 5.0                           | 4.0  | 5.9                                    | 4.4  | 4.5                  | 3.8  |                    |      |
| EC (November 2017)  | 3.1  | 2.5  | 2.6                   | 2.2  | 0.9                   | 0.8  | 4.1                           | 4.0  | 5.1                                    | 4.5  | 3.8                  | 4.0  | 2.5                | 2.3  |
| IMF (October 2017)  | 3.1  | 2.5  | 2.6                   | 2.4  | 0.9                   | 0.4  |                               |      |  |      |                      |      | 2.6                | 2.2  |
| OECD (November 2017)                                      | 3.1  | 2.3  | 2.6                   | 2.0  | 1.0                   | 0.8  | 4.3                           | 3.4  |  |      |                      |      | 2.6                | 2.1  |

<sup>1</sup> Difference in percentage points between the current month's average and that of two months earlier (or six months earlier).

<sup>2</sup> Number of panellists revising their forecast upwards (or downwards) since two months earlier.

#### Table 1 (continued)

#### **Economic Forecasts for Spain – January 2018**

Average year-on-year change, as a percentage, unless otherwise stated

|   | Expo<br>goo<br>serv |      | goo  | orts of<br>ds &<br>vices | & (annual av.) |      |      | Labour costs <sup>3</sup> |      | Jobs⁴ |      | Unempl.<br>(% labour force) |      | C/A b<br>payment<br>GD | :s (% of           |                    |      |      |
|---|---------------------|------|------|--------------------------|----------------|------|------|---------------------------|------|-------|------|-----------------------------|------|------------------------|--------------------|--------------------|------|------|
|   | 2017                | 2018 | 2017 | 2018                     | 2017           | 2018 | 2017 | 2018                      | 2017 | 2018  | 2017 | 2018                        | 2017 | 2018                   | 2017               | 2018               | 2017 | 2018 |
| Analistas Financieros<br>Internacionales (AFI)            | 5.3                 | 5.3  | 4.0  | 4.0                      | 2.0            | 1.8  | 1.1  | 1.3                       | 1.2  | 1.4   | 2.6  | 2.4                         | 17.1 | 15.1                   | 1.9                | 1.8                | -3.1 | -2.6 |
| Axesor  | 6.1                 | 4.4  | 4.6  | 3.1                      | 2.1            | 1.4  | 1.2  | 1.5                       | 1.0  | 1.2   | 2.7  | 2.0                         | 17.0 | 15.2                   | 1.5                | 1.0                | -3.1 | -2.6 |
| Banco Bilbao Vizcaya Argentaria<br>(BBVA)                 | 5.0                 | 4.3  | 3.8  | 3.8                      | 1.9            | 1.4  | 1.1  | 1.3                       | 0.1  | 1.4   | 2.8  | 2.1                         | 17.1 | 15.5                   | 1.8                | 1.5                | -3.1 | -2.4 |
| Bankia  | 5.4                 | 4.9  | 3.9  | 4.2                      | 2.0            | 1.8  | 1.1  | 1.3                       | 0.5  | 1.4   | 2.8  | 2.5                         | 17.1 | 15.0                   | 2.0                | 1.9                |      |      |
| CaixaBank   | 5.2                 | 4.I  | 4.0  | 3.2                      | 2.0            | 1.6  | 1.1  | 1.2                       | 0.1  | 1.1   | 2.9  | 2.1                         | 17.1 | 15.4                   | 1.8                | 1.7                | -3.1 | -2.5 |
| Cámara de Comercio<br>de España                           | 6.5                 | 5.0  | 4.5  | 4.0                      | 2.1            | 1.5  | 1.2  | 1.3                       |      |       | 2.8  | 2.2                         | 17.1 | 15.2                   | 1.6                | 1.6                | -3.1 | -2.2 |
| Cemex   | 5.2                 | 4.5  | 3.9  | 4.2                      | 2.0            | 1.5  | 1.1  | 1.3                       |      |       | 2.6  | 2.3                         | 17.2 | 15.4                   | 1.5                | 1.5                | -3.0 | -2.2 |
| Centro de Estudios Economía de<br>Madrid (CEEM-URJC)      | 5.2                 | 4.5  | 3.9  | 4.2                      | 2.0            | 1.8  | 1.1  | 1.5                       |      |       | 2.9  | 2.2                         | 17.0 | 14.9                   | 1.8                | 1.7                | -3.1 | -2.4 |
| Centro de Predicción Económica<br>(CEPREDE-UAM)           | 5.1                 | 4.2  | 3.8  | 3.9                      | 2.0            | 1.6  |      |                           | 0.2  | 1.1   | 2.8  | 2.1                         | 17.1 | 15.5                   | 1.8                | 1.3                | -3.0 | -2.3 |
| CEOE  | 5.4                 | 5.2  | 3.9  | 3.9                      | 2.0            | 1.1  | 1.0  | 0.7                       | 0.2  | 0.8   | 2.8  | 2.3                         | 17.1 | 15.0                   | 1.7                | 1.6                | -3.1 | -2.5 |
| Funcas  | 5.2                 | 5.0  | 4.1  | 4.9                      | 2.0            | 1.6  | 1.0  | 1.2                       | 0.1  | 1.0   | 2.9  | 2.3                         | 17.1 | 15.1                   | 1.8                | 1.6                | -3.1 | -2.2 |
| Instituto Complutense de Análisis<br>Económico (ICAE-UCM) | 5.7                 | 4.7  | 4.5  | 4.6                      | 1.9            | 1.3  | 1.1  | 1.3                       |      |       | 2.8  | 2.2                         | 17.2 | 15.5                   | 1.8                | 1.6                | -3.1 | -2.3 |
| Instituto de Estudios Económicos<br>(IEE)                 | 5.1                 | 5.6  | 4.0  | 5.8                      | 1.9            | 1.6  | 1.1  | 0.8                       | 0.4  | 0.7   | 2.8  | 2.4                         | 17.2 | 15.5                   | 1.8                | 1.4                | -3.0 | -2.3 |
| Intermoney  | 5.2                 | 4.6  | 4.1  | 3.7                      | 1.9            | 1.6  | 1.2  | 1.5                       |      |       | 2.8  | 2.3                         | 17.2 | 15.2                   | 1.8                | 1.6                | -3.1 | -2.3 |
| Repsol  | 5.2                 | 3.3  | 4.0  | 2.8                      | 2.0            | 1.5  | 1.2  | 1.3                       | 0.1  | 0.8   | 2.8  | 2.2                         | 17.1 | 15.6                   | 1.8                | 1.6                | -3.I | -2.2 |
| Santander   | 5.1                 | 3.5  | 4.0  | 3.0                      | 2.0            | 1.7  | 1.1  | 1.1                       | 0.3  | 1.6   | 2.7  | 2.3                         | 17.1 | 15.2                   | 2.0                | 1.8                | -3.1 | -2.8 |
| Solchaga Recio & asociados                                | 5.1                 | 4.6  | 3.9  | 3.9                      | 2.0            | 1.6  | 1.1  | 1.3                       |      |       | 2.9  | 2.3                         | 17.3 | 15.3                   | 1.8                | 1.7                | -3.1 | -2.4 |
| CONSENSUS (AVERAGE)                                       | 5.4                 | 4.6  | 4.0  | 3.9                      | 2.0            | 1.6  | 1.1  | 1.2                       | 0.4  | 1.1   | 2.8  | 2.3                         | 17.1 | 15.3                   | 1.8                | ۱.6                | -3.1 | -2.4 |
| Maximum   | 6.5                 | 5.6  | 4.6  | 5.8                      | 2.1            | 1.8  | 1.2  | 1.5                       | 1.2  | 1.6   | 2.9  | 2.5                         | 17.3 | 15.6                   | 2.0                | 1.9                | -3.0 | -2.2 |
| Minimum   | 5.0                 | 3.3  | 3.8  | 2.8                      | 1.9            | 1.1  | 1.0  | 0.7                       | 0.1  | 0.7   | 2.6  | 2.0                         | 17.0 | 14.9                   | 1.5                | 1.0                | -3.1 | -2.8 |
| Change on 2 months earlier <sup>1</sup>                   | -0.3                | 0.0  | -0.4 | 0.0                      | 0.0            | 0.1  | -0.1 | -0.2                      | -0.1 | 0.0   | 0.0  | 0.1                         | 0.0  | 0.0                    | 0.1                | 0.0                | 0.0  | 0.0  |
| - Rise <sup>2</sup>                                       | 2                   | 4    | 2    | 3                        | 7              | 7    | 0    | 0                         | Т    | I     | 2    | 4                           | 2    | 2                      | 3                  | 2                  | 6    | 2    |
| - Drop <sup>2</sup>                                       | Ш                   | 6    | 9    | 6                        | I              | 2    | 6    | 7                         | 6    | 3     | 0    | I                           | 4    | 5                      | 0                  | 3                  | 0    | I    |
| Change on 6 months earlier <sup>1</sup>                   | -1.5                | -0.3 | -1.6 | -0.6                     | 0.0            | 0.1  | 0.0  | -0.2                      | -0.5 | -0.3  | 0.1  | 0.0                         | -0.2 | -0.1                   | 0.0                | -0.1               | 0.1  | 0.0  |
| Memorandum items:   |                     |      |      |                          |                |      |      |                           |      |       |      |                             |      |                        |                    |                    |      |      |
| Government (October 2017)                                 | 6.2                 | 5.I  | 4.4  | 4.1                      |                |      |      |                           | 1.1  | 1.1   | 2.9  | 2.4                         | 17.2 | 15.5                   | 1.7                | 1.6                | -3.I | -2.2 |
| Bank of Spain<br>(December 2017)                          | 5.2                 | 4.9  | 4.1  | 4.1                      | 2.0            | 1.5  | 1.1  | 1.2                       |      |       | 2.9  | 2.3                         | 17.0 | 14.9                   | 2.1 <sup>(6)</sup> | 2.1 <sup>(6)</sup> | -3.2 | -2.5 |
| EC (November 2017)  | 6.0                 | 4.8  | 4.4  | 4.3                      | 2.0            | 1.4  |      |                           | 0.5  | 1.2   | 2.7  | 2.1                         | 17.4 | 15.6                   | 1.7                | 1.9                | -3.1 | -2.4 |
| IMF (October 2017)  | 5.9                 | 4.8  | 4.7  | 4.2                      | 2.0            | 1.5  |      |                           |      |       | 2.8  | 1.7                         | 17.1 | 15.6                   | 1.9                | 2.0                | -3.2 | -2.5 |
| OECD (November 2017)                                      | 6.0                 | 4.6  | 4.6  | 4.0                      | 2.0            | 1.3  |      |                           |      |       | 2.7  | 2.4                         | 17.2 | 15.4                   | 1.6                | 1.6                | -3.2 | -2.4 |

<sup>1</sup> Difference in percentage points between the current month's average and that of two months earlier (or six months earlier).

<sup>4</sup> In National Accounts terms: full-time equivalent jobs.

<sup>5</sup> Current account balance, according to Bank of Spain estimates.

<sup>2</sup> Number of panellists revising their forecast upwards (or downwards) since two months earlier.

<sup>3</sup> Average earnings per full-time equivalent job.

<sup>6</sup> Net lending position vis-à-vis rest of world.

7 Excluding financial entities bail-out expenditures.

#### Table 2

#### **Quarterly Forecasts – January 20181**

|                                    |       | Qua    | arter-on-q | uarter ch | ange (pe | ercentage | <del>?</del> ) |        |
|------------------------------------|-------|--------|------------|-----------|----------|-----------|----------------|--------|
|                                    | 17-IQ | 17-IIQ | 17-IIIQ    | 17-IVQ    | 18-IQ    | 18-IIQ    | 18-IIIQ        | 18-IVQ |
| GDP <sup>2</sup>                   | 0.8   | 0.9    | 0.8        | 0.7       | 0.6      | 0.6       | 0.6            | 0.5    |
| Household consumption <sup>2</sup> | 0.6   | 0.7    | 0.7        | 0.6       | 0.5      | 0.5       | 0.5            | 0.4    |

 $^{\rm 1}$  Average of forecasts by private institutions listed in Table 1.  $^{\rm 2}$  According to series corrected for seasonality and labour calendar.

#### Table 3

#### CPI Forecasts – January 2018<sup>1</sup>

|        | Monthly o | change (%) |        | Year-on-year chang |        |  |  |  |
|--------|-----------|------------|--------|--------------------|--------|--|--|--|
| Dec-17 | Jan-18    | Feb-18     | Mar-18 | Dec-17             | Dec-18 |  |  |  |
| 0.0    | -0.5      | 0.1        | 0.4    | 1.1                | 1.5    |  |  |  |

<sup>1</sup> Average of forecasts by private institutions listed in Table 1.

#### Table 4

#### **Opinions – January 2018**

Number of responses

|  |                         | Currently           | у                             | Trend        | for next six | months       |
|--|-------------------------|---------------------|-------------------------------|--------------|--------------|--------------|
|  | Favourable              | Neutral             | Unfavourable                  | Improving    | Unchanged    | Worsening    |
| International context: EU                            | 16                      | 1                   | 0                             | 2            | 15           | 0            |
| International context: Non-EU                        | 15                      | 2                   | 0                             | 2            | 14           | 1            |
|  | Low <sup>1</sup>        | Normal <sup>1</sup> | High <sup>1</sup>             | Increasing   | Stable       | Decreasing   |
| Short-term interest rate <sup>2</sup>                | 17                      | 0                   | 0                             | 2            | 15           | 0            |
| Long-term interest rate <sup>3</sup>                 | 16                      | 1                   | 0                             | 10           | 7            | 0            |
|  | Overvalued <sup>4</sup> | Normal <sup>4</sup> | Undervalued <sup>4</sup>      | Appreciation | Stable       | Depreciation |
| Euro/dollar exchange rate                            | 1                       | 15                  | 1                             | 5            | 12           | 0            |
|  |                         | Is being            | 3                             |              | Should be    |              |
|  | Restrictive             | Neutral             | Expansionary                  | Restrictive  | Neutral      | Expansionary |
| Fiscal policy assessment <sup>1</sup>                | 0                       | 13                  | 4                             | 5            | 11           | 1            |
| Monetary policy assessment <sup>1</sup>              | 0                       | 0                   | 17                            | 0            | 6            | 11           |
| <sup>1</sup> In relation to the current state of the | Spanish economy         |                     | <sup>3</sup> Yield on Spanish |              |              |              |

<sup>2</sup> Three-month Euribor.

<sup>4</sup> Relative to theoretical equilibrium rate.



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# **Economic Indicators**

#### Table 1

#### National accounts: GDP and main expenditure components SWDA\* (ESA 2010, Base 2010) Forecasts in yellow

|              |      |                                     |                        |             | G             | ross fixed c | apital form | ation                  |                             |             |              |                        |             |
|--------------|------|-------------------------------------|------------------------|-------------|---------------|--------------|-------------|------------------------|-----------------------------|-------------|--------------|------------------------|-------------|
|              |      | GDP                                 | Private<br>consumption | Public      |               |              | Construct   | tion                   | Equipment & others products | Exports     | Imports      | Domestic<br>demand (a) | Net exports |
|              |      |                                     | consumption            | consumption | Total         |              |             | Other<br>constructions | otners products             |             |              | demand (a)             | (a)         |
|              |      |                                     |                        | Chair       | n-linked volu | mes, quarte  | er-on-quart | er percentage o        | hanges, at annual           | rate        |              |                        |             |
| 2010         |      | 0.0                                 | 0.3                    | 1.5         | -4.9          | -10.1        | -11.6       | -8.5                   | 5.4                         | 9.4         | 6.9          | -0.5                   | 0.5         |
| 2011         |      | -1.0                                | -2.4                   | -0.3        | -6.9          | -11.7        | -13.3       | -10.2                  | 0.9                         | 7.4         | -0.8         | -3.1                   | 2.1         |
| 2012         |      | -2.9                                | -3.5                   | -4.7        | -8.6          | -12.3        | -10.3       | -13.9                  | -3.5                        | 1.1         | -6.4         | -5.1                   | 2.2         |
| 2013         |      | -1.7                                | -3.1                   | -2.1        | -3.4          | -8.6         | -10.2       | -7.3                   | 2.8                         | 4.3         | -0.5         | -3.2                   | 1.5         |
| 2014         |      | 1.4                                 | 1.5                    | -0.3        | 4.7           | 4.2          | 11.3        | -1.1<br>7.9            | 5.2                         | 4.3         | 6.6          | 1.9                    | -0.5        |
| 2015<br>2016 |      | 3.4                                 | 3.0<br>3.0             | 2.1         | 6.5           | 3.8<br>2.4   | -1.0        | 7.9<br>0.9             | 9.4<br>4.2                  | 4.2         | 5.9<br>2.7   | 3.9<br>2.5             | -0.4<br>0.7 |
| 2016         |      | 3.3<br>3.1                          | 2.5                    | 0.8         | 3.3<br>4.9    | 4.3          | 4.4<br>7.9  | 1.1                    | 4.2                         | 4.8<br>5.2  | 4.1          | 2.5                    | 0.7         |
| 2017         |      | 2.6                                 | 2.2                    | 1.0         | 5.6           |              | 8.3         | 3.1                    | 5.5                         | 5.0         | 4.9          | 2.6                    | 0.2         |
| 2016         | 1    | 3.5                                 | 3.3                    | 1.6         | 4.3           | 2.2          | 3.9         | 0.7                    | 6.4                         | 4.5         | 3.6          | 3.1                    | 0.4         |
| 2010         |      | 3.4                                 | 3.2                    | 0.9         | 3.6           | 2.3          | 3.4         | 1.5                    | 4.9                         | 6.2         | 4.8          | 2.9                    | 0.5         |
|              |      | 3.2                                 | 2.8                    | 0.8         | 2.7           | 2.1          | 4.6         | 0.2                    | 3.4                         | 3.8         | 0.8          | 2.2                    | 1.0         |
|              | IV   | 3.0                                 | 2.8                    | 0.0         | 2.7           | 3.1          | 5.6         | 1.1                    | 2.4                         | 4.5         | 1.6          | 2.0                    | 1.0         |
| 2017         | I    | 3.0                                 | 2.3                    | 0.7         | 4.8           | 4.1          | 5.8         | 2.6                    | 5.5                         | 6.5         | 4.9          | 2.4                    | 0.7         |
|              | П    | 3.1                                 | 2.5                    | 1.1         | 3.8           | 4.0          | 7.9         | 0.7                    | 3.6                         | 4.4         | 2.3          | 2.3                    | 0.8         |
|              | Ш    | 3.1                                 | 2.4                    | 1.0         | 5.4           | 4.9          | 8.6         | 1.6                    | 6.0                         | 4.9         | 4.0          | 2.7                    | 0.4         |
|              | IV   | 3.2                                 | 2.7                    | 1.2         | 5.5           | 4.1          | 9.3         | -0.4                   | 6.8                         | 5.2         | 5.1          | 3.0                    | 0.2         |
| 2018         | 1    | 3.1                                 | 2.7                    | 1.0         | 4.4           | 3.5          | 6.5         | 0.7                    | 5.4                         | 3.3         | 2.5          | 2.7                    | 0.3         |
|              | Ш    | 2.8                                 | 2.3                    | 0.8         | 5.6           | 4.6          | 7.6         | 1.7                    | 6.6                         | 4.8         | 4.8          | 2.6                    | 0.1         |
|              | III  | 2.5                                 | 2.0                    | 0.8         | 5.8           | 6.6          | 9.9         | 3.5                    | 5.0                         | 6.4         | 6.3          | 2.3                    | 0.2         |
|              | IV   | 2.1                                 | 1.7                    | 1.4         | 6.4           | 7.7          | 8.9         | 6.5                    | 5.1                         | 5.7         | 6.0          | 2.1                    | 0.1         |
|              |      |                                     |                        |             |               |              |             |                        | hanges, at annual           |             |              |                        |             |
| 2016         | 1    | 3.0                                 | 3.9                    | 0.3         | 2.6           | 4.6          | 16.2        | -4.1                   | 0.6                         | 5.7         | 3.2          | 2.2                    | 0.9         |
|              | "    | 3.2                                 | 2.5                    | 0.0         | 6.5           | 4.7          | -1.8        | 10.5                   | 8.2                         | 8.8         | 7.7          | 2.6                    | 0.5         |
|              | III  | 2.9                                 | 3.1                    | 2.0         | -1.0          | -2.1         | 0.5         | -4.2                   | 0.1                         | -2.1        | -6.4         | 1.5                    | 1.4         |
| 2017         | IV   | 2.8                                 | 1.5                    | -2.2        | 3.1           | 5.4          | 8.4         | 2.9                    | 0.8                         | 6.1         | 2.4          | 1.5                    | 1.3         |
| 2017         | <br> | 3.2<br>3.5                          | 2.3<br>3.0             | 3.2<br>1.6  | 11.1<br>2.5   | 8.9<br>4.2   | 17.3<br>6.1 | 1.8<br>2.6             | 13.3<br>0.7                 | 13.6<br>0.6 | 17.3<br>-2.6 | 3.8<br>2.5             | -0.6<br>1.0 |
|              |      | 3.5                                 | 2.8                    | 1.6         | 2.5<br>5.2    | 4.2          | 3.0         | -0.8                   | 9.5                         | -0.1        | -2.6         | 3.1                    | 0.0         |
|              | IV   | 3.0                                 | 3.0                    | -1.5        | 3.3           | 2.5          | 11.1        | -5.0                   | 4.1                         | 7.2         | -0.1         | 2.1                    | 0.9         |
| 2018         | 1    | 2.6                                 | 2.1                    | 2.4         | 6.8           | 6.3          | 6.0         | 6.5                    | 7.4                         | 5.5         | 6.2          | 2.1                    | 0.1         |
| 2010         | i.   | 2.3                                 | 1.6                    | 1.0         | 6.9           | 8.6          | 10.7        | 6.5                    | 5.3                         | 6.7         | 6.4          | 2.0                    | 0.3         |
|              |      | 2.1                                 | 1.5                    | 1.2         | 6.3           | 9.2          | 12.0        | 6.5                    | 3.5                         | 6.0         | 5.7          | 1.8                    | 0.3         |
|              | IV   | 1.5                                 | 1.6                    | 1.2         | 5.5           | 6.8          | 7.0         | 6.5                    | 4.3                         | 4.5         | 5.6          | 1.7                    | -0.2        |
|              |      | Current<br>prices (EUR<br>billions) |                        |             |               |              | Percenta    | ge of GDP at c         | urrent prices               |             |              |                        |             |
| 2010         |      | 1,080.9                             | 57.2                   | 20.5        | 23.0          | 14.3         | 6.9         | 7.4                    | 8.7                         | 25.5        | 26.8         | 101.3                  | -1.3        |
| 2011         |      | 1,070.4                             | 57.8                   | 20.5        | 21.5          | 12.5         | 5.7         | 6.8                    | 9.0                         | 28.9        | 29.2         | 100.2                  | -0.2        |
| 2012         |      | 1,039.8                             | 58.8                   | 19.7        | 19.8          | 10.9         | 4.9         | 6.0                    | 8.9                         | 30.7        | 29.2         | 98.5                   | 1.5         |
| 2013         |      | 1,025.7                             | 58.3                   | 19.7        | 18.8          | 9.7          | 4.1         | 5.6                    | 9.0                         | 32.2        | 29.0         | 96.7                   | 2.2         |
| 2014         |      | 1,037.8                             | 58.6                   | 19.5        | 19.3          | 9.9          | 4.5         | 5.4                    | 9.4                         | 32.7        | 30.3         | 97.6                   | 2.4         |
| 2015         |      | 1,080.0                             | 58.0                   | 19.3        | 19.8          | 10.0         | 4.4         | 5.5                    | 9.9                         | 32.9        | 30.7         | 97.7                   | 2.3         |
| 2016         |      | 1,118.5                             | 57.6                   | 18.9        | 20.0          | 10.0         | 4.6         | 5.3                    | 10.0                        | 32.9        | 29.9         | 97.0                   | 3.0         |
| 2017         |      | 1,166.9                             | 57.7                   | 18.4        | 20.5          | 10.4         | 5.1         | 5.3                    | 10.2                        | 34.1        | 31.2         | 97.0                   | 3.0         |
| 2018         |      | 1,211.2                             | 57.6                   | 18.0        | 21.6          | 11.0         | 5.6         | 5.4                    | 10.5                        | 35.2        | 32.6         | 97.4                   | 2.6         |
|              |      |                                     |                        |             |               |              |             |                        |                             |             |              |                        |             |

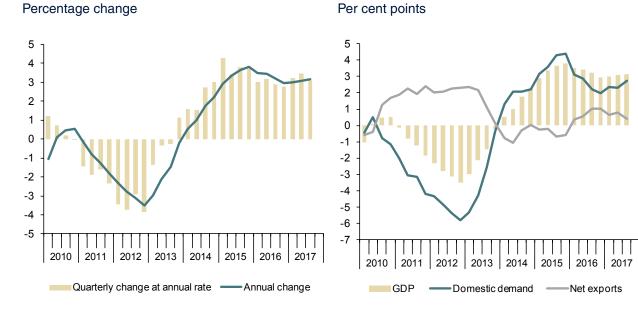
\*Seasonally and Working Day Adjusted.

(a) Contribution to GDP growth.

Source: INE (Quarterly National Accounts) and Funcas (Forecasts).

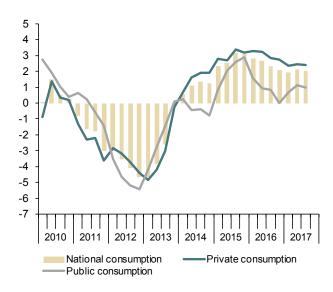
Chart 1.1 - GDP

#### Chart 1.2 - Contribution to GDP annual growth

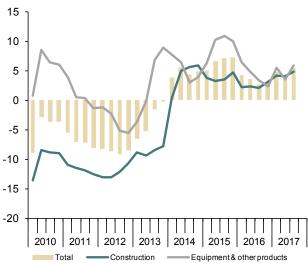


#### Chart 1.3 - Final consumption

#### Percentage change



### Chart 1.4 - Gross fixed capital formation Percentage change



### Per cent points

#### Table 2

### National accounts: Gross value added by economic activity SWDA\* (ESA 2010, Base 2010)

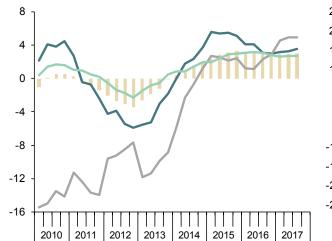
|      |    | Gross value added at basic prices  |                                      |               |                    |                    |                   |   |                |                                    |  |  |  |
|------|----|------------------------------------|--------------------------------------|---------------|--------------------|--------------------|-------------------|---|----------------|------------------------------------|--|--|--|
|      |    |                                    |                                      | Ir            | ndustry            |                    |                   |   |                |                                    |  |  |  |
|      |    | Total                              | Agriculture, forestry<br>and fishing | Total         | Manufacturing      | Construction       | Total             | Public administration,<br>health, education | Other services | Taxes less subsidie<br>on products |  |  |  |
|      |    |                                    |                                      | (             | Chain-linked volum | es, annual percent | age changes       |   |                |                                    |  |  |  |
| 2010 |    | 0.0                                | 2.1                                  | 3.6           | 0.0                | -14.5              | 1.3               | 1.5   | 3.9            | 0.1                                |  |  |  |
| 2011 |    | -0.6                               | 4.4                                  | -0.2          | -1.3               | -12.8              | 0.7               | -0.1  | -0.2           | -5.5                               |  |  |  |
| 2012 |    | -2.8                               | -9.7                                 | -4.9          | -5.2               | -8.8               | -1.5              | -1.9  | 1.6            | -4.0                               |  |  |  |
| 2013 |    | -1.5                               | 13.6                                 | -3.9          | -0.2               | -10.5              | -0.6              | -1.7  | 3.3            | -4.3                               |  |  |  |
| 2014 |    | 1.1                                | -1.2                                 | 2.0           | 3.0                | -2.0               | 1.3               | -0.8  | 2.0            | 4.0                                |  |  |  |
| 2015 |    | 2.9                                | -2.4                                 | 5.4           | 7.8                | 2.4                | 2.6               | 2.2   | 2.7            | 8.6                                |  |  |  |
| 2016 |    | 3.2                                | 6.9                                  | 3.6           | 3.5                | 1.9                | 3.0               | 2.0   | 3.4            | 4.4                                |  |  |  |
| 2015 | IV | 3.3                                | 4.2                                  | 5.1           | 7.8                | 2.5                | 3.0               | 3.3   | 2.9            | 8.5                                |  |  |  |
| 2016 | I  | 3.3                                | 7.9                                  | 4.0           | 5.2                | 1.2                | 3.0               | 2.4   | 3.3            | 5.9                                |  |  |  |
|      | П  | 3.3                                | 7.3                                  | 4.1           | 4.0                | 1.2                | 3.2               | 2.3   | 3.5            | 4.5                                |  |  |  |
|      | Ш  | 3.2                                | 7.4                                  | 3.1           | 2.7                | 2.3                | 3.1               | 2.0   | 3.4            | 3.7                                |  |  |  |
|      | IV | 2.9                                | 5.2                                  | 3.0           | 2.3                | 2.8                | 2.8               | 1.3   | 3.3            | 3.6                                |  |  |  |
| 2017 | I  | 2.9                                | 5.3                                  | 3.1           | 2.6                | 4.5                | 2.6               | 1.2   | 3.1            | 4.1                                |  |  |  |
|      | П  | 2.9                                | 4.3                                  | 3.3           | 3.2                | 4.9                | 2.7               | 1.3   | 3.1            | 4.5                                |  |  |  |
|      | Ш  | 3.0                                | 5.0                                  | 3.5           | 4.1                | 4.9                | 2.7               | 1.2   | 3.1            | 4.4                                |  |  |  |
|      |    |                                    | с                                    | hain-linked v | olumes, quarter-on | -quarter percenta  | ge changes, at ar | nnual rate                                  |                |                                    |  |  |  |
| 2015 | IV | 3.6                                | 12.9                                 | 5.2           | 7.3                | 2.1                | 3.0               | 3.6   | 2.8            | 5.0                                |  |  |  |
| 2016 | I  | 3.3                                | 11.0                                 | 3.6           | 1.8                | -0.1               | 3.1               | 1.9   | 3.6            | 0.8                                |  |  |  |
|      | Ш  | 3.0                                | 3.8                                  | 2.9           | 1.4                | 2.8                | 3.1               | 1.3   | 3.7            | 4.6                                |  |  |  |
|      | Ш  | 2.7                                | 2.5                                  | 0.8           | 0.5                | 4.7                | 3.1               | 1.2   | 3.7            | 4.4                                |  |  |  |
|      | IV | 2.6                                | 3.8                                  | 4.9           | 5.4                | 4.2                | 1.9               | 0.9   | 2.2            | 4.5                                |  |  |  |
| 2017 | I  | 3.3                                | 11.5                                 | 4.1           | 3.3                | 6.6                | 2.5               | 1.3   | 2.9            | 2.9                                |  |  |  |
|      | Ш  | 3.2                                | -0.2                                 | 3.5           | 3.8                | 4.3                | 3.2               | 1.7   | 3.7            | 6.3                                |  |  |  |
|      | Ш  | 3.0                                | 5.0                                  | 1.8           | 3.7                | 4.6                | 3.1               | 1.0   | 3.8            | 4.0                                |  |  |  |
|      |    | Current<br>prices EUR<br>billions) |                                      |               |                    | Percentage of va   | lue added at bas  | ic prices                                   |                |                                    |  |  |  |
| 2010 |    | 989.9                              | 2.6                                  | 17.2          | 13.3               | 8.8                | 71.4              | 18.7  | 52.7           | 9.2                                |  |  |  |
| 2011 |    | 983.7                              | 2.5                                  | 17.5          | 13.5               | 7.5                | 72.5              | 18.7  | 53.8           | 8.8                                |  |  |  |
| 2012 |    | 954.0                              | 2.5                                  | 17.4          | 13.2               | 6.7                | 73.5              | 18.5  | 54.9           | 9.0                                |  |  |  |
| 2013 |    | 935.6                              | 2.8                                  | 17.5          | 13.4               | 5.8                | 74.0              | 19.0  | 55.0           | 9.6                                |  |  |  |
| 2014 |    | 944.5                              | 2.7                                  | 17.6          | 13.7               | 5.6                | 74.1              | 18.8  | 55.4           | 9.9                                |  |  |  |
| 2015 |    | 979.9                              | 2.8                                  | 18.0          | 14.2               | 5.6                | 73.6              | 18.8  | 54.8           | 10.2                               |  |  |  |
| 2016 |    | 1,014.9                            | 2.8                                  | 17.9          | 14.2               | 5.6                | 73.8              | 18.7  | 55.0           | 10.2                               |  |  |  |

\*Seasonally and Working Day Adjusted.

Source: INE (Quarterly National Accounts) and Funcas (Forecasts).

### Chart 2.1 - GVA by sectors Annual percentage change

#### Chart 2.2 - GVA, Industry



-Construction

Services

#### Annual percentage change

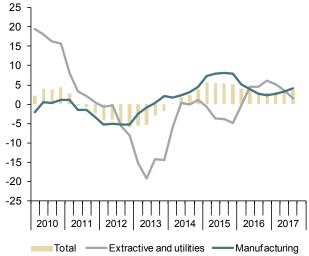


Chart 2.3 - GVA, services

Total — Industry —

Annual percentage change

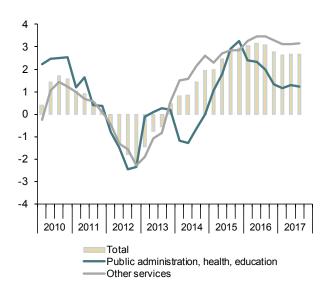
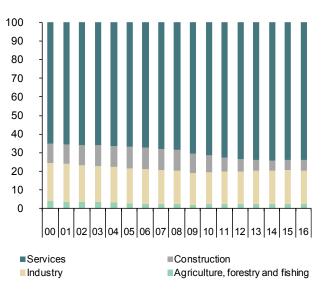


Chart 2.4 - GVA, structure by sectors





#### Table 3

### National accounts: Productivity and labour costs (ESA 2010, Base 2010)

Forecasts in yellow

|      |    |                            |  | Tota                       | al economy              |                             |                              | Manufacturing Industry                      |  |                            |                         |                             |                                 |  |
|------|----|----------------------------|--|----------------------------|-------------------------|-----------------------------|------------------------------|---|--|----------------------------|-------------------------|-----------------------------|---------------------------------|--|
|      |    | GDP,<br>constant<br>prices | Employment<br>(jobs, full<br>time<br>equivalent) | Employment<br>productivity | Compensation<br>per job | Nominal unit<br>labour cost | Real unit<br>Iabour cost (a) | Gross value<br>added,<br>constant<br>prices | Employment<br>(jobs,<br>full time<br>equivalent) | Employment<br>productivity | Compensation<br>per job | Nominal unit<br>labour cost | Real unit<br>labour cost<br>(a) |  |
|      |    | I                          | 2  | 3=1/2                      | 4                       | 5=4/3                       | 6                            | 7   | 8  | 9=7/8                      | 10                      | 11=10/9                     | 12                              |  |
|      |    |                            |  |                            |                         | Inde                        | exes, 2000 = 100             | ), SWDA                                     |  |                            |                         |                             |                                 |  |
| 2010 |    | 124.5                      | 114.0  | 109.3                      | 145.9                   | 133.5                       | 99.4                         | 100.1                                       | 78.9   | 126.9                      | 155.6                   | 122.6                       | 97.7                            |  |
| 2011 |    | 123.3                      | 110.8  | 111.3                      | 147.1                   | 132.2                       | 98.4                         | 98.8  | 75.9   | 130.1                      | 159.0                   | 122.1                       | 95.3                            |  |
| 2012 |    | 119.7                      | 105.5  | 113.5                      | 146.2                   | 128.9                       | 95.9                         | 93.7  | 70.3   | 133.2                      | 161.6                   | 121.4                       | 94.4                            |  |
| 2013 |    | 117.6                      | 101.9  | 115.5                      | 148.2                   | 128.4                       | 95.2                         | 93.5  | 67.0   | 139.6                      | 164.2                   | 117.6                       | 91.5                            |  |
| 2014 |    | 119.3                      | 103.0  | 115.9                      | 148.4                   | 128.1                       | 95.1                         | 96.2  | 66.1   | 145.5                      | 165.1                   | 113.5                       | 88. I                           |  |
| 2015 |    | 123.4                      | 106.2  | 116.2                      | 150.8                   | 129.8                       | 95.8                         | 103.7                                       | 68.0   | 152.5                      | 167.3                   | 109.7                       | 85.4                            |  |
| 2016 |    | 127.4                      | 109.4  | 116.5                      | 150.3                   | 129.0                       | 95.0                         | 107.4                                       | 70.2   | 152.9                      | 167.6                   | 109.6                       | 85.5                            |  |
| 2017 |    | 131.4                      | 112.6  | 116.7                      | 150.7                   | 129.2                       | 94.3                         | 110.9                                       |  |                            |                         |                             |                                 |  |
| 2018 |    | 134.8                      | 115.1  | 117.1                      | 152.2                   | 130.0                       | 94.2                         | 113.6                                       |  |                            |                         |                             |                                 |  |
| 2015 | IV | 125.1                      | 107.4  | 116.4                      | 151.2                   | 129.9                       | 95.6                         | 106.2                                       | 68.6   | 154.8                      | 167.9                   | 108.4                       | 84.8                            |  |
| 2016 | I  | 126.0                      | 108.3  | 116.3                      | 150.1                   | 129.0                       | 95.3                         | 106.7                                       | 69.5   | 153.6                      | 167.3                   | 108.9                       | 85.2                            |  |
|      | Ш  | 127.0                      | 109.0  | 116.5                      | 150.5                   | 129.2                       | 95.3                         | 107.0                                       | 69.8   | 153.3                      | 167.5                   | 109.2                       | 85.4                            |  |
|      | Ш  | 127.9                      | 109.9  | 116.4                      | 150.1                   | 128.9                       | 94.9                         | 107.2                                       | 70.4   | 152.1                      | 167.7                   | 110.2                       | 85.9                            |  |
|      | IV | 128.8                      | 110.4  | 116.7                      | 150.6                   | 129.0                       | 94.5                         | 108.6                                       | 71.2   | 152.6                      | 167.9                   | 110.0                       | 85.3                            |  |
| 2017 | I  | 129.8                      | 111.1  | 116.8                      | 150.4                   | 128.8                       | 94.4                         | 109.5                                       | 71.6   | 152.9                      | 168.4                   | 110.1                       | 84.8                            |  |
|      | Ш  | 130.9                      | 112.2  | 116.7                      | 150.2                   | 128.7                       | 94.2                         | 110.5                                       | 72.1   | 153.3                      | 168.2                   | 109.7                       | 84.3                            |  |
|      | ш  | 131.9                      | 113.0  | 116.7                      | 150.2                   | 128.7                       | 93.8                         | 111.5                                       | 72.7   | 153.4                      | 168.0                   | 109.5                       | 84.I                            |  |
|      |    |                            |  |                            |                         | An                          | nual percentage              | changes                                     |  |                            |                         |                             |                                 |  |
| 2010 |    | 0.0                        | -2.7   | 2.7                        | 1.1                     | -1.6                        | -1.8                         | 0.0   | -4.0   | 4.2                        | 1.9                     | -2.1                        | -1.3                            |  |
| 2011 |    | -1.0                       | -2.8   | 1.8                        | 0.9                     | -0.9                        | -1.0                         | -1.3  | -3.8   | 2.6                        | 2.2                     | -0.4                        | -2.4                            |  |
| 2012 |    | -2.9                       | -4.8   | 2.0                        | -0.6                    | -2.5                        | -2.6                         | -5.2  | -7.4   | 2.3                        | 1.7                     | -0.6                        | -1.0                            |  |
| 2013 |    | -1.7                       | -3.4   | 1.8                        | 1.4                     | -0.4                        | -0.7                         | -0.2  | -4.8   | 4.8                        | 1.6                     | -3.1                        | -3.0                            |  |
| 2014 |    | 1.4                        | 1.0  | 0.3                        | 0.1                     | -0.2                        | 0.0                          | 3.0   | -1.3   | 4.3                        | 0.6                     | -3.5                        | -3.8                            |  |
| 2015 |    | 3.4                        | 3.2  | 0.3                        | 1.6                     | 1.4                         | 0.7                          | 7.8   | 2.8  | 4.8                        | 1.3                     | -3.4                        | -3.0                            |  |
| 2016 |    | 3.3                        | 3.0  | 0.3                        | -0.3                    | -0.6                        | -0.9                         | 3.5   | 3.3  | 0.2                        | 0.2                     | -0.1                        | 0.1                             |  |
| 2017 |    | 3.1                        | 2.9  | 0.2                        | 0.3                     | 0.1                         | -0.7                         | 3.3   |  |                            |                         |                             |                                 |  |
| 2018 |    | 2.6                        | 2.3  | 0.3                        | 1.0                     | 0.7                         | -0.1                         | 2.4   |  |                            |                         |                             |                                 |  |
| 2015 | IV | 3.8                        | 3.3  | 0.5                        | 1.8                     | 1.3                         | 0.7                          | 7.8   | 2.8  | 4.9                        | 1.3                     | -3.4                        | -2.7                            |  |
| 2016 | I  | 3.5                        | 3.4  | 0.1                        | -0.4                    | -0.5                        | -0.5                         | 5.2   | 3.5  | 1.7                        | 0.4                     | -1.3                        | -0.1                            |  |
|      | П  | 3.4                        | 2.8  | 0.6                        | -0.1                    | -0.6                        | -1.0                         | 4.0   | 2.8  | 1.1                        | 0.1                     | -1.0                        | -0.6                            |  |
|      | ш  | 3.2                        | 3.1  | 0.1                        | -0.4                    | -0.6                        | -0.9                         | 2.7   | 3.1  | -0.3                       | 0.2                     | 0.6                         | 0.3                             |  |
|      | IV | 3.0                        | 2.7  | 0.2                        | -0.5                    | -0.7                        | -1.2                         | 2.3   | 3.8  | -1.4                       | 0.0                     | 1.5                         | 0.6                             |  |
| 2017 | I  | 3.0                        | 2.6  | 0.4                        | 0.2                     | -0.1                        | -1.0                         | 2.6   | 3.1  | -0.5                       | 0.7                     | 1.1                         | -0.5                            |  |
|      | Ш  | 3.1                        | 2.9  | 0.2                        | -0.2                    | -0.4                        | -1.1                         | 3.2   | 3.3  | 0.0                        | 0.4                     | 0.5                         | -1.3                            |  |
|      | Ш  | 3.1                        | 2.9  | 0.3                        | 0.1                     | -0.2                        | -1.2                         | 4.1   | 3.2  | 0.8                        | 0.2                     | -0.6                        | -2.1                            |  |

(a) Nominal ULC deflated by GDP/GVA deflator.

Source: INE (Quarterly National Accounts) and Funcas (Forecasts).

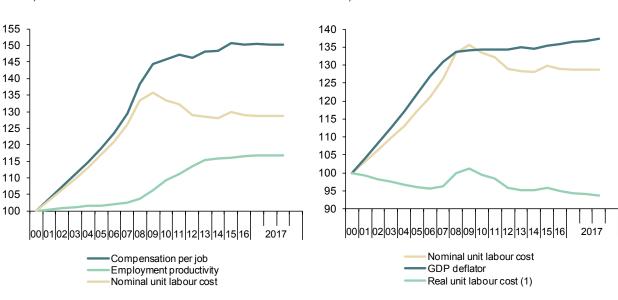


Chart 3.1 - Nominal ULC, total economy

Index, 2000=100

Chart 3.2 - Real ULC, total economy

Index, 2000=100

(1) Nominal ULC deflated by GDP deflator.

Chart 3.3 - Nominal ULC, manufacturing industry

Index, 2000=100

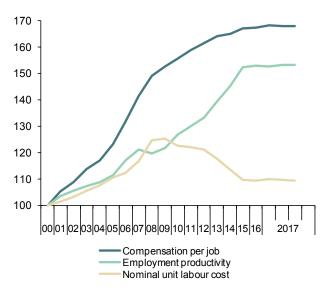
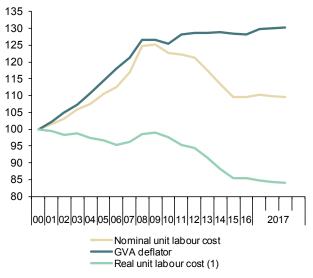


Chart 3.4 - Real ULC, manufacturing industry

Index, 2000=100



(1) Nominal ULC deflated by GDP deflator.

#### Table 4

### **National accounts: National income, distribution and disposition (ESA 2010, Base 2010)** Forecasts in yellow

|      |     | Gross<br>domestic<br>product | Compen-<br>sation of<br>employees | Gross<br>operating<br>surplus | Gross national<br>product | Gross<br>national<br>income | Final national consumption | Gross<br>national<br>saving<br>(a) | Gross<br>capital<br>formation | Compen-<br>sation of<br>employees | Gross<br>operating<br>surplus | Saving rate | Investment<br>rate | Current<br>account<br>balance |
|------|-----|------------------------------|-----------------------------------|-------------------------------|---------------------------|-----------------------------|----------------------------|------------------------------------|-------------------------------|-----------------------------------|-------------------------------|-------------|--------------------|-------------------------------|
|      |     |                              |                                   | EUR                           | Billions, 4-quarter       | cumulated tr                | ansactions                 |                                    |                               |                                   | Perce                         | entage of G | DP                 |                               |
| 2010 |     | 1,080.9                      | 541.5                             | 445.8                         | 1,065.8                   | 1,053.1                     | 840.5                      | 212.6                              | 254.5                         | 50. I                             | 41.2                          | 19.7        | 23.5               | -3.9                          |
| 2011 |     | 1,070.4                      | 531.0                             | 449.3                         | 1,051.9                   | 1,037.7                     | 838.6                      | 199.2                              | 234.5                         | 49.6                              | 42.0                          | 18.6        | 21.9               | -3.3                          |
| 2012 |     | 1,039.8                      | 498.8                             | 446.7                         | 1,032.5                   | 1,019.9                     | 816.6                      | 203.3                              | 207.9                         | 48.0                              | 43.0                          | 19.5        | 20.0               | -0.4                          |
| 2013 |     | 1,025.7                      | 485.3                             | 440.4                         | 1,020.4                   | 1,007.3                     | 800.4                      | 206.9                              | 191.9                         | 47.3                              | 42.9                          | 20.2        | 18.7               | 1.5                           |
| 2014 |     | 1,037.8                      | 491.6                             | 441.8                         | 1,034.4                   | 1,023.0                     | 810.7                      | 212.2                              | 201.9                         | 47.4                              | 42.6                          | 20.4        | 19.5               | 1.0                           |
| 2015 |     | 1,080.0                      | 517.8                             | 449.1                         | 1,077.7                   | 1,066.5                     | 835.3                      | 231.2                              | 220.2                         | 47.9                              | 41.6                          | 21.4        | 20.4               | 1.0                           |
| 2016 |     | 1,118.5                      | 532.9                             | 471.0                         | 1,118.3                   | 1,105.9                     | 855.6                      | 250.3                              | 229.2                         | 47.6                              | 42.1                          | 22.4        | 20.5               | 1.9                           |
| 2017 |     | 1,166.9                      | 549.9                             | 495.9                         | 1,168.1                   | 1,151.6                     | 888.7                      | 262.8                              | 243.7                         | 47.1                              | 42.5                          | 22.5        | 20.9               | 1.6                           |
| 2018 |     | 1,211.2                      | 568.6                             | 514.0                         | 1,215.4                   | 1,198.8                     | 919.1                      | 279.7                              | 261.3                         | 46.9                              | 42.4                          | 23.1        | 21.6               | 1.5                           |
| 2015 | IV  | 1,080.0                      | 517.8                             | 449.1                         | 1,077.7                   | 1,066.5                     | 835.3                      | 231.2                              | 220.2                         | 47.9                              | 41.6                          | 21.4        | 20.4               | 1.0                           |
| 2016 | I   | 1,088.5                      | 521.7                             | 454.7                         | 1,086.8                   | 1,075.9                     | 840.0                      | 235.9                              | 223.3                         | 47.9                              | 41.8                          | 21.7        | 20.5               | 1.2                           |
|      | Ш   | 1,099.6                      | 525.7                             | 460.4                         | 1,097.0                   | 1,086.8                     | 844.9                      | 241.9                              | 226.3                         | 47.8                              | 41.9                          | 22.0        | 20.6               | 1.4                           |
|      | Ш   | 1,109.4                      | 529.7                             | 465.I                         | 1,108.0                   | 1,096.4                     | 850.0                      | 246.4                              | 227.7                         | 47.7                              | 41.9                          | 22.2        | 20.5               | 1.7                           |
|      | IV  | 1,118.5                      | 532.9                             | 471.0                         | 1,118.3                   | 1,105.9                     | 855.6                      | 250.3                              | 229.2                         | 47.6                              | 42.1                          | 22.4        | 20.5               | 1.9                           |
| 2017 | I   | 1,129.4                      | 536.6                             | 476.3                         | 1,130.0                   | 1,118.8                     | 864.4                      | 254.4                              | 232.9                         | 47.5                              | 42.2                          | 22.5        | 20.6               | 1.9                           |
|      | П   | 1,140.0                      | 540.6                             | 481.6                         | 1,140.5                   | 1,128.6                     | 871.5                      | 257.1                              | 236.2                         | 47.4                              | 42.2                          | 22.6        | 20.7               | 1.8                           |
|      | Ш   | 1,150.8                      | 545.0                             | 486.8                         | 1,151.8                   | 1,139.7                     | 878.0                      | 261.7                              | 240.2                         | 47.4                              | 42.3                          | 22.7        | 20.9               | 1.9                           |
|      |     |                              |                                   | Ar                            | inual percentage cl       | hanges                      |                            |                                    |                               |                                   | Difference fr                 | om one yea  | ir ago             |                               |
| 2010 |     | 0.2                          | -1.4                              | -2.0                          | 0.6                       | 0.8                         | 1.7                        | -2.8                               | -4.0                          | -0.8                              | -0.9                          | -0.6        | -1.0               | 0.4                           |
| 2011 |     | -1.0                         | -1.9                              | 0.8                           | -1.3                      | -1.5                        | -0.2                       | -6.3                               | -7.9                          | -0.5                              | 0.7                           | -1.1        | -1.6               | 0.6                           |
| 2012 |     | -2.9                         | -6.1                              | -0.6                          | -1.8                      | -1.7                        | -2.6                       | 2.1                                | -11.3                         | -1.6                              | 1.0                           | 0.9         | -1.9               | 2.9                           |
| 2013 |     | -1.4                         | -2.7                              | -1.4                          | -1.2                      | -1.2                        | -2.0                       | 1.8                                | -7.7                          | -0.7                              | 0.0                           | 0.6         | -1.3               | 1.9                           |
| 2014 |     | 1.2                          | 1.3                               | 0.3                           | 1.4                       | 1.6                         | 1.3                        | 2.6                                | 5.2                           | 0.1                               | -0.4                          | 0.3         | 0.7                | -0.5                          |
| 2015 |     | 4.1                          | 5.3                               | 1.7                           | 4.2                       | 4.3                         | 3.0                        | 8.9                                | 9.1                           | 0.6                               | -1.0                          | 1.0         | 0.9                | 0.0                           |
| 2016 |     | 3.6                          | 2.9                               | 4.9                           | 3.8                       | 3.7                         | 2.4                        | 8.3                                | 4.1                           | -0.3                              | 0.5                           | 1.0         | 0.1                | 0.9                           |
| 2017 |     | 4.3                          | 3.2                               | 5.3                           | 4.5                       | 4.1                         | 3.9                        | 5.0                                | 6.3                           | -0.5                              | 0.4                           | 0.1         | 0.4                | -0.2                          |
| 2018 |     | 3.8                          | 3.4                               | 3.6                           | 4.0                       | 4.1                         | 3.4                        | 6.4                                | 7.2                           | -0.2                              | -0.1                          | 0.6         | 0.7                | -0.1                          |
| 2015 | IV  | 4.1                          | 5.3                               | 1.7                           | 4.2                       | 4.3                         | 3.0                        | 8.9                                | 9.1                           | 0.6                               | -1.0                          | 1.0         | 0.9                | 0.0                           |
| 2016 | I   | 4.0                          | 4.9                               | 2.4                           | 4.1                       | 4.2                         | 3.0                        | 8.8                                | 8.6                           | 0.4                               | -0.6                          | 1.0         | 0.9                | 0.1                           |
|      | П   | 4.0                          | 4.4                               | 3.3                           | 3.8                       | 4.0                         | 2.8                        | 8.1                                | 7.8                           | 0.2                               | -0.3                          | 0.8         | 0.7                | 0.1                           |
|      | III | 3.9                          | 3.8                               | 3.7                           | 3.8                       | 3.8                         | 2.6                        | 8.1                                | 6.1                           | 0.0                               | -0.1                          | 0.9         | 0.4                | 0.4                           |
|      | IV  | 3.6                          | 2.9                               | 4.9                           | 3.8                       | 3.7                         | 2.4                        | 8.3                                | 4.1                           | -0.3                              | 0.5                           | 1.0         | 0.1                | 0.9                           |
| 2017 | I   | 3.8                          | 2.9                               | 4.7                           | 4.0                       | 4.0                         | 2.9                        | 7.8                                | 4.3                           | -0.4                              | 0.4                           | 0.9         | 0.1                | 0.7                           |
|      | Ш   | 3.7                          | 2.8                               | 4.6                           | 4.0                       | 3.8                         | 3.2                        | 6.3                                | 4.4                           | -0.4                              | 0.4                           | 0.6         | 0.1                | 0.4                           |
|      | III | 3.7                          | 2.9                               | 4.7                           | 4.0                       | 4.0                         | 3.3                        | 6.2                                | 5.5                           | -0.4                              | 0.4                           | 0.5         | 0.4                | 0.2                           |

(a) Including change in net equity in pension funds reserves.

Source: INE (Quarterly National Accounts) and Funcas (Forecasts).

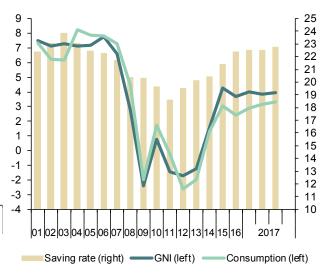
# Chart 4.1 - National income, consumption and saving

1,200 1,100 900 900 800 700 600 500 0102|03|04|05|06|07|08|09|10|11|12|13|14|15|16|2017 •Gross national income •National consumption

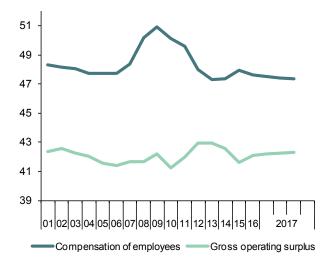
#### EUR Billions, 4-quarter cumulated

# Chart 4.2 - National income, consumption and saving rate

Annual percentage change and percentage of GDP, 4-quarter moving averages

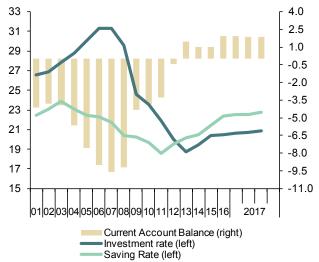


### Chart 4.3 - Components of National Income Percentage of GDP, 4-quarter moving averages



# Chart 4.4 - Saving, Investment and Currect Account Balance

Percentage of GDP, 4-quarter moving averages



#### Table 5

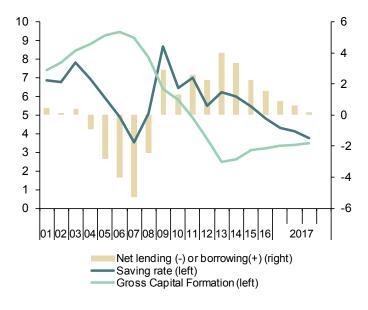
### National accounts: Household and non-finantial corporations accounts (ESA 2010, Base 2010) Forecasts in yellow

|      |    |  |  |                 | Househol                   | ds  |   |   | Non-finantial corporations    |                  |                               |   |  |            |  |
|------|----|--|--|-----------------|----------------------------|---|---|---|-------------------------------|------------------|-------------------------------|---|--|------------|--|
|      |    | Gross<br>disposable<br>income<br>(GDI) | Final con-<br>sumption<br>expen-<br>diture | Gross<br>saving | Gross capital<br>formation | Saving rate<br>(gross<br>saving as a<br>percentage<br>of GDI) | Gross capital<br>formation as a<br>percentage of<br>GDP | Net<br>lending or<br>borrowing as<br>a percentage<br>of GDP | Gross<br>operating<br>surplus | Gross saving     | Gross<br>capital<br>formation | Saving rate<br>(gross<br>saving as a<br>percentage<br>of GDP) | Gross<br>capital<br>formation as<br>a percentage<br>of GDP |            |  |
|      |    |  |  |                 |                            | I   | EUR Billions, 4-q                                       | uarter cumula   | ted operat                    | ions             |                               |   |  |            |  |
| 2010 |    | 688.4                                  | 618.8                                      | 69.5            | 63.0                       | 10.1  | 5.8   | 1.3   | 235.7                         | 161.8            | 132.0                         | 15.0  | 12.2   | 3.7        |  |
| 2011 |    | 694.2                                  | 618.9                                      | 74.7            | 52.2                       | 10.8  | 4.9   | 2.6   | 232.8                         | 144.8            | 131.4                         | 13.5  | 12.3   | 2.1        |  |
| 2012 |    | 670.6                                  | 611.3                                      | 57.2            | 38.8                       | 8.5   | 3.7   | 2.2   | 234.6                         | 144.8            | 136.5                         | 13.9  | 13.1   | 1.4        |  |
| 2013 |    | 664.4                                  | 598.5                                      | 63.9            | 25.7                       | 9.6   | 2.5   | 4.0   | 235.0                         | 160.5            | 136.2                         | 15.7  | 13.3   | 2.9        |  |
| 2014 |    | 671.8                                  | 608.7                                      | 62.1            | 27.0                       | 9.2   | 2.6   | 3.4   | 236.9                         | 158.8            | 148.5                         | 15.3  | 14.3   | 1.8        |  |
| 2015 |    | 686.6                                  | 626.3                                      | 58.9            | 33.6                       | 8.6   | 3.1   | 2.3   | 243.6                         | 175.4            | 153.0                         | 16.2  | 14.2   | 2.9        |  |
| 2016 |    | 700. I                                 | 644.7                                      | 54.0            | 35.8                       | 7.7   | 3.2   | 1.6   | 258.3                         | 194.2            | 166.2                         | 17.4  | 14.9   | 3.1        |  |
| 2017 |    | 718.1                                  | 673.8                                      | 42.9            | 40.2                       | 6.0   | 3.4   | 0.2   | 272.9                         | 206.5            | 175.9                         | 17.7  | 15.1   | 3.1        |  |
| 2018 |    | 744.4                                  | 699.6                                      | 43.4            | 45.7                       | 5.8   | 3.8   | -0.2  | 281.8                         | 212.7            | 186.8                         | 17.6  | 15.4   | 2.7        |  |
| 2015 | IV | 686.6                                  | 626.3                                      | 58.9            | 33.6                       | 8.6   | 3.1   | 2.3   | 243.6                         | 175.4            | 153.0                         | 16.2  | 14.2   | 2.9        |  |
| 2016 | Т  | 690.5                                  | 630.7                                      | 58.7            | 33.3                       | 8.5   | 3.1   | 2.3   | 245.8                         | 179.7            | 157.2                         | 16.5  | 14.4   | 2.8        |  |
|      | Ш  | 694.9                                  | 634.6                                      | 59.0            | 34.7                       | 8.5   | 3.2   | 2.2   | 250.7                         | 187.5            | 158.6                         | 17.1  | 14.4   | 3.3        |  |
|      | Ш  | 696.6                                  | 639.0                                      | 56.4            | 35.1                       | 8.1   | 3.2   | 1.9   | 254.6                         | 193.0            | 163.3                         | 17.4  | 14.7   | 3.3        |  |
|      | IV | 700. I                                 | 644.7                                      | 54.0            | 35.8                       | 7.7   | 3.2   | 1.6   | 258.3                         | 194.2            | 166.2                         | 17.4  | 14.9   | 3.1        |  |
| 2017 | Т  | 702.7                                  | 652.5                                      | 48.7            | 37.9                       | 6.9   | 3.4   | 0.9   | 261.6                         | 199.7            | 168.6                         | 17.7  | 14.9   | 3.3        |  |
|      | II | 707.7                                  | 659.5                                      | 46.8            | 38.8                       | 6.6   | 3.4   | 0.6   | 264.9                         | 197.9            | 172.2                         | 17.4  | 15.1   | 2.8        |  |
|      | Ш  | 709.7                                  | 665.2                                      | 43.2            | 40.0                       | 6.1   | 3.5   | 0.2   | 267.7                         | 199.4            | 174.2                         | 17.3  | 15.1   | 2.7        |  |
|      |    |  | Annual perce                               | ntage chan      | ges                        | Differe   | ence from one ye  | ear ago   | Annu                          | al percentage cl | nanges                        | Differe   | nce from on  | e year ago |  |
| 2010 |    | -1.5                                   | 2.2  | -25.8           | -8.7                       | -3.3  | -0.6  | -1.6  | -0.2                          | 12.2             | 1.5                           | 1.6   | 0.2  | 1.3        |  |
| 2011 |    | 0.8                                    | 0.0  | 7.5             | -17.1                      | 0.7   | -0.9  | 1.3   | -1.3                          | -10.5            | -0.5                          | -1.4  | 0.1  | -1.6       |  |
| 2012 |    | -3.4                                   | -1.2                                       | -23.4           | -25.6                      | -2.2  | -1.1  | -0.3  | 0.8                           | 0.0              | 3.9                           | 0.4   | 0.9  | -0.7       |  |
| 2013 |    | -0.9                                   | -2.1                                       | 11.7            | -33.9                      | 1.1   | -1.2  | 1.8   | 0.1                           | 10.9             | -0.2                          | 1.7   | 0.2  | 1.4        |  |
| 2014 |    | 1.1                                    | 1.7  | -2.9            | 5.1                        | -0.4  | 0.1   | -0.6  | 0.8                           | -1.1             | 9.0                           | -0.3  | 1.0  | -1.1       |  |
| 2015 |    | 2.2                                    | 2.9  | -5.0            | 24.5                       | -0.7  | 0.5   | -1.1  | 2.8                           | 10.4             | 3.0                           | 0.9   | -0.1   | 1.1        |  |
| 2016 |    | 2.0                                    | 2.9  | -8.4            | 6.5                        | -0.9  | 0.1   | -0.7  | 6.0                           | 10.8             | 8.7                           | 1.1   | 0.7  | 0.2        |  |
| 2017 |    | 2.6                                    | 4.5  | -20.5           | 12.2                       | -1.7  | 0.2   | -1.4  | 5.6                           | 6.3              | 5.8                           | 0.3   | 0.2  | 0.0        |  |
| 2018 |    | 3.7                                    | 3.8  | 1.2             | 13.7                       | -0.1  | 0.3   | -0.4  | 3.3                           | 3.0              | 6.2                           | -0.1  | 0.4  | -0.4       |  |
| 2015 | IV | 2.2                                    | 2.9  | -5.0            | 24.5                       | -0.7  | 0.5   | -1.1  | 2.8                           | 10.4             | 3.0                           | 0.9   | -0.1   | 1.1        |  |
| 2016 | I  | 2.0                                    | 3.0  | -7.7            | 16.4                       | -0.9  | 0.3   | -1.0  | 2.8                           | 9.2              | 4.9                           | 0.8   | 0.1  | 0.6        |  |
|      | II | 1.7                                    | 3.0  | -10.1           | 17.9                       | -1.1  | 0.4   | -1.2  | 4.2                           | 13.2             | 3.0                           | 1.4   | -0.1   | 1.4        |  |
|      | Ш  | 1.3                                    | 2.8  | -12.1           | 12.7                       | -1.2  | 0.2   | -1.1  | 4.9                           | 14.4             | 6.9                           | 1.6   | 0.4  | 0.9        |  |
|      | IV | 2.0                                    | 2.9  | -8.4            | 6.5                        | -0.9  | 0.1   | -0.7  | 6.0                           | 10.8             | 8.7                           | 1.1   | 0.7  | 0.2        |  |
| 2017 | I  | 1.8                                    | 3.5  | -17.0           | 13.9                       | -1.6  | 0.3   | -1.4  | 6.4                           | 11.1             | 7.2                           | 1.2   | 0.5  | 0.5        |  |
|      | Ш  | 1.8                                    | 3.9  | -20.7           | 12.0                       | -1.9  | 0.3   | -1.6  | 5.7                           | 5.6              | 8.6                           | 0.3   | 0.7  | -0.6       |  |
|      | Ш  | 1.9                                    | 4.I  | -23.4           | 13.8                       | -2.0  | 0.3   | -1.7  | 5.2                           | 3.3              | 6.7                           | -0.1  | 0.4  | -0.6       |  |

Source: INE (Quarterly National Accounts) and Funcas (Forecasts).

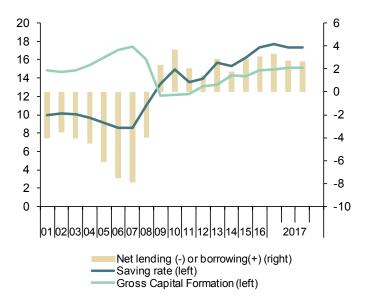
Chart 5.1 - Households: Net lending or borrowing





## Chart 5.2 - Non-finantial corporations: Net lending or borrowing

Percentage of GDP, 4-quarter moving averages



# National accounts: Public revenue, expenditure and deficit (ESA 2010, Base 2010) Forecasts in yellow

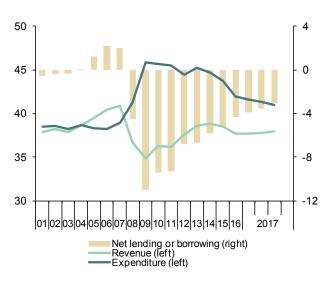
|      |         | Gross<br>value<br>added | Taxes on<br>production<br>and imports<br>receivable | Taxes on<br>income<br>and weath<br>receivable | Social<br>contribu-<br>tions<br>receivable | Compen-<br>sation of<br>employees | Interests<br>and other<br>capital<br>incomes<br>payable (net) | Social bene-<br>fits payable | Subsidies<br>and net<br>current<br>transfers<br>payable | Gross<br>disposable<br>income | Final<br>consump-<br>tion<br>expendi-<br>ture | Gross<br>saving | Net capital<br>expenditure | Net<br>lending(+)/<br>net<br>borrowing(-) | Net<br>lending(+)/<br>net borrowing<br>(-) excluding<br>financial<br>entities<br>bail-out<br>expenditures |
|------|---------|-------------------------|---|---|--|-----------------------------------|---|------------------------------|---|-------------------------------|---|-----------------|----------------------------|---|---|
|      |         | I                       | 2   | 3   | 4  | 5                                 | 6   | 7                            | 8   | 9=1+2+3+4-<br>5-6-7-8         | 10  | 11=9-10         | 12                         | 3=  - 2                                   | 14  |
|      |         |                         |   |   |  | EU                                | IR Billions, 4-q  | uarter cumul                 | ated opera  | tions                         |   |                 |                            |   |   |
| 2010 |         | 152.0                   | 110.1   | 100.7   | 138.6                                      | 124.9                             | 10.8  | 162.8                        | 21.4  | 181.6                         | 221.7   | -40.1           | 61.3                       | -101.4                                    | -102.2  |
| 2011 |         | 150.3                   | 106.2   | 102.0   | 137.8                                      | 122.6                             | 16.2  | 164.2                        | 22.5  | 170.8                         | 219.7   | -48.9           | 54.3                       | -103.2                                    | -99.7   |
| 2012 |         | 142.2                   | 108.2   | 106.4   | 131.9                                      | 113.9                             | 20.3  | 168.6                        | 18.6  | 167.2                         | 205.3   | -38.1           | 70.8                       | -108.8                                    | -70.6   |
| 2013 |         | 143.0                   | 114.6   | 105.2   | 128.2                                      | 114.7                             | 24.1  | 170.8                        | 20.6  | 160.8                         | 201.9   | -41.1           | 30.6                       | -71.7                                     | -68.4   |
| 2014 |         | 143.4                   | 119.2   | 105.6   | 130.1                                      | 115.2                             | 25.7  | 171.1                        | 20.6  | 165.7                         | 202.0   | -36.3           | 25.6                       | -61.9                                     | -60.6   |
| 2015 |         | 147.5                   | 127.0   | 109.2   | 132.3                                      | 119.4                             | 24.4  | 170.6                        | 21.3  | 180.3                         | 208.9   | -28.6           | 28.4                       | -57.0                                     | -56.5   |
| 2016 |         | 149.4                   | 128.8   | 110.8   | 136.2                                      | 121.3                             | 23.1  | 173.8                        | 20.8  | 186.2                         | 210.9   | -24.7           | 25.7                       | -50.4                                     | -48.0   |
| 2017 |         | 151.8                   | 135.8   | 115.9   | 142.5                                      | 123.7                             | 21.3  | 177.5                        | 21.2  | 202.4                         | 215.0   | -12.6           | 24.5                       | -37.1                                     | -36.7   |
| 2018 |         | 154.4                   | 143.6   | 120.7   | 147.3                                      | 126.3                             | 18.4  | 182.3                        | 21.7  | 217.4                         | 219.5   | -2.2            | 25.0                       | -27.2                                     | -27.2   |
| 2015 | IV      | 147.5                   | 127.0   | 109.2   | 132.3                                      | 119.4                             | 24.4  | 170.6                        | 21.3  | 180.3                         | 208.9   | -28.6           | 28.4                       | -57.0                                     | -56.5   |
| 2016 | Ι       | 147.4                   | 126.2   | 106.9   | 132.9                                      | 119.3                             | 23.9  | 171.1                        | 20.7  | 178.5                         | 209.4   | -30.9           | 26.9                       | -57.8                                     | -57.4   |
|      | II      | 148.4                   | 127.3   | 105.0   | 134.1                                      | 120.4                             | 23.5  | 172.5                        | 19.3  | 179.1                         | 210.3   | -31.2           | 26.9                       | -58.1                                     | -56.1   |
|      | Ш       | 149.2                   | 128.4   | 107.0   | 135.2                                      | 121.1                             | 23.2  | 173.1                        | 20.7  | 181.7                         | 211.1   | -29.4           | 24.7                       | -54.1                                     | -51.8   |
|      | IV      | 149.4                   | 128.8   | 110.8   | 136.2                                      | 121.3                             | 23.1  | 173.8                        | 20.8  | 186.2                         | 210.9   | -24.7           | 25.7                       | -50.4                                     | -48.0   |
| 2017 | I       | 149.9                   | 130.6   | 111.9   | 137.9                                      | 121.7                             | 23.0  | 174.3                        | 19.6  | 191.7                         | 211.8   | -20.1           | 26.8                       | -46.9                                     | -44.2   |
|      | II      | 149.7                   | 132.2   | 114.7   | 139.6                                      | 121.4                             | 22.8  | 175.0                        | 20.6  | 196.3                         | 212.0   | -15.7           | 25.7                       | -41.4                                     | -40.5   |
|      | 111     | 150.3                   | 133.5   | 118.3   | 141.3                                      | 121.9                             | 22.6  | 175.9                        | 20.7  | 202.4                         | 212.8   | -10.4           | 25.3                       | -35.7                                     | -35.1   |
|      |         |                         |   |   |  |                                   | Percentage of   |                              |   | •                             |   |                 |                            |   |   |
| 2010 |         | 14.1                    | 10.2  | 9.3   | 12.8                                       | 11.6                              | 1.0   | 15.1                         | 2.0   | 16.8                          | 20.5  | -3.7            | 5.7                        | -9.4                                      | -9.5  |
| 2011 |         | 14.0                    | 9.9   | 9.5   | 12.9                                       | 11.5                              | 1.5   | 15.3                         | 2.1   | 16.0                          | 20.5  | -4.6            | 5.1                        | -9.6                                      | -9.3  |
| 2012 |         | 13.7                    | 10.4  | 10.2  | 12.7                                       | 11.0                              | 2.0   | 16.2                         | 1.8   | 16.1                          | 19.7  | -3.7            | 6.8                        | -10.5                                     | -6.8  |
| 2013 |         | 13.9                    | 11.2  | 10.3  | 12.5                                       | 11.2                              | 2.3   | 16.6                         | 2.0   | 15.7                          | 19.7  | -4.0            | 3.0                        | -7.0                                      | -6.7  |
| 2014 |         | 13.8                    | 11.5  | 10.2  | 12.5                                       | 11.1                              | 2.5   | 16.5                         | 2.0   | 16.0                          | 19.5  | -3.5            | 2.5                        | -6.0                                      | -5.8  |
| 2015 |         | 13.7                    | 11.8  | 10.1  | 12.3                                       | 11.1                              | 2.3   | 15.8                         | 2.0   | 16.7                          | 19.3  | -2.6            | 2.6                        | -5.3                                      | -5.2  |
| 2016 |         | 13.4                    | 11.5  | 9.9   | 12.2                                       | 10.8                              | 2.1   | 15.5                         | 1.9   | 16.6                          | 18.9  | -2.2            | 2.3                        | -4.5                                      | -4.3  |
| 2017 |         | 13.0                    | 11.6  | 9.9   | 12.2                                       | 10.6                              | 1.8   | 15.2                         | 1.8   | 17.3                          | 18.4  | -1.1            | 2.1                        | -3.2                                      | -3.1  |
| 2018 | 11/     | 12.8                    | 11.9  | 10.0  | 12.2                                       | 10.4                              | 1.5   | 15.1                         | 1.8   | 17.9                          | 18.1  | -0.2            | 2.1                        | -2.2                                      | -2.2  |
| 2015 | IV<br>I | 13.7                    | 11.8  | 10.1  | 12.3                                       | 11.1                              | 2.3   | 15.8                         | 2.0   | 16.7                          | 19.3  | -2.6            | 2.6                        | -5.3                                      | -5.2  |
| 2016 | 1       | 13.5                    | 11.6  | 9.8   | 12.2                                       | 11.0                              | 2.2   | 15.7                         | 1.9   | 16.4                          | 19.2  | -2.8            | 2.5                        | -5.3                                      | -5.3  |
|      | 11      | 13.5                    | 11.6  | 9.5   | 12.2                                       | 11.0                              | 2.1   | 15.7                         | 1.8   | 16.3                          | 19.1  | -2.8            | 2.4                        | -5.3                                      | -5.1  |
|      | III     | 13.4                    | 11.6  | 9.6   | 12.2                                       | 10.9                              | 2.1   | 15.6                         | 1.9   | 16.4                          | 19.0  | -2.7            | 2.2                        | -4.9                                      | -4.7  |
| 2017 | IV      | 13.4                    | 11.5  | 9.9   | 12.2                                       | 10.8                              | 2.1   | 15.5                         | 1.9   | 16.6                          | 18.9  | -2.2            | 2.3                        | -4.5                                      | -4.3  |
| 2017 | 1       | 13.3                    | 11.6  | 9.9   | 12.2                                       | 10.8                              | 2.0   | 15.4                         | 1.7   | 17.0                          | 18.8  | -1.8            | 2.4                        | -4.2                                      | -3.9  |
|      | <br>    | 13.1                    | .6<br>  .6  | 10.1<br>10.3                                  | 12.2                                       | 10.6<br>10.6                      | 2.0<br>2.0  | 15.4<br>15.3                 | 1.8<br>1.8  | 17.2<br>17.6                  | 18.6<br>18.5                                  | -1.4<br>-0.9    | 2.3<br>2.2                 | -3.6                                      | -3.5  |
|      |         | 13.1                    | 11.6  | 10.3  | 12.3                                       | 10.6                              | 2.0   | 15.3                         | 1.8   | 17.0                          | 18.5  | -0.9            | 2.2                        | -3.1                                      | -3.0  |

Source: INE (Quarterly National Accounts) and Funcas (Forecasts).

# Chart 6.1 - Public sector: Revenue, expenditure and deficit (a)

# Chart 6.2 - Public sector: Main revenues

Percentage of GDP, 4-quarter moving averages

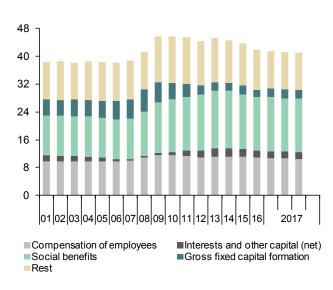


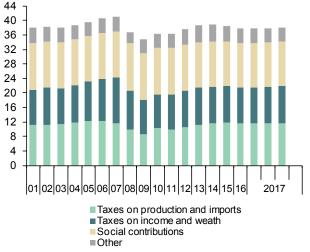
Percentage of GDP, 4-quarter moving averages

(a) Excluding financial entities bail-out expenditures

# Chart 6.3.- Public sector: Main expenditures

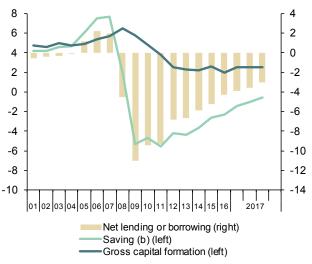
Percentage of GDP, 4-quarter moving averages





# Chart 6.4 - Public sector: Saving, investment and deficit (a)

Percentage of GDP, 4-quarter moving averages



(a) Excluding financial entities bail-out expenditures(b) Including net capital transfers

# Public sector balances, by level of Government

Forecasts in yellow

|      |    |                       | Net                     | t lending (+)/ ne    | t borrowing (-) ( | a)                  |                       |                         |                      | Debt            |                                    |
|------|----|-----------------------|-------------------------|----------------------|-------------------|---------------------|-----------------------|-------------------------|----------------------|-----------------|------------------------------------|
|      |    | Central<br>Government | Regional<br>Governments | Local<br>Governments | Social Security   | TOTAL<br>Government | Central<br>Government | Regional<br>Governments | Local<br>Governments | Social Security | Total Government<br>(consolidated) |
|      |    | EUF                   | R Billions, 4-quarter   | cumulated oper       | ations            |                     |                       | E                       | UR Billions, end c   | of period       |                                    |
| 2010 |    | -52.5                 | -40.2                   | -7.1                 | -2.4              | -102.2              | 551.6                 | 124.2                   | 35.5                 | 17.2            | 650.1                              |
| 2011 |    | -35.3                 | -54.8                   | -8.5                 | -1.1              | -99.7               | 624.2                 | 145.9                   | 36.8                 | 17.2            | 744.3                              |
| 2012 |    | -44.3                 | -19.4                   | 3.3                  | -10.2             | -70.6               | 761.9                 | 189.2                   | 44.0                 | 17.2            | 891.5                              |
| 2013 |    | -46.4                 | -16.2                   | 5.7                  | -11.5             | -68.4               | 850.2                 | 210.5                   | 42.1                 | 17.2            | 979.0                              |
| 2014 |    | -36.8                 | -18.5                   | 5.5                  | -10.8             | -60.6               | 902.5                 | 237.9                   | 38.3                 | 17.2            | 1,041.6                            |
| 2015 |    | -29.3                 | -18.7                   | 4.6                  | -13.0             | -56.5               | 940.4                 | 263.3                   | 35.2                 | 17.2            | 1,073.9                            |
| 2016 |    | -27.8                 | -9.3                    | 6.8                  | -17.8             | -48.0               | 969.6                 | 277.0                   | 32.2                 | 17.2            | 1,107.2                            |
| 2017 |    | -14.9                 | -7.0                    | 2.9                  | -17.7             | -36.7               |                       |                         |                      |                 | 1,141.3                            |
| 2018 |    | -7.8                  | -3.6                    | 2.4                  | -18.2             | -27.2               |                       |                         |                      |                 | 1,167.4                            |
| 2015 | IV | -29.3                 | -18.7                   | 4.6                  | -13.0             | -56.5               | 940.4                 | 263.3                   | 35.2                 | 17.2            | 1,073.9                            |
| 2016 | I  | -29.7                 | -17.9                   | 4.2                  | -14.0             | -57.4               | 962.1                 | 266.0                   | 35.1                 | 17.2            | 1,096.9                            |
|      | Ш  | -28.3                 | -16.9                   | 4.5                  | -15.4             | -56.1               | 964.7                 | 273.5                   | 35.1                 | 17.2            | 1,107.1                            |
|      | Ш  | -33.1                 | -9.1                    | 6.9                  | -16.6             | -51.8               | 968.8                 | 272.7                   | 34.7                 | 17.2            | 1,108.4                            |
|      | IV | -27.8                 | -9.3                    | 6.8                  | -17.8             | -48.0               | 969.6                 | 277.0                   | 32.2                 | 17.2            | 1,107.2                            |
| 2017 | I  | -23.0                 | -10.1                   | 7.1                  | -18.2             | -44.2               | 987.9                 | 279.4                   | 31.7                 | 17.2            | 1,129.0                            |
|      | Ш  | -20.4                 | -10.0                   | 7.3                  | -17.4             | -40.5               | 996.1                 | 285.9                   | 32.4                 | 17.2            | 1,137.9                            |
|      | Ш  | -17.8                 | -6.3                    | 7.4                  | -18.4             | -35.1               | 1,000.1               | 284.4                   | 30.6                 | 23.2            | 1,136.2                            |
|      |    | Pe                    | rcentage of GDP, 4      | -quarter cumula      | ted operations    |                     |                       | F                       | Percentage of GD     | P               |                                    |
| 2010 |    | -4.9                  | -3.7                    | -0.7                 | -0.2              | -9.5                | 51.0                  | 11.5                    | 3.3                  | 1.6             | 60.1                               |
| 2011 |    | -3.3                  | -5.1                    | -0.8                 | -0.1              | -9.3                | 58.3                  | 13.6                    | 3.4                  | 1.6             | 69.5                               |
| 2012 |    | -4.3                  | -1.9                    | 0.3                  | -1.0              | -6.8                | 73.3                  | 18.2                    | 4.2                  | 1.7             | 85.7                               |
| 2013 |    | -4.5                  | -1.6                    | 0.6                  | -1.1              | -6.7                | 82.9                  | 20.5                    | 4.1                  | 1.7             | 95.5                               |
| 2014 |    | -3.5                  | -1.8                    | 0.5                  | -1.0              | -5.8                | 87.0                  | 22.9                    | 3.7                  | 1.7             | 100.4                              |
| 2015 |    | -2.7                  | -1.7                    | 0.4                  | -1.2              | -5.2                | 87.1                  | 24.4                    | 3.3                  | 1.6             | 99.4                               |
| 2016 |    | -2.5                  | -0.8                    | 0.6                  | -1.6              | -4.3                | 86.7                  | 24.8                    | 2.9                  | 1.5             | 99.0                               |
| 2017 |    | -1.3                  | -0.6                    | 0.3                  | -1.5              | -3.1                |                       |                         |                      |                 | 97.8                               |
| 2018 |    | -0.6                  | -0.3                    | 0.2                  | -1.5              | -2.2                |                       |                         |                      |                 | 96.4                               |
| 2015 | IV | -2.7                  | -1.7                    | 0.4                  | -1.2              | -5.2                | 87.1                  | 24.4                    | 3.3                  | 1.6             | 99.4                               |
| 2016 | I  | -2.7                  | -1.6                    | 0.4                  | -1.3              | -5.3                | 88.4                  | 24.4                    | 3.2                  | 1.6             | 100.8                              |
|      | Ш  | -2.6                  | -1.5                    | 0.4                  | -1.4              | -5.1                | 87.7                  | 24.9                    | 3.2                  | 1.6             | 100.7                              |
|      | Ш  | -3.0                  | -0.8                    | 0.6                  | -1.5              | -4.7                | 87.3                  | 24.6                    | 3.1                  | 1.5             | 99.9                               |
|      | IV | -2.5                  | -0.8                    | 0.6                  | -1.6              | -4.3                | 86.7                  | 24.8                    | 2.9                  | 1.5             | 99.0                               |
| 2017 | I  | -2.0                  | -0.9                    | 0.6                  | -1.6              | -3.9                | 87.5                  | 24.7                    | 2.8                  | 1.5             | 100.0                              |
|      | П  | -1.8                  | -0.9                    | 0.6                  | -1.5              | -3.5                | 87.4                  | 25.1                    | 2.8                  | 1.5             | 99.8                               |
|      | Ш  | -1.5                  | -0.5                    | 0.6                  | -1.6              | -3.0                | 86.9                  | 24.7                    | 2.7                  | 2.0             | 98.7                               |

(a) Excluding financial entities bail-out expenditures.

Sources: National Statistics Institute, Bank of Spain (Financial Accounts of the Spanish Economy), and Funcas (Forecasts).

### Chart 7.1 - Government deficit

Percent of GDP, 4-quarter cumulated operations

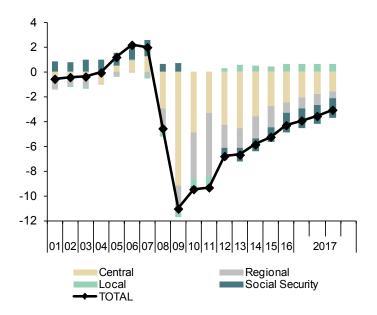
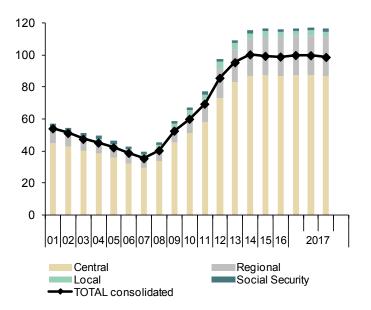


Chart 7.2 - Government debt

Percent of GDP

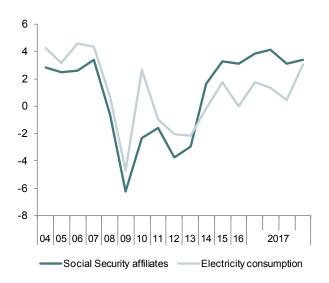


# General activity and industrial sector indicators (a)

|      |        |                                | General activ          | vity indicators                   |   |                                   |  | Industrial s                | ector indicators               |                        |                         |
|------|--------|--------------------------------|------------------------|-----------------------------------|---|-----------------------------------|--|-----------------------------|--------------------------------|------------------------|-------------------------|
|      |        | Economic<br>Sentiment<br>Index | Composite PMI<br>index | Social Security<br>Affiliates (f) | Electricity<br>consumption<br>(temperature<br>adjusted) | Industrial<br>production<br>index | Social Security<br>Affiliates in<br>industry | Manufac turing<br>PMI index | Industrial<br>confidence index | 0                      | Industrial order        |
|      |        | Index                          | Index                  | Thousands                         | I,000 GWH<br>(smoothed)                                 | 2010=100                          | Thousands                                    | Index                       | Balance of<br>responses        | 2010=100<br>(smoothed) | Balance of<br>responses |
| 2010 |        | 92.8                           | 50.0                   | 17,244.0                          | 263.7   | 100.0                             | 2,294.6                                      | 50.6                        | -13.7                          | 100.0                  | -36.7                   |
| 2011 |        | 92.7                           | 46.6                   | 16,970.3                          | 261.1   | 98.4                              | 2,231.9                                      | 47.3                        | -12.5                          | 101.1                  | -30.8                   |
| 2012 |        | 88.0                           | 43.1                   | 16,335.3                          | 255.7   | 91.9                              | 2,113.9                                      | 43.8                        | -17.6                          | 97.1                   | -37.1                   |
| 2013 |        | 92.1                           | 48.3                   | 15,855.2                          | 250.2   | 90.5                              | 2,021.6                                      | 48.5                        | -14.0                          | 93.8                   | -30.7                   |
| 2014 |        | 102.1                          | 55.1                   | 16,111.1                          | 249.7   | 91.6                              | 2,022.8                                      | 53.2                        | -7.1                           | 95.1                   | -16.3                   |
| 2015 |        | 108.7                          | 56.7                   | 16,641.8                          | 254.0   | 94.7                              | 2,067.3                                      | 53.6                        | -0.3                           | 96.5                   | -5.4                    |
| 2016 |        | 106.3                          | 54.9                   | 17,157.5                          | 254.1   | 96.4                              | 2,124.7                                      | 53.1                        | -2.3                           | 97.6                   | -5.4                    |
| 2017 | (b)    | 108.8                          | 56.2                   | 17,789.6                          | 258.2   | 99.6                              | 2,191.0                                      | 54.8                        | 1.0                            | 103.0                  | 2.0                     |
| 2016 | I.     | 107.1                          | 55.0                   | 16,949.1                          | 63.4  | 95.8                              | 2,103.2                                      | 54.3                        | -1.9                           | 96.4                   | -7.6                    |
|      | Ш      | 105.9                          | 55.3                   | 17,063.1                          | 63.6  | 96.3                              | 2,116.6                                      | 52.5                        | -2.8                           | 97.0                   | -2.9                    |
|      | Ш      | 105.0                          | 54.2                   | 17,232.7                          | 63.8  | 96.9                              | 2,132.4                                      | 51.4                        | -3.8                           | 98.1                   | -6.7                    |
|      | IV     | 107.2                          | 55.0                   | 17,384.6                          | 63.9  | 97.1                              | 2,147.8                                      | 54.4                        | -0.6                           | 99.6                   | -4.2                    |
| 2017 | I      | 107.6                          | 56.2                   | 17,548.6                          | 64.0  | 97.6                              | 2,165.1                                      | 54.8                        | 0.3                            | 101.0                  | -3.1                    |
|      | П      | 108.4                          | 57.4                   | 17,727.9                          | 64.2  | 98.4                              | 2,182.5                                      | 54.9                        | -0.5                           | 102.2                  | 6.1                     |
|      | Ш      | 109.0                          | 56.1                   | 17,863.4                          | 64.7  | 99.5                              | 2,199.8                                      | 53.5                        | -0.1                           | 103.6                  | 0.5                     |
|      | IV (b) | 110.3                          | 55.2                   | 18,012.4                          | 65.3  | 101.1                             | 2,217.2                                      | 55.9                        | 4.3                            | 105.0                  | 6.1                     |
| 2017 | Oct    | 110.2                          | 55.1                   | 17,966.5                          | 21.7  | 100.6                             | 2,210.8                                      | 55.8                        | 2.5                            | 104.7                  | 5.0                     |
|      | Nov    | 110.8                          | 55.2                   | 18,015.7                          | 21.8  | 101.6                             | 2,217.3                                      | 56.1                        | 5.5                            | 105.2                  |                         |
|      | Dec    | 110.0                          | 55.4                   | 18,054.9                          | 21.9  |                                   | 2,223.5                                      | 55.8                        | 4.8                            |                        |                         |
|      |        |                                |                        |                                   | Per   | centage changes                   | s (c)  |                             |                                |                        |                         |
| 2010 |        |                                |                        | -2.3                              | 2.7   | 0.8                               | -4.8   |                             |                                | 3.6                    |                         |
| 2011 |        |                                |                        | -1.6                              | -1.0  | -1.6                              | -2.7   |                             |                                | 1.2                    |                         |
| 2012 |        |                                |                        | -3.7                              | -2.1  | -6.7                              | -5.3   |                             |                                | -4.0                   |                         |
| 2013 |        |                                |                        | -2.9                              | -2.2  | -1.6                              | -4.4   |                             |                                | -3.3                   |                         |
| 2014 |        |                                |                        | 1.6                               | -0.2  | 1.3                               | 0.1  |                             |                                | 1.4                    |                         |
| 2015 |        |                                |                        | 3.3                               | 1.7   | 3.4                               | 2.2  |                             |                                | 1.5                    |                         |
| 2016 |        |                                |                        | 3.1                               | 0.0   | 1.9                               | 2.8  |                             |                                | 1.2                    |                         |
| 2017 | (d)    |                                |                        | 3.7                               | 1.6   | 2.6                               | 3.1  |                             |                                | 5.4                    |                         |
| 2016 | I      |                                |                        | 3.0                               | -1.0  | 1.1                               | 2.9  |                             |                                | 0.1                    |                         |
|      | П      |                                |                        | 2.7                               | 0.9   | 2.0                               | 2.6  |                             |                                | 2.2                    |                         |
|      | Ш      |                                |                        | 4.0                               | 0.3   | 2.8                               | 3.0  |                             |                                | 4.7                    |                         |
|      | IV     |                                |                        | 3.6                               | 0.0   | 0.6                               | 2.9  |                             |                                | 6.4                    |                         |
| 2017 | I      |                                |                        | 3.8                               | 1.8   | 2.2                               | 3.3  |                             |                                | 5.7                    |                         |
|      | Ш      |                                |                        | 4.2                               | 1.3   | 3.4                               | 3.3  |                             |                                | 4.7                    |                         |
|      | Ш      |                                |                        | 3.1                               | 0.4   | 4.5                               | 3.2  |                             |                                | 5.6                    |                         |
|      | IV (e) |                                |                        | 3.4                               | 3.0   | 6.5                               | 3.2  |                             |                                | 5.5                    |                         |
| 2017 | Oct    |                                |                        | 0.3                               | 0.3   | 0.6                               | 0.2  |                             |                                | 0.5                    |                         |
|      | Nov    |                                |                        | 0.3                               | 0.4   | 1.0                               | 0.3  |                             |                                | 0.5                    |                         |
|      | Dec    |                                |                        | 0.2                               | 0.4   |                                   | 0.3  |                             |                                |                        |                         |

(a) Seasonally adjusted, except for annual data. (b) Period with available data. (c) Annualized percent change from the previous quarter for quarterly data, non-annualized percent change from the previous month for monthly data, unless otherwise indicated. (d) Growth of available period over the same period of the previous year. (e) Annualized growth of the average of available months over the monthly average of the previous quarter. (f) Excluding domestic service workers and non-profesional caregivers.

Sources: European Commision, Markit Economics Ltd., M. of Labour, M. of Industry, National Statistics Institute, REE and Funcas.



# Chart 8.1 - General activity indicators (I)

Annualized percent change from previous period



Index

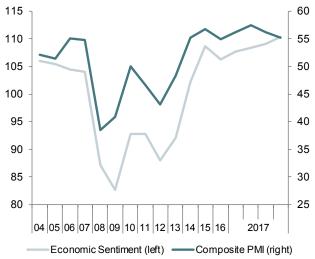
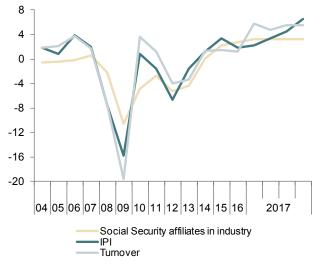
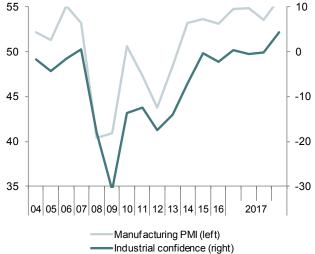


Chart 8.3 - Industrial sector indicators (I) Annualized percent change from previous period

# Chart 8.4 - Industrial sector indicators (II)



Index



# Construction and services sector indicators (a)

|        |        |  | Cor  | nstruction indica                   | itors                      |                        |  |                                | Service sector        | r indicators             |                            |                                 |
|--------|--------|--|--|-------------------------------------|----------------------------|------------------------|--|--------------------------------|-----------------------|--------------------------|----------------------------|---------------------------------|
|        |        | Social Security<br>Affiliates in<br>construction | Industrial<br>production<br>index<br>construction<br>materials | Construction<br>confidence<br>index | Official<br>tenders (f)    | Housing<br>permits (f) | Social Security<br>Affiliates in<br>services (g) | Turnover<br>index<br>(nominal) | Services PMI<br>index | Hotel<br>overnight stays | Passenger air<br>transport | Services<br>confidence<br>index |
|        |        | Thousands  | 2010=100<br>(smoothed)   | Balance of<br>responses             | EUR Billions<br>(smoothed) | Million m <sup>2</sup> | Thousands  | 2010=100<br>(smoothed)         | Index                 | Million<br>(smoothed)    | Million<br>(smoothed)      | Balance of<br>responses         |
| 2010   |        | 1,559  | 100.0  | -29.7                               | 26.2                       | 16.3                   | 12,186   | 100.0                          | 49.3                  | 267.2                    | 191.7                      | -22.4                           |
| 2011   |        | 1,369  | 91.6   | -55.4                               | 13.7                       | 14.1                   | 12,176   | 98.9                           | 46.5                  | 286.8                    | 203.3                      | -20.8                           |
| 2012   |        | 1,136  | 66.9   | -54.9                               | 7.4                        | 8.5                    | 11,907   | 92.8                           | 43.1                  | 280.7                    | 193.2                      | -21.5                           |
| 2013   |        | 997  | 63.0   | -55.6                               | 9.2                        | 6.8                    | 11,728   | 91.0                           | 48.3                  | 286.0                    | 186.5                      | -15.3                           |
| 2014   |        | 980  | 62.1   | -41.4                               | 13.1                       | 6.9                    | 11,995   | 93.3                           | 55.2                  | 295.3                    | 194.9                      | 9.9                             |
| 2015   |        | 1,027  | 66.9   | -25.3                               | 9.4                        | 9.9                    | 12,432   | 97.8                           | 57.3                  | 308.2                    | 206.6                      | 19.4                            |
| 2016   |        | 1,054  | 69.2   | -39.6                               | 9.3                        | 12.7                   | 12,852   | 102.0                          | 55.0                  | 331.2                    | 229.4                      | 17.8                            |
| 2017 ( | b)     | 1,119  | 74.9   | -26.9                               | 11.0                       | 13.4                   | 13,338   | 107.6                          | 56.4                  | 340.0                    | 248.4                      | 22.4                            |
| 2016   | I      | 1,042  | 68.7   | -31.7                               | 2.2                        | 3.4                    | 12,685   | 99.8                           | 54.6                  | 80.9                     | 55.0                       | 18.8                            |
|        | П      | 1,047  | 68.7   | -40.4                               | 2.3                        | 3.2                    | 12,780   | 101.1                          | 55.5                  | 82.1                     | 56.4                       | 17.5                            |
|        | Ш      | 1,059  | 69.7   | -44.3                               | 2.3                        | 2.9                    | 12,911   | 102.7                          | 54.9                  | 83.3                     | 57.8                       | 16.0                            |
|        | IV     | 1,069  | 71.5   | -42.0                               | 2.2                        | 3.2                    | 13,026   | 104.5                          | 54.9                  | 84.3                     | 59.1                       | 18.7                            |
| 2017   | I      | 1,095  | 73.1   | -43.7                               | 2.4                        | 4.0                    | 13,146   | 106.3                          | 56.4                  | 84.9                     | 60.3                       | 19.2                            |
|        | П      | 1,111  | 73.8   | -24.7                               | 2.8                        | 4.2                    | 13,287   | 107.9                          | 57.8                  | 85.2                     | 61.4                       | 23.3                            |
|        | Ш      | 1,125  | 74.3   | -23.5                               | 3.4                        | 3.7                    | 13,399   | 109.4                          | 56.8                  | 85.3                     | 62.5                       | 25.2                            |
|        | IV (b) | 1,144  | 74.9   | -15.7                               | 2.6                        | 1.5                    | 13,515   | 110.8                          | 54.6                  | 85.4                     | 85.4                       | 21.7                            |
| 2017   | Oct    | 1,137  | 74.7   | -14.0                               | 1.3                        | 1.5                    | 13,481   | 110.5                          | 54.6                  | 28.4                     | 21.1                       | 26.4                            |
|        | Nov    | 1,144  | 75.0   | -14.5                               | 1.3                        |                        | 13,518   | 111.0                          | 54.4                  | 28.5                     | 21.3                       | 20.7                            |
|        | Dec    | 1,151  |  | -18.7                               |                            |                        | 13,548   |                                | 54.6                  | 28.5                     | 21.4                       | 17.9                            |
|        |        |  |  |                                     | Percentage                 |                        |  |                                |                       |                          |                            |                                 |
| 2010   |        | -13.4  | -13.7  |                                     | -33.9                      | -16.1                  | -0.5   | 0.8                            |                       | 6.4                      | 2.9                        |                                 |
| 011    |        | -12.2  | -8.4   |                                     | -47.9                      | -13.2                  | -0.1   | -1.1                           |                       | 7.3                      | 6.0                        |                                 |
| 2012   |        | -17.0  | -26.9  |                                     | -45.5                      | -39.9                  | -2.2   | -6.1                           |                       | -2.1                     | -5.0                       |                                 |
| 2013   |        | -12.2  | -5.8   |                                     | 23.2                       | -20.3                  | -1.5   | -2.0                           |                       | 1.9                      | -3.5                       |                                 |
| 2014   |        | -1.7   | -1.4   |                                     | 42.6                       | 2.2                    | 2.3  | 2.6                            |                       | 3.2                      | 4.6                        |                                 |
| 2015   |        | 4.7  | 7.7  |                                     | -28.2                      | 42.6                   | 3.6  | 4.8                            |                       | 4.4                      | 6.0                        |                                 |
| 2016   |        | 2.6  | 3.4  |                                     | -0.8                       | 29.0                   | 3.4  | 4.4                            |                       | 7.4                      | 11.0                       |                                 |
| 2017 ( | ·      | 6.2  | 7.2  |                                     | 30.9                       | 27.0                   | 3.8  | 6.6                            |                       | 2.7                      | 8.3                        |                                 |
| 2016   | I      | 2.3  | -0.5   |                                     | -22.3                      | 60.4                   | 3.6  | 3.4                            |                       | 8.2                      | 11.7                       |                                 |
|        | II     | 2.0  | 0.2  |                                     | -8.3                       | 28.4                   | 3.0  | 5.1                            |                       | 6.5                      | 10.8                       |                                 |
|        | 111    | 4.7  | 5.9  |                                     | 6.9                        | 13.7                   | 4.2  | 6.6                            |                       | 5.7                      | 10.1                       |                                 |
|        | IV     | 3.8  | 10.5   |                                     | 11.0                       | 19.6                   | 3.6  | 7.1                            |                       | 4.9                      | 9.6                        |                                 |
| 2017   | 1      | 10.1   | 9.3  |                                     | 10.1                       | 16.9                   | 3.7  | 7.0                            |                       | 3.0                      | 8.4                        |                                 |
|        | "      | 6.0  | 4.1  |                                     | 21.6                       | 29.3                   | 4.4  | 6.3                            |                       | 1.5                      | 7.2                        |                                 |
|        | 111    | 5.0  | 2.5  |                                     | 46.7                       | 28.9                   | 3.4  | 5.8                            |                       | 0.2                      | 7.3                        |                                 |
|        | IV (e) | 7.1  | 3.3  |                                     | 71.1                       | 47.6                   | 3.5  | 5.1                            |                       | 0.6                      | 8.6                        |                                 |
| 2017   | Oct    | 0.6  | 0.3  |                                     | 107.0                      | 47.6                   | 0.3  | 0.5                            |                       | 0.1                      | 0.7                        |                                 |
|        | Nov    | 0.6  | 0.3  |                                     | 101.8                      |                        | 0.3  | 0.5                            |                       | 0.1                      | 0.7                        |                                 |
|        | Dec    | 0.6  |  |                                     |                            |                        | 0.2  |                                |                       | 0.1                      | 0.7                        |                                 |

(a) Seasonally adjusted, except for annual data and (f). (b) Period with available data. (c) Annualized percent change from the previous quarter for quarterly data, non-annualized percent change from the previous month for monthly data, unless otherwise indicated. (d) Growth of available period over the same period of the previous year. (e) Annualized growth of the average of available months over the monthly average of the previous quarter. (f) Percent changes are over the same period of the previous year. (g) Excluding domestic service workers and non-profesional caregivers.

Sources: European Commision, Markit Economics Ltd., M. of Labour, M. of Public Works, National Statistics Institute, AENA, OFICEMEN, SEOPAN and Funcas.

### Chart 9.1 - Construction indicators (I)

# Annualized percentage changes from previous period and index



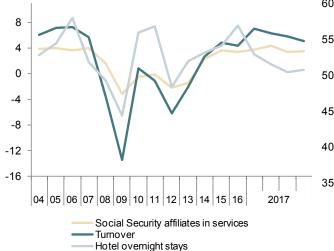
Annualized percentage changes from previous

10 30 80 60 15 5 40 0 0 20 -5 -15 0 -30 -10 -20 -45 -15 -40 -20 -60 -60 -80 -25 -75 04 05 06 07 08 09 10 11 12 13 14 15 16 2017 04 05 06 07 08 09 10 11 12 13 14 15 16 2017 S. Security affiliates in construction (left) Official tenders Construction confidence index (right) Housing permits

period

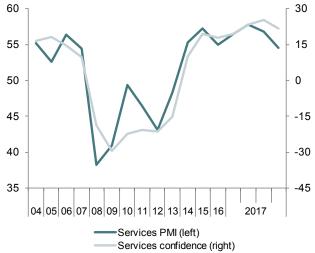
# Chart 9.3 - Services indicators (I)

Percentage change from previous period



# Chart 9.4 - Services indicators (II)

Index



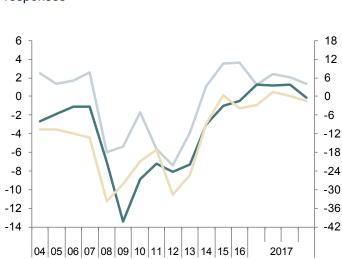
# **Consumption and investment indicators (a)**

|                | _      |                        | C                       | onsumption indicator         | s   |  | Investment                      | in equipment indic                           | ators                              |
|----------------|--------|------------------------|-------------------------|------------------------------|---|--|---------------------------------|--|------------------------------------|
|                |        | Retail sales deflated  | Car registrations       | Consumer<br>confidence index | Hotel overnight<br>stays by residents<br>in Spain | Industrial orders<br>for consumer<br>goods | Cargo vehicles<br>registrations | Industrial orders<br>for investment<br>goods | Imports of capit<br>goods (volume) |
|                |        | 2010=100<br>(smoothed) | Thousands<br>(smoothed) | Balance of responses         | Million (smoothed)                                | Balance of responses                       | Thousands (smoothed)            | Balance of responses                         | 2005=100<br>(smoothed)             |
| 2010           |        | 100.0                  | 1,000.1                 | -20.9                        | 113.2   | -26.7                                      | 152.1                           | -31.1  | (sindotned)<br>70.3                |
| 2011           |        | 94.4                   | 808.3                   | -17.1                        | 111.5   | -21.7                                      | 142.0                           | -23.0  | 68.0                               |
| 2012           |        | 87.4                   | 710.6                   | -31.7                        | 102.1   | -24.2                                      | 107.7                           | -38.6  | 60.6                               |
| 2013           |        | 84.0                   | 742.3                   | -25.3                        | 100.6   | -21.8                                      | 107.6                           | -33.5  | 68.9                               |
| 014            |        | 84.9                   | 890.1                   | -8.9                         | 104.7   | -9.1                                       | 137.5                           | -16.5  | 81.6                               |
| 015            |        | 87.9                   | 1,094.0                 | 0.3                          | 110.3   | -3.1                                       | 180.3                           | 0.2  | 93.3                               |
| 016            |        | 91.1                   | 1,230.1                 | -3.8                         | 114.2   | -1.4                                       | 191.3                           | -0.2   | 97.2                               |
| ото<br>017 (b) |        | 90.8                   | 1,341.6                 | -0.7                         | 115.0   | 3.0  | 207.6                           | 5.2  | 103.1                              |
| 016            | 1      | 90.1                   | 295.2                   | -2.5                         | 27.9  | 0.4  | 46.2                            | -2.3   | 95.5                               |
|                |        | 90.8                   | 302.4                   | -3.2                         | 28.1  | -4.4                                       | 47.0                            | 1.9  | 97.0                               |
|                |        | 91.2                   | 308.4                   | -6.1                         | 28.3  | -2.0                                       | 48.4                            | 2.3  | 98.4                               |
|                | IV     | 91.4                   | 314.6                   | -3.2                         | 28.5  | 0.2  | 49.5                            | -2.6   | 100.2                              |
| 2017           |        | 91.7                   | 320.5                   | -2.8                         | 28.4  | 3.9  | 50.3                            | 1.4  | 103.0                              |
|                |        | 92.2                   | 328.0                   | 1.5                          | 28.5  | 3.6  | 51.3                            | 7.6  | 104.2                              |
|                |        | 92.7                   | 339.0                   | 0.2                          | 28.8  | 3.7  | 52.8                            | -2.0   | 103.4                              |
|                | IV (b) | 93.0                   | 353.4                   | -1.5                         | 29.3  | -0.4                                       | 53.9                            | 17.9   | 102.1                              |
| 2017           | Oct    | 92.9                   | 116.1                   | -1.4                         | 9.7   | -2.7                                       | 17.9                            | 21.1   | 102.4                              |
| 2017           | Nov    | 93.1                   | 117.8                   | -1.7                         | 9.8   | 1.9  | 18.0                            | 14.7   |                                    |
|                | Dec    |                        | 119.5                   | -1.5                         | 9.8   |  | 18.1                            |  |                                    |
|                |        |                        |                         |                              | ercentage changes (c)                             |  |                                 |  |                                    |
| 2010           |        | -1.7                   | 3.0                     |                              | 3.2   |  | 7.0                             |  | 6.1                                |
| 2011           |        | -5.6                   | -19.2                   |                              | -1.5  |  | -6.6                            |  | -3.2                               |
| 2012           |        | -7.4                   | -12.1                   |                              | -8.4  |  | -24.2                           |  | -10.9                              |
| 2013           |        | -3.9                   | 4.5                     |                              | -1.4  |  | -0.1                            |  | 13.7                               |
| 2014           |        | 1.1                    | 19.9                    |                              | 4.1   |  | 27.8                            |  | 18.4                               |
| 2015           |        | 3.6                    | 22.9                    |                              | 5.3   |  | 31.1                            |  | 14.4                               |
| 2016           |        | 3.6                    | 12.4                    |                              | 3.6   |  | 6.1                             |  | 4.1                                |
| 2017 (d)       |        | 1.4                    | 9.1                     |                              | 0.7   |  | 8.5                             |  | 6.8                                |
| 2016           | I      | 3.9                    | 12.7                    |                              | 3.5   |  | 2.1                             |  | 4.0                                |
|                | Ш      | 2.8                    | 10.1                    |                              | 2.6   |  | 7.5                             |  | 6.2                                |
|                | Ш      | 1.9                    | 8.3                     |                              | 3.3   |  | 11.9                            |  | 6.0                                |
|                | IV     | 0.9                    | 8.3                     |                              | 1.5   |  | 9.9                             |  | 7.8                                |
| 017            | I      | 1.2                    | 7.7                     |                              | -0.3  |  | 6.3                             |  | 11.3                               |
|                | П      | 2.4                    | 9.7                     |                              | 1.4   |  | 8.5                             |  | 5.0                                |
|                | Ш      | 2.1                    | 14.1                    |                              | 3.5   |  | 12.0                            |  | -3.1                               |
|                | IV (e) | 1.3                    | 18.1                    |                              | 7.4   |  | 8.6                             |  | -5.0                               |
| 2017           | Oct    | 0.1                    | 1.4                     |                              | 0.6   |  | 0.7                             |  | -0.5                               |
|                | Nov    | 0.1                    | 1.5                     |                              | 0.7   |  | 0.6                             |  |                                    |
|                | Dec    |                        | 1.4                     |                              | 0.7   |  | 0.5                             |  |                                    |

(a) Seasonally adjusted, except for annual data. (b) Period with available data. (c) Annualized percent change from the previous quarter for quarterly data, non-annualized percent change from the previous month for monthly data, unless otherwise indicated. (d) Growth of available period over the same period of the previous year. (e) Annualized growth of the average of available months over the monthly average of the previous quarter.

Sources: European Commision, M. of Economy, M. of Industry, National Statistics Institute, DGT, ANFAC and Funcas.

# **Chart 10.1 - Consumption indicators**

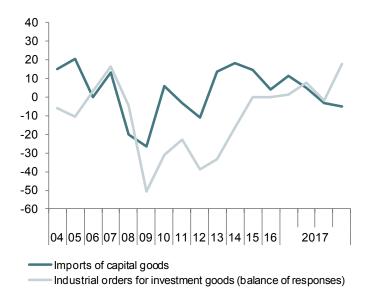


Percent change from previous period and balance of responses

Industrial orders for consumer goods (right, balance of responses)
Consumer confidence index (right, balance of responses)

#### Chart 10.2 - Investment indicators

Percent change from previous period and balance of responses



#### Table 11a

# Labour market (I)

Forecasts in yellow

|      |     |            |          |                        |          |                        |          |                        | Participation   | Employment     |             | Unemploym  | ent rate (c) |         |
|------|-----|------------|----------|------------------------|----------|------------------------|----------|------------------------|-----------------|----------------|-------------|------------|--------------|---------|
|      |     | Population | Labou    | r force                | Emplo    | yment                  | Unem     | ployment               | rate 16-64 (a)  | rate 16-64 (b) | Total       | Aged 16-24 | Spanish      | Foreign |
|      |     | aged 16-64 | Original | Seasonally<br>adjusted | Original | Seasonally<br>adjusted | Original | Seasonally<br>adjusted |                 | S              | easonally a | adjusted   |              |         |
|      |     | I          | 2=4+6    | 3=5+7                  | 4        | 5                      | 6        | 7                      | 8               | 9              | 10=7/3      | П          | 12           | 13      |
| 2010 |     | 31.1       | 23.4     | Million                | 18.7     |                        | 4.6      |                        | 74.6            | 59.7           | Percent     | age 41.5   | 18.1         | 29.9    |
| 2010 |     | 31.1       | 23.4     |                        | 18.4     |                        | 5.0      |                        | 74.9            | 58.8           | 21.4        | 46.2       | 19.5         | 32.6    |
| 2012 |     | 30.9       | 23.4     |                        | 17.6     |                        | 5.8      |                        | 75.3            | 56.5           | 24.8        | 52.9       | 23.0         | 35.9    |
| 2013 |     | 30.6       | 23.2     |                        | 17.1     |                        | 6.1      |                        | 75.3            | 55.6           | 26.1        | 55.5       | 24.4         | 37.0    |
| 2014 |     | 30.3       | 23.0     |                        | 17.3     |                        | 5.6      |                        | 75.3            | 56.8           | 24.4        | 53.2       | 23.0         | 34.5    |
| 2015 |     | 30.2       | 22.9     |                        | 17.9     |                        | 5.1      |                        | 75.5            | 58.7           | 22.1        | 48.3       | 20.9         | 30.5    |
| 2016 |     | 30.1       | 22.8     |                        | 18.3     |                        | 4.5      |                        | 75.4            | 60.5           | 19.6        | 44.4       | 18.7         | 26.6    |
| 2017 |     | 30.1       | 22.7     |                        | 18.8     |                        | 3.9      |                        | 75.1            | 62.1           | 17.2        | 38.7       | 16.3         | 23.8    |
| 2018 |     | 30.0       | 22.7     |                        | 19.3     |                        | 3.4      |                        | 75.0            | 63.7           | 15.1        |            |              |         |
| 2016 | I   | 30.1       | 22.8     | 22.9                   | 18.0     | 18.2                   | 4.8      | 4.6                    | 75.3            | 59.4           | 20.3        | 45.4       | 19.2         | 28.2    |
|      | Ш   | 30.1       | 22.9     | 22.8                   | 18.3     | 18.3                   | 4.6      | 4.6                    | 75.5            | 60.3           | 20.0        | 45.7       | 19.0         | 27.5    |
|      | Ш   | 30.1       | 22.8     | 22.8                   | 18.5     | 18.4                   | 4.3      | 4.4                    | 75.5            | 61.1           | 19.3        | 43.5       | 18.5         | 25.6    |
|      | IV  | 30.0       | 22.7     | 22.7                   | 18.5     | 18.5                   | 4.2      | 4.2                    | 75.1            | 61.1           | 18.6        | 42.6       | 17.8         | 24.8    |
| 2017 | Т   | 30.0       | 22.7     | 22.7                   | 18.4     | 18.6                   | 4.3      | 4.1                    | 75.0            | 60.8           | 18.0        | 40.5       | 17.2         | 24.0    |
|      | Ш   | 30.0       | 22.7     | 22.7                   | 18.8     | 18.8                   | 3.9      | 3.9                    | 75.1            | 62.0           | 17.2        | 38.9       | 16.4         | 23.8    |
|      | Ш   | 30.0       | 22.8     | 22.7                   | 19.0     | 18.9                   | 3.7      | 3.8                    | 75.2            | 62.8           | 16.8        | 37.6       | 15.9         | 23.5    |
|      | IV  | 30.1       | 22.8     | 22.8                   | 19.0     | 19.0                   | 3.8      | 3.8                    | 75.1            | 62.6           | 16.5        | 37.1       | 15.5         | 23.7    |
|      |     |            | P        | ercentage char         | nges (d) |                        |          |                        | Difference from | one year ago   |             |            |              |         |
| 2010 |     | -0.1       | 0.4      |                        | -2.0     |                        | 11.7     |                        | 0.4             | -1.2           | 2.0         | 3.8        | 2.1          | 1.7     |
| 2011 |     | -0.2       | 0.3      |                        | -1.6     |                        | 8.0      |                        | 0.4             | -0.9           | 1.5         | 4.7        | 1.4          | 2.7     |
| 2012 |     | -0.5       | 0.0      |                        | -4.3     |                        | 15.9     |                        | 0.4             | -2.3           | 3.4         | 6.7        | 3.5          | 3.3     |
| 2013 |     | -1.1       | -1.1     |                        | -2.8     |                        | 4.1      |                        | 0.0             | -0.9           | 1.3         | 2.6        | 1.5          | 1.1     |
| 2014 |     | -0.9       | -1.0     |                        | 1.2      |                        | -7.3     |                        | 0.0             | 1.2            | -1.7        | -2.3       | -1.4         | -2.5    |
| 2015 |     | -0.5       | -0.1     |                        | 3.0      |                        | -9.9     |                        | 0.2             | 1.9            | -2.4        | -4.9       | -2.1         | -4.0    |
| 2016 |     | -0.4       | -0.4     |                        | 2.7      |                        | -11.4    |                        | -0.1            | 1.8            | -2.4        | -3.9       | -2.2         | -3.8    |
| 2017 |     | 0.0        | -0.4     |                        | 2.6      |                        | -12.6    |                        | -0.3            | 1.6            | -2.4        | -5.8       | -2.4         | -2.8    |
| 2018 |     | -0.2       | -0.1     |                        | 2.4      |                        | -12.5    |                        | -0.1            | 1.6            | -2.1        |            |              |         |
| 2016 | Ι   | -0.5       | -0.3     | 0.0                    | 3.3      | 3.1                    | -12.0    | -10.9                  | 0.0             | 2.1            | -2.8        | -4.8       | -2.6         | -3.8    |
|      | II  | -0.4       | -0.6     | -0.3                   | 2.4      | 1.2                    | -11.2    | -6.2                   | -0.2            | 1.6            | -2.4        | -2.8       | -2.2         | -3.6    |
|      | III | -0.3       | -0.2     | -0.4                   | 2.7      | 2.9                    | -10.9    | -12.8                  | 0.1             | 1.8            | -2.3        | -4.5       | -2.0         | -4.2    |
|      | IV  | -0.3       | -0.6     | -1.4                   | 2.3      | 2.1                    | -11.3    | -15.1                  | -0.2            | 1.5            | -2.3        | -3.5       | -2.1         | -3.7    |
| 2017 | I   | -0.2       | -0.6     | 0.0                    | 2.3      | 3.0                    | -11.2    | -12.1                  | -0.3            | 1.4            | -2.3        | -4.9       | -2.0         | -4.2    |
|      | II  | -0.1       | -0.6     | -0.6                   | 2.8      | 3.3                    | -14.4    | -17.0                  | -0.5            | 1.7            | -2.7        | -6.9       | -2.6         | -3.7    |
|      | III | 0.0        | -0.3     | 0.8                    | 2.8      | 2.8                    | -13.6    | -8.5                   | -0.3            | 1.7            | -2.5        | -5.9       | -2.6         | -2.1    |
|      | IV  | 0.1        | 0.1      | 0.2                    | 2.6      | 1.6                    | -11.1    | -6.4                   | -0.1            | 1.5            | -2.1        | -5.5       | -2.3         | -1.1    |

(a) Labour force aged 16-64 over population aged 16-64. (b) Employed aged 16-64 over population aged 16-64. (c) Unemployed in each group over labour force in that group. (d) Annual percentage changes for original data; annualized quarterly percentage changes for S.A. data.

Source: INE (Labour Force Survey) and Funcas.

# Chart 11a.1 - Labour force, Employment and unemployment, S.A.

Annual / annualized quarterly growth rates and percentage of active population

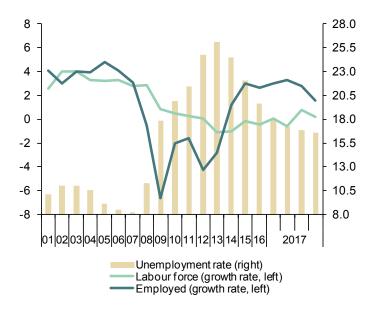
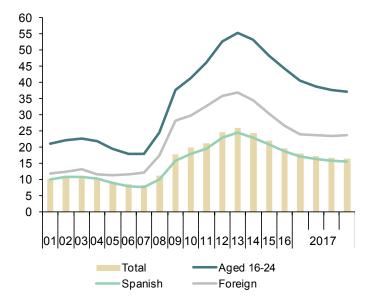


Chart 11a.2 - Unemployment rates, S.A. Percentage



#### Table 11b

# Labour market (II)

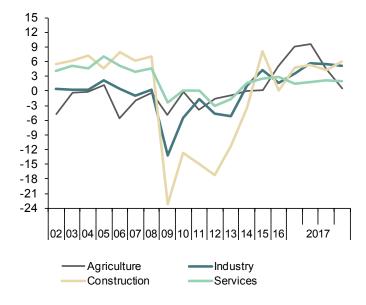
|          |    |             | Employe  |                  |           |       | Emal           | and by success | sional situation                    |               | Employed     | hu dunction of | the working-day                 |
|----------|----|-------------|----------|------------------|-----------|-------|----------------|----------------|-------------------------------------|---------------|--------------|----------------|---------------------------------|
|          |    |             | Employe  | d by sector      |           |       |                |                | sional situation                    |               | Employed     | by duration of | the working-day                 |
|          |    |             |          |                  |           |       |                | Employees      |                                     |               |              |                |                                 |
|          |    | Agriculture | Industry | Construction     | Services  |       |                | By type of co  |                                     | Self employed | Full-time    | Part-time      | Part-time<br>employment         |
|          |    |             |          |                  |           | Total | Tempo-<br>rary | Indefinite     | Temporary<br>employment<br>rate (a) |               |              |                | rate (b)                        |
|          |    | I           | 2        | 3                | 4         | 5=6+7 | 6              | 7              | 8=6/5                               | 9             | 10           | П              | 12                              |
|          |    |             |          |                  |           |       | Million (or    |                |                                     |               |              |                |                                 |
| 2009     |    | 0.79        | 2.81     | 1.89             | 13.62     | 15.88 | 4.00           | 11.88          | 25.2                                | 3.23          | 16.71        | 2.40           | 12.5                            |
| 2010     |    | 0.79        | 2.65     | 1.65             | 13.64     | 15.59 | 3.86           | 11.73          | 24.7                                | 3.13          | 16.29        | 2.44           | 13.0                            |
| 2011     |    | 0.76        | 2.60     | 1.40             | 13.66     | 15.39 | 3.87           | 11.52          | 25.1                                | 3.03          | 15.92        | 2.50           | 13.6                            |
| 2012     |    | 0.74        | 2.48     | 1.16             | 13.24     | 14.57 | 3.41           | 11.16          | 23.4                                | 3.06          | 15.08        | 2.55           | 14.5                            |
| 2013     |    | 0.74        | 2.36     | 1.03             | 13.02     | 14.07 | 3.26           | 10.81          | 23.1                                | 3.07          | 14.43        | 2.71           | 15.8                            |
| 2014     |    | 0.74        | 2.38     | 0.99             | 13.23     | 14.29 | 3.43           | 10.86          | 24.0                                | 3.06          | 14.59        | 2.76           | 15.9                            |
| 2015     |    | 0.74        | 2.48     | 1.07             | 13.57     | 14.77 | 3.71           | 11.06          | 25.1                                | 3.09          | 15.05        | 2.81           | 15.7                            |
| 2016     |    | 0.77        | 2.52     | 1.07             | 13.97     | 15.23 | 3.97           | 11.26          | 26.1                                | 3.11          | 15.55        | 2.79           | 15.2                            |
| 2017 (c) |    | 0.82        | 2.65     | 1.13             | 14.23     | 15.72 | 4.19           | 11.52          | 26.7                                | 3.11          | 16.01        | 2.82           | 15.0                            |
| 2016     | I  | 0.78        | 2.48     | 1.03             | 13.74     | 14.94 | 3.74           | 11.19          | 25.0                                | 3.09          | 15.20        | 2.83           | 15.7                            |
|          | П  | 0.76        | 2.50     | 1.08             | 13.97     | 15.19 | 3.91           | 11.28          | 25.7                                | 3.11          | 15.50        | 2.80           | 15.3                            |
|          | ш  | 0.74        | 2.53     | 1.11             | 14.15     | 15.40 | 4.15           | 11.25          | 27.0                                | 3.12          | 15.83        | 2.70           | 14.6                            |
|          | IV | 0.82        | 2.58     | 1.08             | 14.03     | 15.39 | 4.07           | 11.31          | 26.5                                | 3.12          | 15.68        | 2.83           | 15.3                            |
| 2017     | I  | 0.85        | 2.57     | 1.08             | 13.94     | 15.34 | 3.95           | 11.39          | 25.8                                | 3.10          | 15.56        | 2.87           | 15.6                            |
|          | П  | 0.83        | 2.64     | 1.13             | 14.21     | 15.69 | 4.21           | 11.48          | 26.8                                | 3.12          | 15.94        | 2.87           | 15.3                            |
|          | ш  | 0.78        | 2.67     | 1.15             | 14.45     | 15.91 | 4.36           | 11.55          | 27.4                                | 3.14          | 16.32        | 2.73           | 14.3                            |
|          | IV | 0.82        | 2.71     | 1.14             | 14.32     | 15.92 | 4.25           | 11.67          | 26.7                                | 3.08          | 16.19        | 2.81           | 14.8                            |
|          |    |             | A        | nnual percentage | e changes |       |                |                | Difference from<br>one year ago     | n Annual      | percentage c | hanges         | Difference from<br>one year ago |
| 2009     |    | -4.8        | -13.3    | -23.2            | -2.3      | -5.8  | -18.4          | -0.6           | -3.9                                | -10.6         | -7.5         | -0.4           | 0.8                             |
| 2010     |    | -0.3        | -5.6     | -12.6            | 0.1       | -1.8  | -3.6           | -1.2           | -0.5                                | -2.9          | -2.5         | 1.7            | 0.5                             |
| 2011     |    | -3.9        | -1.7     | -15.0            | 0.2       | -1.3  | 0.3            | -1.8           | 0.4                                 | -3.3          | -2.2         | 2.5            | 0.5                             |
| 2012     |    | -1.6        | -4.6     | -17.3            | -3.0      | -5.3  | -11.8          | -3.1           | -1.7                                | 1.1           | -5.3         | 2.3            | 0.9                             |
| 2013     |    | -0.9        | -5.2     | -11.4            | -1.7      | -3.5  | -4.6           | -3.1           | -0.3                                | 0.4           | -4.3         | 6.0            | 1.3                             |
| 2014     |    | -0.1        | 1.0      | -3.5             | 1.7       | 1.5   | 5.3            | 0.4            | 0.9                                 | -0.4          | 1.1          | 1.9            | 0.1                             |
| 2015     |    | 0.1         | 4.3      | 8.1              | 2.6       | 3.4   | 8.3            | 1.9            | 1.1                                 | 1.1           | 3.2          | 1.9            | -0.2                            |
| 2016     |    | 5.1         | 1.6      | 0.0              | 2.9       | 3.1   | 6.8            | 1.8            | 0.9                                 | 0.7           | 3.3          | -0.8           | -0.5                            |
| 2017 (d) |    | 5.8         | 5.0      | 5.1              | 1.9       | 3.2   | 5.6            | 2.3            | 0.6                                 | -0.1          | 2.9          | 1.0            | -0.2                            |
| 2016     | I  | 8.4         | 1.7      | -2.7             | 3.8       | 3.8   | 10.1           | 1.8            | 1.4                                 | 1.1           | 4.0          | -0.2           | -0.6                            |
|          | П  | 2.7         | -0.4     | -1.4             | 3.2       | 2.9   | 5.5            | 2.0            | 0.6                                 | 0.3           | 3.0          | -0.6           | -0.5                            |
|          | ш  | 4.8         | 0.5      | 2.3              | 3.0       | 3.0   | 6.2            | 1.9            | 0.8                                 | 0.7           | 3.5          | -1.9           | -0.7                            |
|          | IV | 4.7         | 4.7      | 2.0              | 1.7       | 2.6   | 5.9            | 1.5            | 0.8                                 | 0.6           | 2.8          | -0.4           | -0.4                            |
| 2017     |    | 9.0         | 3.6      | 4.8              | 1.4       | 2.7   | 5.6            | 1.5            | 0.7                                 | 0.1           | 2.4          | 1.5            | -0.1                            |
|          | "  | 9.5         | 5.6      | 5.2              | 1.7       | 3.3   | 7.7            | 1.7            | 1.1                                 | 0.3           | 2.9          | 2.5            | -0.1                            |
|          |    | 4.5         | 5.5      | 4.3              | 2.1       | 3.3   | 4.9            | 2.7            | 0.4                                 | 0.6           | 3.1          | 1.1            | -0.1                            |
|          | IV | 4.5<br>0.5  | 5.5      | 6.0              | 2.1       | 3.5   | 4.4            | 3.2            | 0.4                                 | -1.5          | 3.1          | -1.0           | -0.2                            |
|          | IV | 0.5         | 5.1      | 6.0              | Z. I      | 5.5   | 4.4            | 3.2            | 0.2                                 | -1.5          | 3.3          | -1.0           | -0.5                            |

(a) Percentage of employees with temporary contract over total employees. (b) Percentage of part-time employed over total employed. (c) Period with available data. (d) Growth of available period over the same period of the previous year.

Source: INE (Labour Force Survey).

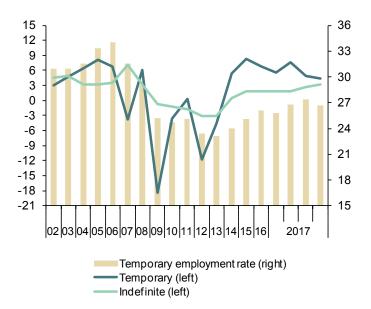
# Chart 11b 1.- Employment by sector

Annual percentage changes



# Chart 11b.2 - Employment by type of contract

Annual percentage changes and percentage over total employees



# **Index of Consumer Prices**

Forecasts in yellow

|           |           |       | Total excluding | Excl  | uding unprocessed f            | ood and ener | gy                |                  |        |       |
|-----------|-----------|-------|-----------------|-------|--------------------------------|--------------|-------------------|------------------|--------|-------|
|           |           | Total | food and energy | Total | Non-energy<br>industrial goods | Services     | Processed<br>food | Unprocessed food | Energy | Food  |
| % of tota | l in 2017 | 100.0 | 66.01           | 81.28 | 24.76                          | 41.25        | 15.27             | 7.52             | 11.20  | 22.79 |
|           |           |       |                 |       | Indexes, 20                    | 16 = 100     |                   |                  |        |       |
| 2014      |           | 100.7 | 98.7            | 98.6  | 99.2                           | 98.3         | 98.2              | 96.0             | 120.3  | 97.6  |
| 2015      |           | 100.2 | 99.2            | 99.2  | 99.5                           | 98.9         | 99.2              | 97.7             | 109.4  | 98.7  |
| 2016      |           | 100.0 | 100.0           | 100.0 | 100.0                          | 100.0        | 100.0             | 100.0            | 100.0  | 100.0 |
| 2017      |           | 102.0 | 101.1           | 101.1 | 100.2                          | 101.6        | 100.7             | 102.6            | 108.0  | 101.3 |
| 2018      |           | 103.6 | 102.4           | 102.3 | 100.7                          | 103.3        | 101.6             | 104.3            | 112.6  | 102.5 |
|           |           |       |                 |       | Annual percent                 | tage changes |                   |                  |        |       |
| 2011      |           | 3.2   | 1.3             | 1.7   | 0.6                            | 1.8          | 3.8               | 1.8              | 15.7   | 3.2   |
| 2012      |           | 2.4   | 1.3             | 1.6   | 0.8                            | 1.5          | 3.1               | 2.3              | 8.9    | 2.8   |
| 2013      |           | 1.4   | 1.1             | 1.4   | 0.6                            | 1.4          | 3.1               | 3.6              | 0.0    | 3.2   |
| 2014      |           | -0.2  | 0.0             | 0.0   | -0.4                           | 0.1          | 0.4               | -1.2             | -0.8   | -0.1  |
| 2015      |           | -0.5  | 0.5             | 0.6   | 0.3                            | 0.7          | 0.9               | 1.8              | -9.0   | 1.2   |
| 2016      |           | -0.2  | 0.8             | 0.8   | 0.5                            | 1.1          | 0.8               | 2.3              | -8.6   | 1.3   |
| 2017      |           | 2.0   | 1.1             | 1.1   | 0.2                            | 1.6          | 0.7               | 2.6              | 8.0    | 1.3   |
| 2018      |           | 1.6   | 1.2             | 1.2   | 0.5                            | 1.7          | 1.0               | 1.7              | 4.3    | 1.2   |
| 2017      | Jan       | 3.0   | 1.2             | 1.1   | 0.8                            | 1.3          | 0.3               | 2.7              | 17.5   | 1.1   |
|           | Feb       | 3.0   | 1.2             | 1.0   | 0.6                            | 1.3          | 0.0               | 5.4              | 16.8   | 1.7   |
|           | Mar       | 2.3   | 1.0             | 0.9   | 0.6                            | 1.1          | 0.1               | 4.3              | 11.7   | 1.4   |
|           | Apr       | 2.6   | 1.5             | 1.2   | 0.3                            | 2.1          | 0.2               | 3.4              | 12.0   | 1.2   |
|           | May       | 1.9   | 1.1             | 1.0   | 0.1                            | 1.7          | 0.4               | 2.8              | 8.3    | 1.2   |
|           | Jun       | 1.5   | 1.3             | 1.2   | 0.2                            | 1.9          | 0.7               | 1.4              | 3.7    | 0.9   |
|           | Jul       | 1.5   | 1.4             | 1.4   | 0.3                            | 1.9          | 1.0               | -1.0             | 4.1    | 0.3   |
|           | Aug       | 1.6   | 1.2             | 1.2   | 0.0                            | 1.7          | 1.1               | -1.6             | 6.3    | 0.3   |
|           | Sep       | 1.8   | 1.3             | 1.2   | 0.1                            | 1.8          | 0.9               | 2.2              | 5.8    | 1.3   |
|           | Oct       | 1.6   | 0.9             | 0.9   | -0.2                           | 1.6          | 1.0               | 4.9              | 3.9    | 2.3   |
|           | Nov       | 1.7   | 0.8             | 0.8   | -0.3                           | 1.5          | 1.2               | 4.3              | 5.9    | 2.2   |
|           | Dec       | 1.1   | 0.7             | 0.8   | -0.3                           | 1.3          | 1.2               | 2.8              | 2.6    | 1.7   |
| 2018      | Jan       | 0.6   | 0.9             | 0.9   | -0.2                           | 1.5          | 1.1               | 1.5              | -2.0   | 1.2   |
|           | Feb       | 1.1   | 1.0             | 1.1   | 0.0                            | 1.6          | 1.4               | 0.0              | 2.2    | 0.9   |
|           | Mar       | 1.6   | 1.3             | 1.3   | 0.1                            | 2.0          | 1.3               | 0.4              | 5.0    | 1.0   |
|           | Apr       | 1.3   | 0.7             | 0.8   | 0.2                            | 1.1          | 1.2               | 1.1              | 4.6    | 1.2   |
|           | May       | 1.6   | 1.1             | 1.1   | 0.3                            | 1.7          | 1.0               | 1.1              | 5.8    | 1.0   |
|           | Jun       | 1.9   | 1.1             | 1.1   | 0.4                            | 1.6          | 0.8               | 2.2              | 7.5    | 1.3   |
|           | Jul       | 2.0   | 1.2             | 1.1   | 0.6                            | 1.6          | 0.7               | 2.9              | 8.0    | 1.4   |
|           | Aug       | 2.0   | 1.3             | 1.2   | 0.7                            | 1.7          | 0.6               | 4.3              | 6.8    | 1.8   |
|           | Sep       | 2.0   | 1.4             | 1.3   | 0.8                            | 1.8          | 0.9               | 3.3              | 5.9    | 1.7   |
|           | Oct       | 1.6   | 1.5             | 1.4   | 0.9                            | 1.9          | 0.9               | 0.1              | 4.2    | 0.7   |
|           | Nov       | 1.5   | 1.6             | 1.4   | 1.0                            | 2.0          | 0.8               | 1.1              | 1.9    | 0.9   |
|           | Dec       | 1.6   | 1.7             | 1.5   | 1.1                            | 2.0          | 0.8               | 2.0              | 2.0    | 1.2   |

Source: INE and Funcas (Forecasts).

# Chart 12.1 - Inflation Rate (I)

Annual percentage changes

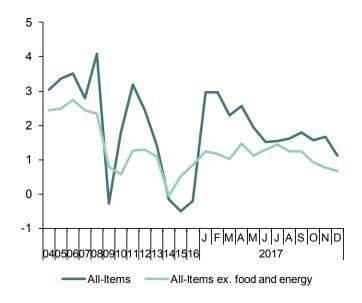
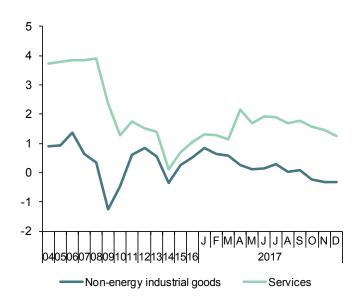


Chart 12.2 - Inflation rate (II) Annual percentage changes



# **Other prices and costs indicators**

|         |        |                     | Industrial pro | oducer prices       | Housi                           | ng prices                                | Urban                     |                                     | Labour C                 | osts Survey              |  | Wage increa                           |
|---------|--------|---------------------|----------------|---------------------|---------------------------------|--|---------------------------|-------------------------------------|--------------------------|--------------------------|--|---------------------------------------|
|         |        | GDP deflator<br>(a) | Total          | Excluding<br>energy | Housing<br>Price Index<br>(INE) | m² average<br>price (M.<br>Public Works) | land prices<br>(M. Public | Total labour<br>costs per<br>worker | Wage costs per<br>worker | Other cost per<br>worker | Total labour<br>costs per hour<br>worked | agreed in<br>collective<br>bargaining |
|         |        | 2010=100            | 2010           | =100                |                                 | 2007=100                                 |                           |                                     | 2000                     | 0=100                    |  |                                       |
| 2010    |        | 100.0               | 100.0          | 100.0               | 90.1                            | 89.6                                     | 74.8                      | 142.8                               | 140.4                    | 150.2                    | 151.4                                    |                                       |
| 2011    |        | 100.0               | 106.9          | 104.2               | 83.4                            | 84.6                                     | 69.8                      | 144.5                               | 141.9                    | 152.5                    | 154.8                                    |                                       |
| 2012    |        | 100.1               | 111.0          | 105.9               | 72.0                            | 77.2                                     | 65.4                      | 143.6                               | 141.1                    | 151.3                    | 154.7                                    |                                       |
| 2013    |        | 100.5               | 111.7          | 106.7               | 64.3                            | 72.7                                     | 55.1                      | 143.8                               | 141.1                    | 152.2                    | 155.2                                    |                                       |
| 014     |        | 100.3               | 110.2          | 105.9               | 64.5                            | 71.0                                     | 52.6                      | 143.3                               | 140.9                    | 150.7                    | 155.4                                    |                                       |
| 015     |        | 100.9               | 107.9          | 106.2               | 66.8                            | 71.7                                     | 54.9                      | 144.2                               | 142.5                    | 149.6                    | 156.4                                    |                                       |
| 016     |        | 101.2               | 104.5          | 105.8               | 70.0                            | 73.1                                     | 57.8                      | 143.6                               | 142.1                    | 148.4                    | 156.2                                    |                                       |
| .017 (b | )      | 101.9               | 109.1          | 108.2               | 73.8                            | 74.5                                     | 59.3                      | 141.7                               | 139.3                    | 149.0                    | 153.5                                    |                                       |
| 016     | I      | 100.7               | 102.3          | 105.2               | 68.7                            | 72.6                                     | 56.6                      | 140.4                               | 137.3                    | 150.0                    | 147.4                                    |                                       |
|         | Ш      | 101.0               | 103.4          | 105.6               | 69.9                            | 73.3                                     | 58.7                      | 146.2                               | 145.5                    | 148.4                    | 154.5                                    |                                       |
|         | ш      | 101.2               | 105.0          | 106.0               | 70.5                            | 72.9                                     | 54.2                      | 138.2                               | 135.1                    | 147.7                    | 159.4                                    |                                       |
|         | IV     | 101.7               | 107.4          | 106.3               | 70.8                            | 73.5                                     | 61.6                      | 149.8                               | 150.6                    | 147.4                    | 163.6                                    |                                       |
| 017     | I      | 101.6               | 109.4          | 107.7               | 72.4                            | 74.2                                     | 60.1                      | 140.2                               | 137.0                    | 150.1                    | 147.1                                    |                                       |
|         | Ш      | 101.7               | 108.3          | 108.2               | 73.8                            | 74.4                                     | 59.7                      | 146.1                               | 145.5                    | 148.2                    | 154.4                                    |                                       |
|         | Ш      | 102.2               | 108.4          | 108.3               | 75.2                            | 74.9                                     | 58.2                      | 138.7                               | 135.5                    | 148.7                    | 158.9                                    |                                       |
|         | IV (b) |                     | 110.1          | 108.5               |                                 |  |                           |                                     |                          |                          |  |                                       |
| 017     | Oct    |                     | 109.7          | 108.5               |                                 |  |                           |                                     |                          |                          |  |                                       |
|         | Nov    |                     | 110.3          | 108.5               |                                 |  |                           |                                     |                          |                          |  |                                       |
|         | Dec    |                     | 110.5          | 108.7               |                                 |  |                           |                                     |                          |                          |  |                                       |
|         |        |                     |                |                     |                                 | Annual perc                              | ent changes               | (c)                                 |                          |                          |  |                                       |
| 010     |        | 0.2                 | 3.7            | 1.8                 | -2.0                            | -3.9                                     | -12.8                     | 0.4                                 | 0.9                      | -1.1                     | 0.9                                      | 1.5                                   |
| 011     |        | 0.0                 | 6.9            | 4.2                 | -7.4                            | -5.6                                     | -6.7                      | 1.2                                 | 1.0                      | 1.6                      | 2.2                                      | 2.0                                   |
| 012     |        | 0.1                 | 3.8            | 1.7                 | -13.7                           | -8.7                                     | -6.4                      | -0.6                                | -0.6                     | -0.8                     | -0.1                                     | 1.0                                   |
| 013     |        | 0.4                 | 0.6            | 0.7                 | -10.6                           | -5.8                                     | -15.7                     | 0.2                                 | 0.0                      | 0.6                      | 0.4                                      | 0.5                                   |
| 014     |        | -0.2                | -1.3           | -0.8                | 0.3                             | -2.4                                     | -4.6                      | -0.3                                | -0.1                     | -1.0                     | 0.1                                      | 0.5                                   |
| 015     |        | 0.6                 | -2.1           | 0.3                 | 3.6                             | 1.1                                      | 4.3                       | 0.6                                 | 1.1                      | -0.7                     | 0.6                                      | 0.7                                   |
| 016     |        | 0.3                 | -3.1           | -0.4                | 4.7                             | 1.9                                      | 5.3                       | -0.4                                | -0.3                     | -0.8                     | -0.1                                     | 1.1                                   |
| 017 (d  | )      | 0.9                 | 4.4            | 2.3                 | 5.8                             | 2.2                                      | 5.0                       | 0.1                                 | 0.0                      | 0.2                      | -0.2                                     | 1.4                                   |
| 016     | ,<br>I | 0.0                 | -5.1           | -0.7                | 6.3                             | 1.5                                      | 5.3                       | -0.1                                | 0.1                      | -0.7                     | 0.3                                      | 1.1                                   |
|         | Ш      | 0.3                 | -5.4           | -0.9                | 3.9                             | 1.8                                      | 6.6                       | -0.2                                | 0.0                      | -1.0                     | 0.1                                      | 1.1                                   |
|         | ш      | 0.3                 | -3.3           | -0.5                | 4.0                             | 0.8                                      | -3.5                      | -0.5                                | -0.3                     | -0.9                     | -0.4                                     | 1.1                                   |
|         | IV     | 0.5                 | 1.2            | 0.6                 | 4.5                             | 0.4                                      | 13.0                      | -0.8                                | -0.7                     | -0.8                     | -0.5                                     | 1.1                                   |
| 017     |        | 0.9                 | 6.9            | 2.4                 | 5.3                             | 2.3                                      | 6.2                       | -0.1                                | -0.2                     | 0.1                      | -0.2                                     | 1.3                                   |
|         |        | 0.7                 | 4.8            | 2.5                 | 5.6                             | 2.0                                      | 1.8                       | 0.0                                 | 0.0                      | -0.1                     | -0.1                                     | 1.3                                   |
|         |        | 1.0                 | 3.3            | 2.1                 | 6.6                             | 1.8                                      | 7.4                       | 0.4                                 | 0.3                      | 0.7                      | -0.3                                     | 1.5                                   |
|         | IV (e) |                     | 2.6            | 2.1                 |                                 |  | ·                         |                                     |                          |                          | -0.5                                     | 1.4                                   |
| 017     | Oct    |                     | 2.8            | 2.1                 |                                 |  |                           |                                     |                          |                          |  | 1.3                                   |
| U17     | Nov    |                     | 3.2            | 2.3                 |                                 |  |                           |                                     |                          |                          |  | 1.3                                   |
|         | Dec    |                     | 3.2<br>1.8     | 1.9                 |                                 |  |                           |                                     |                          |                          |  | 1.3                                   |

(a) Seasonally adjusted. (b) Period with available data. (c) Annualized percent change from the previous quarter for quarterly data, non-annualized percent change from the previous month for monthly data, unless otherwise indicated. (d) Growth of available period over the same period of the previous year. (e) Annualized growth of the average of available months over the monthly average of the previous quarter.

Sources: M. of Public Works, M. of Labour and INE (National Statistics Institute).

# Chart 13.1 - Housing and urban land prices

Index (2007=100)

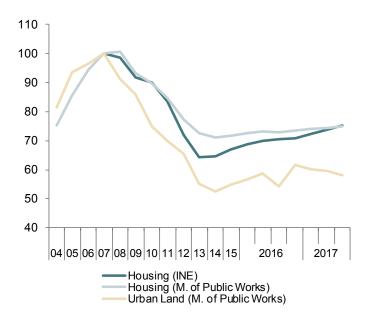
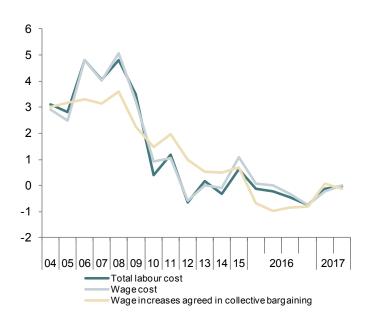


Chart 13.2 - Wage costs

Annual percent change



# External trade (a)

|          |     |         | Exports of goods | ;     | l             | mports of goo | ds    | Eveneter   |   | Tees Delaw  | Palanasa   | Balance of   |
|----------|-----|---------|------------------|-------|---------------|---------------|-------|--|---|---|--|--|
|          |     | Nominal | Prices           | Real  | Nominal       | Prices        | Real  | Exports to<br>EU countries<br>(monthly<br>average) | Exports to non-<br>EU countries<br>(monthly<br>average) | Total Balance<br>of goods<br>(monthly<br>average) | Balance of<br>goods excluding<br>energy (monthly<br>average) | goods with<br>EU countries<br>(monthly<br>average) |
|          |     |         | 2005=100         |       |               | 2005=100      |       |  |   | EUR Billions                                      | · · ·  |  |
| 2010     |     | 120.5   | 103.4            | 116.5 | 103.0         | 100.9         | 102.1 | 10.5   | 5.0   | -4.4  | -1.5   | -0.4   |
| 2011     |     | 138.9   | 108.4            | 128.1 | 113.0         | 109.6         | 103.1 | 11.9   | 6.1   | -4.0  | -0.3   | 0.3  |
| 2012     |     | 145.9   | 110.7            | 131.8 | 110.7         | 114.7         | 96.6  | 11.9   | 6.9   | -2.7  | 1.2  | 1.0  |
| 2013     |     | 152.1   | 110.5            | 137.7 | 108.3         | 109.8         | 98.6  | 12.3   | 7.3   | -1.4  | 2.1  | 1.4  |
| 2014     |     | 155.2   | 109.4            | 141.8 | 114.0         | 107.3         | 106.3 | 12.7   | 7.3   | -2.1  | 1.1  | 0.9  |
| 2015     |     | 161.2   | 110.1            | 146.4 | 118.0         | 104.6         | 112.8 | 13.5   | 7.3   | -2.1  | 0.2  | 0.6  |
| 2016     |     | 165.4   | 108.2            | 152.9 | 117.5         | 101.3         | 116.0 | 14.2   | 7.2   | -1.4  | 0.3  | 1.2  |
| 2017 (b) |     | 179.8   | 108.7            | 165.5 | 130.2         | 105.9         | 123.0 | 15.1   | 7.9   | -2.1  | 0.1  | 1.3  |
| 2015     | IV  | 165.1   | 109.9            | 150.2 | 118.1         | 103.9         | 113.7 | 13.8   | 7.4   | -1.7  | 0.3  | 0.7  |
| 2016     | I   | 158.8   | 107.7            | 147.4 | 114.2         | 99.4          | 114.8 | 13.8   | 6.6   | -1.7  | -0.1   | 1.1  |
|          | Ш   | 165.8   | 107.7            | 153.9 | 117.1         | 100.3         | 116.7 | 14.8   | 7.2   | -1.4  | 0.3  | 1.0  |
|          | Ш   | 165.6   | 108.3            | 152.9 | 117.3         | 101.6         | 115.5 | 13.2   | 7.3   | -1.5  | 0.3  | 0.8  |
|          | IV  | 171.6   | 108.8            | 157.8 | 122.6         | 104.0         | 117.9 | 14.5   | 7.5   | -1.7  | 0.1  | 1.3  |
| 2017     | I   | 177.9   | 108.5            | 164.0 | 131.0         | 107.2         | 122.2 | 15.6   | 7.6   | -2.5  | 0.2  | 1.3  |
|          | Ш   | 179.5   | 107.7            | 166.6 | 127.6         | 104.6         | 121.9 | 15.7   | 7.8   | -1.7  | 0.3  | 1.7  |
|          | Ш   | 179.0   | 108.8            | 164.5 | 130.3         | 105.1         | 124.0 | 13.9   | 8.2   | -2.2  | -0.2   | 1.1  |
| 2017     | Sep | 183.9   | 110.9            | 165.8 | 129.6         | 106.7         | 121.5 | 15.6   | 8.3   | -1.5  | 0.3  | 1.7  |
|          | Oct | 182.0   | 110.0            | 165.5 | 131.7         | 107.0         | 123.1 | 15.7   | 8.2   | -2.1  | -0.3   | 1.0  |
|          | Nov | 187.1   | 110.3            | 169.7 | 134.1         | 107.3         | 125.0 | 16.9   | 8.4   | -1.9  | 0.5  | 1.3  |
|          |     |         |                  | Perce | entage change | es (c)        |       |  |   |   | Percentage of GDF  | <b>)</b>   |
| 2010     |     | 16.8    | 1.6              | 15.0  | 16.5          | 4.6           | 11.3  | 14.3   | 22.5  | -4.9  | -1.7   | -0.4   |
| 2011     |     | 15.2    | 4.9              | 9.9   | 9.6           | 8.6           | 1.0   | 12.7   | 20.5  | -4.5  | -0.4   | 0.3  |
| 2012     |     | 5.1     | 2.1              | 2.9   | -2.0          | 4.7           | -6.3  | 0.5  | 14.1  | -3.1  | 1.4  | 1.2  |
| 2013     |     | 4.3     | -0.2             | 4.5   | -2.2          | -4.2          | 2.1   | 3.1  | 6.3   | -1.6  | 2.5  | 1.7  |
| 2014     |     | 2.0     | -0.9             | 3.0   | 5.2           | -2.3          | 7.7   | 3.5  | -0.4  | -2.4  | 1.3  | 1.0  |
| 2015     |     | 3.8     | 0.6              | 3.2   | 3.5           | -2.5          | 6.1   | 5.8  | 0.4   | -2.3  | 0.2  | 0.7  |
| 2016     |     | 2.6     | -1.7             | 4.4   | -0.4          | -3.1          | 2.8   | 5.3  | -2.5  | -1.6  | 0.3  | 1.2  |
| 2017 (d) |     | 9.1     | 0.6              | 8.5   | 11.1          | 5.0           | 5.8   | 8.0  | 11.4  |   |  |  |
| 2015     | IV  | -1.0    | 1.7              | -2.7  | -8.9          | -1.9          | -7.1  | 3.7  | -9.1  | -1.8  | 0.3  | 0.8  |
| 2016     | I   | -14.4   | -7.7             | -7.3  | -12.6         | -16.1         | 4.2   | -0.6   | -36.2   | -1.9  | -0.1   | 1.2  |
|          | Ш   | 19.0    | 0.2              | 18.8  | 10.5          | 3.8           | 6.5   | 10.1   | 39.4  | -1.5  | 0.3  | 1.1  |
|          | Ш   | -0.6    | 1.9              | -2.5  | 1.0           | 5.1           | -4.0  | -5.6   | 9.8   | -1.6  | 0.3  | 0.9  |
|          | IV  | 15.4    | 1.9              | 13.3  | 19.1          | 9.7           | 8.6   | 20.3   | 6.7   | -1.8  | 0.1  | 1.4  |
| 2017     | Т   | 15.5    | -1.1             | 16.8  | 30.2          | 12.9          | 15.4  | 19.6   | 7.7   | -2.6  | 0.2  | 1.3  |
|          | Ш   | 3.6     | -2.7             | 6.4   | -9.8          | -9.1          | -0.8  | -0.6   | 12.3  | -1.7  | 0.4  | 1.7  |
|          | ш   | -1.0    | 4.1              | -4.9  | 8.8           | 1.7           | 7.0   | -10.4  | 19.3  |   |  |  |
| 2017     | Sep | 2.0     | 32.5             | -23.0 | -2.2          | 51.6          | -35.5 | 2.7  | 0.6   |   |  |  |
|          | Oct | -1.0    | 0.9              | -1.9  | 1.6           | -13.3         | 17.2  | -1.4   | -0.3  |   |  |  |
|          | Nov | 2.8     | -23.5            | 34.4  | 1.8           | -14.8         | 19.4  | 3.1  | 2.2   |   |  |  |

(a) Seasonally adjusted, except for annual data. (b) Period with available data. (c) Annualized percent change from the previous quarter for quarterly data, non-annualized percent change from the previous month for monthly data. (d) Growth of available period over the same period of the previous year. *Source Ministry of Economy.* 

# Chart 14.1 - External trade (real)



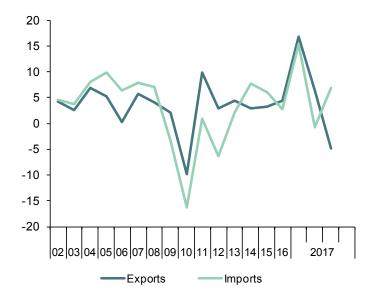
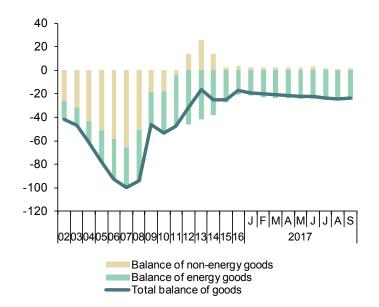


Chart 14.2 - Trade balance EUR Billions, moving sum of 12 months



# Balance of Payments (according to IMF manual)

(Net transactions)

|                  |     |                  | C                | urrent acc        | ount             |                    |              |                         |                 | Fin                  | nancial account        |                     |                       |                   |                  |
|------------------|-----|------------------|------------------|-------------------|------------------|--------------------|--------------|-------------------------|-----------------|----------------------|------------------------|---------------------|-----------------------|-------------------|------------------|
|                  |     | Total            |                  | Services          | Primary          | Secondary          | Capital      | Current                 | F               |                      | nt, excluding B        |                     |                       | Bank of           | Errors           |
|                  |     |                  |                  |                   | Income           | Income             | account      | and capital<br>accounts | Total           | Direct<br>investment | Porfolio<br>investment | Other<br>investment | Financial derivatives | Spain             | and<br>omission: |
|                  |     | I=2+3+4+5        | 2                | 3                 | 4                | 5                  | 6            | 7=1+6                   | 8=9+10+11+12    | 9                    | 10                     | П                   | 12                    | 13                | 14               |
|                  |     |                  |                  |                   | 20.40            |                    |              | EUR bi                  |                 |                      |                        | 75 70               |                       |                   |                  |
| 2008             |     | -103.25          | -87.04           | 29.82             | -30.49           | -15.55             | 4.67         | -98.58                  | -69.23          | -1.53                | 0.96                   | -75.72              | 7.07                  | -30.22            | -0.86            |
| 2009             |     | -46.19           | -41.47           | 29.54             | -19.62           | -14.64             | 3.33         | -42.86                  | -40.70          | 1.94                 | -44.04                 | -4.66               | 6.05                  | -10.46            | -8.31            |
| 2010<br>2011     |     | -42.39<br>-34.04 | -47.80<br>-44.48 | 33.93<br>42.59    | -15.13<br>-18.36 | -13.38<br>-13.79   | 4.89<br>4.06 | -37.49<br>-29.98        | -27.24<br>79.51 | -1.46<br>9.23        | -28.40<br>26.25        | 11.23<br>41.96      | -8.61<br>2.07         | -15.70<br>-109.23 | -5.44<br>0.26    |
| 2011             |     | -34.04           | -44.48           | 42.59             | -18.36           | -13.79             | 5.18         | -29.98                  | 170.51          | -21.12               | 26.25<br>55.40         | 41.96               | -8.35                 | -109.23           | -1.02            |
| 2012             |     | -2.40            | -14.01           | 47.78             | -5.29            | -11.37             | 6.58         | 2.77                    | -84.89          | -21.12               | -52.99                 | -14.40              | -0.35<br>1.04         | 118.19            | -1.02            |
| 2013             |     | 11.22            | -22.22           |                   | -3.37            | -11.09             | 5.05         | 16.27                   | -04.87          | 6.48                 | -52.77                 | -17.71              | 1.28                  | 27.49             | -4.17            |
| 2014             |     | 12.18            | -22.30           | 47.56             | -2.26            | -10.81             | 7.07         | 19.25                   | 63.86           | 27.93                | -6.80                  | 43.74               | -1.01                 | -40.16            | 4.45             |
| 2015             |     | 21.48            | -17.42           |                   | -2.20            | -10.01             | 2.68         | 24.17                   | 79.33           | 16.67                | 38.29                  | 26.99               | -2.62                 | -52.63            | 2.53             |
| 2018<br>2017 (a) |     | 12.45            | -17.42           | 43.33             | -3.08            | -12.01             | 1.10         | 13.54                   | 51.68           | 16.19                | 26.05                  | 12.41               | -2.98                 | -37.54            | 0.59             |
| 2017 (a)<br>2015 | IV  | 5.95             | -18.03           | 10.19             | 3.02             | -1.82              | 3.36         | 9.31                    | 25.06           | 4.08                 | -6.42                  | 27.04               | 0.36                  | -16.79            | -1.04            |
| 2015             | 1   | -0.89            | -3.71<br>-4.71   | 8.76              | -0.31            | -1.62              | 0.68         | -0.20                   | 23.00           | 5.22                 | 16.93                  | -18.32              | -1.50                 | -7.19             | -4.67            |
| 2010             |     | 6.16             | -2.66            | 13.16             | -2.59            | -1.74              | 0.66         | 6.82                    | 39.86           | 4.90                 | 9.19                   | 25.93               | -0.17                 | -34.60            | -1.56            |
|                  |     | 8.08             | -4.98            | 17.54             | -1.46            | -3.02              | 0.38         | 8.46                    | 18.80           | 0.13                 | 10.02                  | 9.74                | -1.09                 | -6.48             | 3.86             |
|                  | IV  | 8.12             | -5.06            | 11.63             | 4.18             | -2.63              | 0.96         | 9.09                    | 18.36           | 6.42                 | 2.15                   | 9.64                | 0.14                  | -4.37             | 4.91             |
| 2017             | 1   | -0.74            | -6.51            | 8.94              | 0.52             | -3.69              | 0.49         | -0.26                   | 40.90           | -0.53                | 28.82                  | 14.22               | -1.61                 | -43.23            | -2.07            |
| 2017             |     | 5.76             | -4.17            | 15.24             | -2.67            | -2.65              | 0.38         | 6.13                    | -1.71           | 5.44                 | -4.74                  | -2.12               | -0.29                 | 5.90              | -1.94            |
|                  |     | 7.43             | -7.35            | 19.15             | -0.94            | -3.43              | 0.24         | 7.67                    | 12.49           | 11.28                | 1.97                   | 0.32                | -1.08                 | -0.22             | 4.60             |
|                  |     |                  | Goo              | ods and<br>rvices | Prima            | ry and<br>y Income |              |                         |                 |                      |                        |                     |                       |                   |                  |
| 2017             | Aug | 2.71             |                  | 8.87              |                  | .16                | 0.05         | 2.76                    | 5.91            | 2.02                 | 2.98                   | 1.18                | -0.27                 | -0.76             | 2.39             |
| 2017             | Sep | 2.13             |                  | 2.64              |                  | .51                | 0.11         | 2.24                    | -9.90           | 8.16                 | -1.31                  | -16.41              | -0.34                 | 11.75             | -0.39            |
|                  | Oct | 1.68             |                  | .93               |                  | .25                | 0.15         | 1.83                    | -7.41           | 1.32                 | 6.29                   | -15.21              | 0.19                  | 13.11             | 3.88             |
|                  |     |                  |                  |                   |                  |                    |              | Percentage              |                 |                      |                        |                     |                       |                   |                  |
| 2008             |     | -9.3             | -7.8             | 2.7               | -2.7             | -1.4               | 0.4          | -8.8                    | -6.2            | -0.1                 | 0.1                    | -6.8                | 0.6                   | -2.7              | -0.1             |
| 2009             |     | -4.3             | -3.8             | 2.7               | -1.8             | -1.4               | 0.3          | -4.0                    | -3.8            | 0.2                  | -4.1                   | -0.4                | 0.6                   | -1.0              | -0.8             |
| 2010             |     | -3.9             | -4.4             | 3.1               | -1.4             | -1.2               | 0.5          | -3.5                    | -2.5            | -0.1                 | -2.6                   | 1.0                 | -0.8                  | -1.5              | -0.5             |
| 2011             |     | -3.2             | -4.2             | 4.0               | -1.7             | -1.3               | 0.4          | -2.8                    | 7.4             | 0.9                  | 2.5                    | 3.9                 | 0.2                   | -10.2             | 0.0              |
| 2012             |     | -0.2             | -2.8             | 4.4               | -0.7             | -1.1               | 0.5          | 0.3                     | 16.4            | -2.0                 | 5.3                    | 13.9                | -0.8                  | -16.2             | -0.1             |
| 2013             |     | 1.5              | -1.4             | 4.7               | -0.5             | -1.3               | 0.6          | 2.2                     | -8.3            | -1.8                 | -5.2                   | -1.4                | 0.1                   | 11.5              | 1.1              |
| 2014             |     | 1.1              | -2.1             | 4.6               | -0.3             | -1.1               | 0.5          | 1.6                     | -1.5            | 0.6                  | -0.5                   | -1.7                | 0.1                   | 2.6               | -0.4             |
| 2015             |     | 1.1              | -2.1             | 4.4               | -0.2             | -1.0               | 0.7          | 1.8                     | 5.9             | 2.6                  | -0.6                   | 4.0                 | -0.1                  | -3.7              | 0.4              |
| 2016             |     | 1.9              | -1.6             | 4.6               | 0.0              | -1.1               | 0.2          | 2.2                     | 7.1             | 1.5                  | 3.4                    | 2.4                 | -0.2                  | -4.7              | 0.2              |
| 2017 (a)         |     | 1.4              | -2.1             | 5.0               | -0.4             | -1.1               | 0.1          | 1.6                     | 6.0             | 1.9                  | 3.0                    | 1.4                 | -0.3                  | -4.4              | 0.1              |
| 2015             | IV  | 2.1              | -1.9             | 3.6               | 1.1              | -0.6               | 1.2          | 3.3                     | 8.9             | 1.4                  | -2.3                   | 9.6                 | 0.1                   | -5.9              | -0.4             |
| 2016             | I   | -0.3             | -1.8             | 3.3               | -0.1             | -1.7               | 0.3          | -0.1                    | 0.9             | 2.0                  | 6.3                    | -6.9                | -0.6                  | -2.7              | -1.7             |
|                  | П   | 2.2              | -0.9             | 4.6               | -0.9             | -0.6               | 0.2          | 2.4                     | 14.0            | 1.7                  | 3.2                    | 9.1                 | -0.1                  | -12.2             | -0.5             |
|                  | Ш   | 2.9              | -1.8             | 6.3               | -0.5             | -1.1               | 0.1          | 3.1                     | 6.8             | 0.0                  | 3.6                    | 3.5                 | -0.4                  | -2.3              | 1.4              |
|                  | IV  | 2.8              | -1.7             | 4.0               | 1.4              | -0.9               | 0.3          | 3.1                     | 6.3             | 2.2                  | 0.7                    | 3.3                 | 0.0                   | -1.5              | 1.7              |
| 2017             | I   | -0.3             | -2.3             | 3.2               | 0.2              | -1.3               | 0.2          | -0.1                    | 14.7            | -0.2                 | 10.4                   | 5.1                 | -0.6                  | -15.6             | -0.7             |
|                  | П   | 2.0              | -1.4             | 5.2               | -0.9             | -0.9               | 0.1          | 2.1                     | -0.6            | 1.8                  | -1.6                   | -0.7                | -0.1                  | 2.0               | -0.7             |
|                  | Ш   | 2.6              | -2.6             | 6.7               | -0.3             | -1.2               | 0.1          | 2.7                     | 4.3             | 3.9                  | 0.7                    | 0.1                 | -0.4                  | -0.1              | 1.6              |

(a) Period with available data.

Source: Bank of Spain.

# Chart 15.1 - Balance of payments: Current and capital accounts

EUR Billions, 12-month cumulated

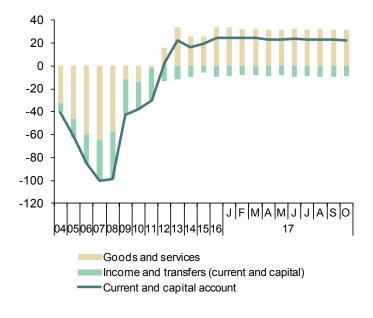
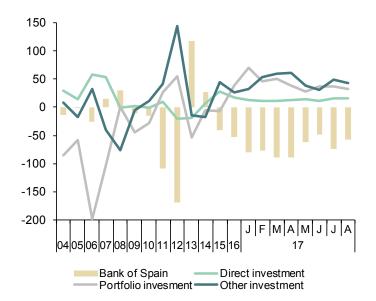


Chart 15.2 - Balance of payments: financial account

EUR Billions, 12-month cumulated



# **Competitiveness indicators in relation to EMU**

|          |     | Relative Ur              | nit Labour Costs<br>(Spain/EMU) | in industry  | Harm  | onized Consum | er Prices    |              | Producer price | S            | Real Effective Excha<br>ge Rate in relation |
|----------|-----|--------------------------|---------------------------------|--------------|-------|---------------|--------------|--------------|----------------|--------------|---|
|          |     | Relative hourly<br>wages | Relative hourly<br>productivity | Relative ULC | Spain | EMU           | Spain/EMU    | Spain        | EMU            | Spain/EMU    | developed countrie                          |
|          |     |                          | 1998=100                        |              |       | 2015=100      |              |              | 2010=100       |              | 19991=100                                   |
| 2010     |     | 107.1                    | 94.3                            | 113.5        | 94.1  | 93.3          | 100.9        | 100.0        | 100.0          | 100.0        | 112.8                                       |
| 2011     |     | 105.9                    | 94.7                            | 111.7        | 96.9  | 95.8          | 101.2        | 106.5        | 105.2          | 101.2        | 113.1                                       |
| 2012     |     | 104.8                    | 96.0                            | 109.2        | 99.3  | 98.2          | 101.1        | 110.1        | 107.9          | 102.0        | 111.6                                       |
| 2013     |     | 103.4                    | 95.7                            | 108.1        | 100.8 | 99.5          | 101.3        | 110.0        | 107.4          | 102.4        | 113.4                                       |
| 2014     |     | 101.7                    | 95.7                            | 106.3        | 100.6 | 100.0         | 100.7        | 108.4        | 105.8          | 102.4        | 112.4                                       |
| 2015     |     | 99.6                     | 95.5                            | 104.3        | 100.0 | 100.0         | 100.0        | 106.8        | 104.0          | 102.7        | 109.0                                       |
| 2016     |     | 99.0                     | 95.3                            | 103.9        | 99.7  | 100.3         | 99.4         | 103.9        | 101.8          | 102.0        | 108.8                                       |
| 2017 (a) |     |                          |                                 |              | 101.7 | 101.8         | 99.9         | 108.1        | 104.7          | 103.3        | 110.3                                       |
| 2016     | I   |                          |                                 |              | 98.0  | 99.2          | 98.8         | 101.9        | 100.8          | 101.1        | 107.7                                       |
|          | Ш   |                          |                                 |              | 100.1 | 100.4         | 99.7         | 102.8        | 101.2          | 101.6        | 109.1                                       |
|          | Ш   |                          |                                 |              | 99.5  | 100.3         | 99.2         | 104.3        | 102.0          | 102.2        | 108.7                                       |
|          | IV  |                          |                                 |              | 101.1 | 101.0         | 100.1        | 106.5        | 103.3          | 103.1        | 110.0                                       |
| 2017     | I   |                          |                                 |              | 100.7 | 101.0         | 99.7         | 108.4        | 104.8          | 103.4        | 109.2                                       |
|          | Ш   |                          |                                 |              | 102.2 | 102.0         | 100.2        | 107.7        | 104.4          | 103.1        | 110.3                                       |
|          | Ш   |                          |                                 |              | 101.3 | 101.8         | 99.5         | 107.6        | 104.3          | 103.2        | 110.4                                       |
|          | IV  |                          |                                 |              | 102.6 | 102.4         | 100.2        |              |                |              | 111.4                                       |
| 017      | Oct |                          |                                 |              | 102.4 | 102.2         | 100.2        | 108.7        | 105.0          | 103.5        | 111.2                                       |
|          | Nov |                          |                                 |              | 102.7 | 102.3         | 100.4        | 109.2        | 105.7          | 103.3        | 111.7                                       |
|          | Dec |                          |                                 |              | 102.7 | 102.7         | 100.1        |              |                |              | 111.4                                       |
|          |     | ,                        | Annual percentag                | ge changes   |       |               | Differential | Annual perce | entage changes | Differential | Annual percentage<br>changes                |
| 2010     |     | -0.8                     | -3.4                            | 2.7          | 2.0   | 1.6           | 0.4          | 3.9          | 3.1            | 0.8          | -1.0  |
| 011      |     | -1.1                     | 0.4                             | -1.5         | 3.0   | 2.7           | 0.3          | 6.5          | 5.2            | 1.3          | 0.2   |
| 012      |     | -1.0                     | 1.3                             | -2.3         | 2.4   | 2.5           | -0.1         | 3.4          | 2.6            | 0.8          | -1.3  |
| 013      |     | -1.4                     | -0.3                            | -1.1         | 1.5   | 1.3           | 0.2          | -0.1         | -0.4           | 0.3          | 1.5   |
| 014      |     | -1.6                     | 0.0                             | -1.6         | -0.2  | 0.4           | -0.6         | -1.5         | -1.5           | 0.0          | -0.9  |
| 015      |     | -2.1                     | -0.2                            | -1.9         | -0.6  | 0.0           | -0.6         | -1.5         | -1.7           | 0.2          | -3.0  |
| 016      |     | -0.7                     | -0.2                            | -0.4         | -0.3  | 0.3           | -0.6         | -2.7         | -2.0           | -0.7         | -0.1  |
| 017 (b)  |     |                          |                                 |              | 0.5   | 0.3           | 0.2          | 4.4          | 3.0            | 1.4          | 1.3   |
| 016      | I   |                          |                                 |              | -0.8  | 0.0           | -0.8         | -4.4         | -3.2           | -1.2         | -0.9  |
|          | П   |                          |                                 |              | -1.0  | -0.1          | -0.9         | -4.8         | -3.6           | -1.2         | -0.5  |
|          | Ш   |                          |                                 |              | -0.3  | 0.3           | -0.6         | -2.9         | -1.9           | -1.0         | 0.1   |
|          | IV  |                          |                                 |              | 0.8   | 0.7           | 0.1          | 1.2          | 0.6            | 0.6          | 0.9   |
| 017      | I   |                          |                                 |              | 2.7   | 1.8           | 0.9          | 6.3          | 4.0            | 2.3          | 1.4   |
|          | П   |                          |                                 |              | 2.1   | 1.5           | 0.6          | 4.7          | 3.2            | 1.5          | 1.1   |
|          | ш   |                          |                                 |              | 1.8   | 1.4           | 0.4          | 3.2          | 2.2            | 1.0          | 1.6   |
|          | IV  |                          |                                 |              | 1.6   | 1.4           | 0.2          |              |                |              | 1.3   |
| 2017     | Oct |                          |                                 |              | 1.7   | 1.4           | 0.3          | 0.6          | 0.4            | 0.2          | 1.2   |
|          | Nov |                          |                                 |              | 1.8   | 1.5           | 0.3          | 0.5          | 0.7            | -0.2         | 1.5   |
|          | Dec |                          |                                 |              | 1.2   | 1.4           | -0.2         |              |                |              | 1.4   |

(a) Period with available data. (b) Growth of available period over the same period of the previous year.

Sources: Eurostat, Bank of Spain and Funcas.

# Chart 16.1 - Relative Unit Labour Costs in industry (Spain/EMU)

1998=100

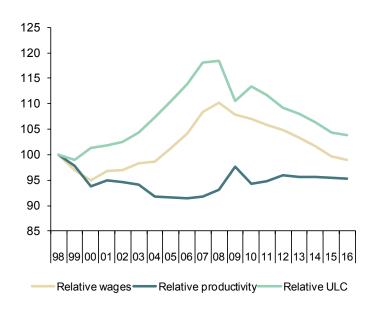
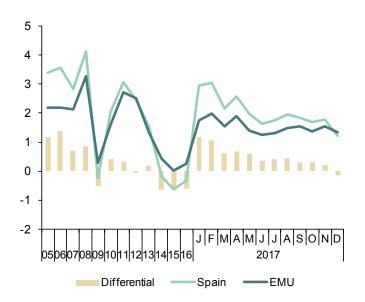


Chart 16.2.- Harmonized Consumer Prices Annual growth in % and percentage points



### Table 17a

# Imbalances: International comparison (I)

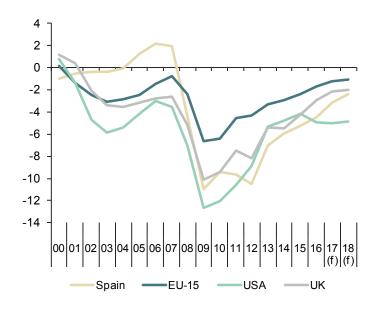
(In yellow: European Commission Forecasts)

|      | Governmen | nt net lendin | ng (+) or bo | orrowing (-) | G      | overnment co   | onsolidated gro | oss debt | Current Accou | nt Balance of Payr | nents (National | Accounts) |
|------|-----------|---------------|--------------|--------------|--------|----------------|-----------------|----------|---------------|--------------------|-----------------|-----------|
|      | Spain     | EMU           | USA          | UK           | Spain  | EMU            | USA             | UK       | Spain         | EMU                | USA             | UK        |
|      |           |               |              |              |        | Billions of na | tional currenc  | у        |               |                    |                 |           |
| 2005 | 11.3      | -264.8        | -543.4       | -43.7        | 393.5  | 6,851.6        | 8,496.9         | 552.6    | -70.3         | 22.0               | -702.2          | -28.9     |
| 2006 | 22.2      | -171.1        | -411.6       | -40.5        | 392.1  | 7,064.4        | 8,818.1         | 596.8    | -90.7         | 6.4                | -584.9          | -45.6     |
| 2007 | 20.8      | -95.5         | -513.6       | -40.4        | 384.7  | 7,139.9        | 9,267.8         | 643.5    | -104.1        | -10.4              | -735.6          | -58.3     |
| 2008 | -49.3     | -290.8        | -1033.3      | -81.1        | 440.6  | 7,580.8        | 10,722.1        | 785.0    | -102.9        | -104.1             | -791.0          | -72.9     |
| 2009 | -118.2    | -750.8        | -1827.4      | -154.2       | 569.5  | 8,545.9        | 12,405.0        | 979.8    | -46.5         | -2.1               | -457.2          | -59.8     |
| 2010 | -101.4    | -758.2        | -1797.7      | -148.7       | 650. I | 9,591.0        | 14,176.1        | 1,194.3  | -42.0         | 17.7               | -495.1          | -59.7     |
| 2011 | -103.2    | -551.4        | -1646.6      | -122.1       | 744.3  | 10,277.8       | 15,361.9        | 1,328.8  | -35.3         | 59.4               | -443.2          | -38.9     |
| 2012 | -108.8    | -533.3        | -1430.7      | -137.4       | 891.5  | 10,913.9       | 16,558.7        | 1,424.8  | -4.6          | 136.8              | -264.9          | -71.6     |
| 2013 | -71.7     | -413.2        | -894.0       | -94.7        | 979.0  | 11,277.3       | 17,462.8        | 1,499.8  | 15.0          | 164.8              | -248.2          | -97.0     |
| 2014 | -61.9     | -382.2        | -834.9       | -100.2       | 1041.6 | 11,815.5       | 18,194.1        | 1,604.8  | 10.3          | 187.4              | -154.1          | -98.0     |
| 2015 | -57.0     | -329.8        | -761.2       | -80.5        | 1073.9 | 12,140.7       | 18,965.9        | 1,666.0  | 11.0          | 249.5              | -194.7          | -98.1     |
| 2016 | -50.4     | -230.3        | -925.3       | -57.2        | 1107.2 | 12,018.4       | 19,947.7        | 1,731.4  | 21.1          | 258.1              | -313.7          | -115.5    |
| 2017 | -36.4     | -171.0        | -975.7       | -43.6        | 1144.9 | 12,126.2       | 20,943.4        | 1,761.7  | 20.3          | 257.1              |                 | -104.5    |
| 2018 | -29.0     | -150.8        | -981.4       | -41.5        | 75.    | 12,260.9       | 21,934.8        | 1,795.7  | 23.2          | 281.0              |                 | -97.8     |
|      |           |               |              |              |        | Percenta       | ige of GDP      |          |               |                    |                 |           |
| 2005 | 1.2       | -2.4          | -4.2         | -3.2         | 42.3   | 63.0           | 64.9            | 39.9     | -7.6          | 0.2                | -5.4            | -2.1      |
| 2006 | 2.2       | -1.5          | -3.0         | -2.8         | 38.9   | 61.6           | 63.6            | 40.8     | -9.0          | 0.1                | -4.2            | -3.1      |
| 2007 | 1.9       | -0.8          | -3.5         | -2.6         | 35.6   | 59.2           | 64.0            | 41.9     | -9.6          | -0.1               | -5.1            | -3.8      |
| 2008 | -4.4      | -2.4          | -7.0         | -5.2         | 39.5   | 63.2           | 72.8            | 49.9     | -9.2          | -0.9               | -5.4            | -4.6      |
| 2009 | -11.0     | -6.6          | -12.7        | -10.1        | 52.8   | 75.2           | 86.0            | 64.1     | -4.3          | 0.0                | -3.2            | -3.9      |
| 2010 | -9.4      | -6.4          | -12.0        | -9.4         | 60.I   | 81.2           | 94.7            | 75.6     | -3.9          | 0.1                | -3.3            | -3.8      |
| 2011 | -9.6      | -4.5          | -10.6        | -7.5         | 69.5   | 84.7           | 99.0            | 81.3     | -3.3          | 0.5                | -2.9            | -2.4      |
| 2012 | -10.5     | -4.3          | -8.9         | -8.2         | 85.7   | 88.1           | 102.5           | 84.5     | -0.4          | 1.1                | -1.6            | -4.2      |
| 2013 | -7.0      | -3.3          | -5.4         | -5.4         | 95.5   | 90.4           | 104.6           | 85.6     | 1.5           | 1.3                | -1.5            | -5.5      |
| 2014 | -6.0      | -3.0          | -4.8         | -5.5         | 100.4  | 91.5           | 104.4           | 87.4     | 1.0           | 1.5                | -0.9            | -5.3      |
| 2015 | -5.3      | -2.4          | -4.2         | -4.3         | 99.4   | 89.2           | 104.7           | 88.2     | 1.0           | 1.8                | -1.1            | -5.2      |
| 2016 | -4.5      | -1.7          | -5.0         | -2.9         | 99.0   | 87.8           | 107.1           | 88.3     | 1.9           | 1.9                | -1.7            | -5.9      |
| 2017 | -3.1      | -1.2          | -5.0         | -2.1         | 98.4   | 86.6           | 108.2           | 86.6     | 1.7           | 1.8                |                 | -5.1      |
| 2018 | -2.4      | -1.0          | -4.9         | -2.0         | 96.9   | 84.7           | 108.4           | 85.3     | 1.9           | 1.9                |                 | -4.6      |

Source: European Commission Forecasts, Autum, 2017.

# Chart 17a.1 - Government deficit

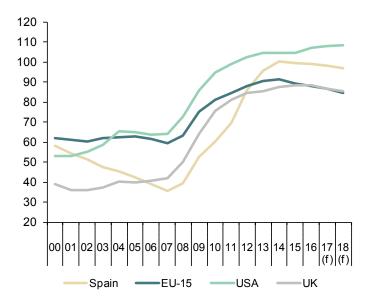
Percentage of GDP



(f) European Commission forecast.

# Chart 17a.2 - Government gross debt

Percentage of GDP



(f) European Commission forecast.

### Table 17b

# Imbalances: International comparison (II)

|                  |       | Househol | d debt (a) |                       |          | Non-financia | l corporations debt (a) |         |
|------------------|-------|----------|------------|-----------------------|----------|--------------|-------------------------|---------|
|                  | Spain | EMU-19   | USA        | UK                    | Spain    | EMU-19       | USA                     | UK      |
|                  |       |          | В          | illions of national o | currency |              |                         |         |
| 2005             | 653.5 | 4,786.2  | 11,976.1   | 1,189.8               | 925.0    | 7,586.3      | 8,156.7                 | 1,102.9 |
| 2006             | 780.7 | 5,196.3  | 13,256.8   | 1,310.9               | 1,158.8  | 8,230.8      | 8,973.0                 | 1,201.6 |
| 2007             | 876.6 | 5,561.3  | 14,175.0   | 1,426.4               | 1,344.5  | 9,021.8      | 10,099.8                | 1,281.6 |
| 2008             | 914.0 | 5,806.6  | 14,048.4   | 1,477.0               | 1,422.6  | 9,597.3      | 10,667.0                | 1,476.9 |
| 2009             | 906.2 | 5,935.6  | 13,812.9   | 1,473.8               | 1,406.1  | 9,531.4      | 10,145.2                | 1,414.2 |
| 2010             | 902.5 | 6,070.3  | 13,576.2   | 1,476.9               | 1,429.4  | 9,809.4      | 9,995.9                 | 1,379.5 |
| 2011             | 875.2 | 6,161.1  | 13,382.4   | 1,486.7               | 1,415.7  | 9,964.6      | 10,257.6                | 1,408.1 |
| 2012             | 838.2 | 6,146.9  | 13,445.2   | 1,509.2               | 1,309.8  | 10,167.6     | 10,761.7                | 1,481.4 |
| 2013             | 790.6 | 6,094.4  | 13,597.5   | 1,525.5               | 1,230.6  | 10,065.2     | 11,245.7                | 1,454.1 |
| 2014             | 754.2 | 6,116.1  | 13,954.6   | 1,565.8               | 1,179.5  | 10,457.0     | 11,933.9                | 1,414.1 |
| 2015             | 730.4 | 6,177.0  | 14,218.1   | 1,612.8               | 1,157.2  | 11,050.4     | 12,737.4                | 1,394.8 |
| 2016             | 717.2 | 6,283.7  | 14,673.9   | 1,685.9               | 1,137.2  | 11,274.5     | 13,434.5                | 1,488.9 |
| 2017 III qrt.(b) | 711.5 | 6,399.9  | 15,067.5   | 1,709.2               | 1,128.3  | 11,371.5     | 14,061.8                | 1,495.7 |
|                  |       |          |            | Percentage of C       | GDP      |              |                         |         |
| 2005             | 70.2  | 56.6     | 91.5       | 85.8                  | 99.4     | 89.7         | 62.3                    | 79.6    |
| 2006             | 77.5  | 58.3     | 95.7       | 89.6                  | 115.0    | 92.4         | 64.8                    | 82.I    |
| 2007             | 81.1  | 59.1     | 97.9       | 92.8                  | 124.4    | 95.9         | 69.8                    | 83.4    |
| 2008             | 81.9  | 60.3     | 95.4       | 93.9                  | 127.5    | 99.6         | 72.5                    | 93.9    |
| 2009             | 84.0  | 63.9     | 95.8       | 96.4                  | 130.3    | 102.6        | 70.4                    | 92.5    |
| 2010             | 83.5  | 63.6     | 90.7       | 93.5                  | 132.2    | 102.7        | 66.8                    | 87.3    |
| 2011             | 81.8  | 62.9     | 86.2       | 90.9                  | 132.3    | 101.7        | 66. I                   | 86.1    |
| 2012             | 80.6  | 62.5     | 83.2       | 89.6                  | 126.0    | 103.4        | 66.6                    | 87.9    |
| 2013             | 77.1  | 61.3     | 81.5       | 87.0                  | 120.0    | 101.3        | 67.4                    | 83.0    |
| 2014             | 72.7  | 60.2     | 80.1       | 85.2                  | 113.7    | 102.9        | 68.5                    | 77.0    |
| 2015             | 67.6  | 58.7     | 78.5       | 85.4                  | 107.1    | 105.1        | 70.3                    | 73.8    |
| 2016             | 64.I  | 58.2     | 78.8       | 85.9                  | 101.7    | 104.5        | 72.1                    | 75.8    |
| 2017 III qrt.(b) | 61.8  | 57.9     | 78.6       | 86.1                  | 98.1     | 102.8        | 73.3                    | 75.4    |

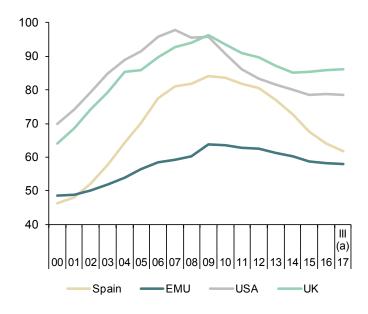
(a) Loans and debt securities.

(b) For UK: First quarter 2017.

Sources: Eurostat and Federal Reserve.

# Chart 17b.1 - Household debt

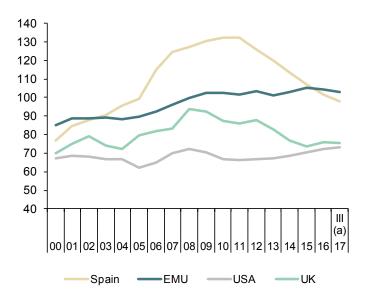
Percentage of GDP



(a) For UK, first quarter 2017.

# Chart 17b.2 - Non-financial corporations debt

Percentage of GDP



(a) For UK, first quarter 2017.

# 50 Financial System Indicators

Updated: January 15th, 2018

| Indicator  | Last value<br>available | Corresponding<br>to: |
|--|-------------------------|----------------------|
| Bank lending to other resident sectors (monthly average % var.)  | 0.2                     | October 2017         |
| Other resident sectors' deposits in credit institutions (monthly average % var.)                           | 0.6                     | October 2017         |
| Doubtful loans (monthly % var.)  | -1.9                    | October 2017         |
| Recourse to the Eurosystem L/T (Eurozone financial institutions, million euros)                            | 762,540                 | December 2017        |
| Recourse to the Eurosystem L/T (Spanish financial institutions, million euros)                             | 170,445                 | December 2017        |
| Recourse to the Eurosystem (Spanish financial institutions million euros)<br>- Main refinancing operations | 96                      | December 2017        |
| "Operating expenses/gross operating income" ratio (%)  | 57.22                   | June 2017            |
| "Customer deposits/employees" ratio (thousand euros)   | 6,429.18                | June 2017            |
| "Customer deposits/branches" ratio (thousand euros)  | 46,215.17               | June 2017            |
|  | 135.64                  | June 2017            |

# A. Money and Interest Rates

| Indicator   | Source           | Average<br>2001-2014 | 2015 | 2016  | 2017   | 2018<br>January | Definition and calculation  |
|---|------------------|----------------------|------|-------|--------|-----------------|---|
| I. Monetary Supply (% chg.)                             | ECB              | 5.4                  | 4.7  | 5.0   | -      | -               | M3 aggregate change<br>(non-stationary)   |
| 2. Three-month interbank interest rate                  | Bank<br>of Spain | 2.19                 | -0.1 | -0.26 | -0.329 | -0.329          | Daily data average  |
| 3. One-year Euribor interest rate (from 1994)           | Bank<br>of Spain | 2.5                  | 0.2  | -0.03 | -0.186 | -0.186          | End-of-month data   |
| 4. Ten-year Treasury bonds interest<br>rate (from 1998) | Bank<br>of Spain | 4.4                  | 1.7  | 1.4   | 1.5    | 1.5             | Market interest rate (not<br>exclusively between account<br>holders)                      |
| 5. Corporate bonds average interest rate                | Bank<br>of Spain | 4.3                  | 2.1  | 2.3   | -      | -               | End-of-month straight<br>bonds average interest rate<br>(> 2 years) in the AIAF<br>market |

Comment on "Money and Interest Rates": Interbank rates remained unchanged in the first fortnight of January. The 3-month interbank rate stayed at -0.329% and the 1-year Euribor rate remains at -0.186%. No news from the ECB since the announcement of an acceleration of tapering that will reduce the bond-buying program since January 2018, while most of the attention is on the expected rate increases conducted by the Federal Reserve. As for the Spanish 10-year bond yield, it has remained at 1.5%.

### **B.** Financial Markets

| Indicator  | Source  | Average<br>2001-2014 | 2015     | 2016    | 2017<br>October | 2017<br>November | Definition and calculation  |
|--|---|----------------------|----------|---------|-----------------|------------------|---|
| 6. Outright spot treasury bills transactions trade ratio   | Bank<br>of Spain                                    | 39.0                 | 75.5     | 102.6   | 100.99          | 120.11           | (Traded amount/outstanding<br>balance) ×100 in the market<br>(not exclusively between<br>account holders) |
| 7. Outright spot government bonds transactions trade ratio   | Bank<br>of Spain                                    | 78.4                 | 65.3     | 55.1    | 59.53           | 50.12            | (Traded amount/outstanding<br>balance) ×100 in the market<br>(not exclusively between<br>account holders) |
| 8. Outright forward treasury bills transactions trade ratio  | Bank<br>of Spain                                    | 1.1                  | 1.3      | 0.4     | 1.56            | 1.33             | (Traded amount/outstanding<br>balance) ×100 in the market<br>(not exclusively between<br>account holders) |
| 9. Outright forward government bonds transactions trade ratio  | Bank<br>of Spain                                    | 4.7                  | 3.4      | 1.9     | 4.74            | 5.61             | (Traded amount/outstanding<br>balance) in the market (not<br>exclusively between account<br>holders)      |
| 10. Three-month maturity treasury bills interest rate  | Bank<br>of Spain                                    | 2.0                  | 0.0      | 0.0     | -0.39           | -0.47            | Outright transactions in the market (not exclusively between account holders)                             |
| <ol> <li>Government bonds yield index<br/>(Dec1987=100)</li> </ol>   | Bank<br>of Spain                                    | 642.9                | 1,058.2  | 1,104.9 | 1,101.05        | 1,124.23         | Outright transactions in<br>the market (not exclusively<br>between account holders)                       |
| <ul><li>12. Madrid Stock Exchange</li><li>Capitalization</li><li>(monthly average % chg.)</li></ul>                  | Bank of<br>Spain and<br>Madrid<br>Stock<br>Exchange | 0.3                  | 0.5      | 0.2     | -1.9            | 0.4              | Change in the total number<br>of resident companies   |
| <ul> <li>I3. Stock market trading volume.</li> <li>Stock trading volume</li> <li>(monthly average % var.)</li> </ul> | Bank of<br>Spain and<br>Madrid<br>Stock<br>Exchange | 4.1                  | -0.2     | 0.7     | 52.4            | 115.2            | Stock market trading volume.<br>Stock trading volume:<br>change in total trading<br>volume                |
| 14. Madrid Stock Exchange general<br>index (Dec 1985=100)  | Bank of<br>Spain and<br>Madrid<br>Stock<br>Exchange | 1,038.3              | 965.1    | 943.6   | I,028.2 (a)     | I,060.0 (a)      | Base 1985=100   |
| 15. IBEX-35<br>(Dec 1989=3000)   | Bank of<br>Spain and<br>Madrid<br>Stock<br>Exchange | 9,750.4              | 10,647.2 | 8,790.9 | 10,176.5 (a)    | 10,477.9 (a)     | Base dec1989=3000   |
| 16. Madrid Stock Exchange PER<br>ratio (share value/profitability)   | Bank of<br>Spain and<br>Madrid<br>Stock<br>Exchange | 16.7                 | 15.4     | 23.6    | 15.3(a)         | 14.8(a)          | Madrid Stock Exchange<br>Ratio "share value/ capital<br>profitability"                                    |
| 17. Long-term bonds. Stock trading volume (% chg.)   | Bank of<br>Spain and<br>Madrid<br>Stock<br>Exchange | 4.9                  | 21.3     | 55.9    | -               | -                | Variation for all stocks  |

# B. Financial Markets (continued)

| Indicator   | Source                       | Average<br>2001-2014 | 2015 | 2016 | 2017<br>October | 2017<br>November | Definition and calculation            |
|---|------------------------------|----------------------|------|------|-----------------|------------------|---------------------------------------|
| 18. Commercial paper. Trading balance (% chg.)                | Bank<br>of Spain<br>and AIAF | 1.9                  | -0.2 | 0.1  | -               | -                | AIAF fixed-income market              |
| 19. Commercial paper. Three-month interest rate               | Bank<br>of Spain<br>and AIAF | 2.5                  | 0.1  | 0.0  | -               | -                | AIAF fixed-income market              |
| 20. IBEX-35 financial futures concluded transactions (% chg.) | Bank<br>of Spain             | 1.6                  | 1.3  | -0.4 | 42.5            | -20.9            | IBEX-35 shares concluded transactions |
| 21. IBEX-35 financial options concluded transactions (%chg.)  | Bank<br>of Spain             | 8.9                  | 17.7 | 5.8  | 62.7            | -50.5            | IBEX-35 shares concluded transactions |

(a) Last data published: January 15th, 2018.

Comment on "Financial Markets": During November, there was an increase in transactions with outright spot T-bills to 120.11% and a fall of spot government bonds transactions, which stood at 50.12%. The stock market has registered an increase in the first fortnight of January compared to the end of 2017, with the IBEX-35 up to 10,478 points, and the General Index of the Madrid Stock Exchange to 1,060. There was a fall in both IBEX-35 financial futures and options of 20.9% and 50.5% respectively.

### C. Financial Saving and Debt

| Indicator  | Source           | Average<br>2008-2013 | 2014  | 2015  | 2016  | 2017<br>Q3 | Definition and calculation  |
|--|------------------|----------------------|-------|-------|-------|------------|---|
| 22. Net Financial Savings/GDP<br>(National Economy)  | Bank<br>of Spain | -2.8                 | 1.6   | 2.2   | 2.1   | 2.0        | Difference between financial<br>assets and financial liabilities<br>flows over GDP                          |
| 23. Net Financial Savings/GDP<br>(Households and non-profit<br>institutions)                               | Bank<br>of Spain | 2.5                  | 3.4   | 3.6   | 2.6   | 1.3        | Difference between financial<br>assets and financial liabilities<br>flows over GDP                          |
| 24. Debt in securities (other than<br>shares) and loans/GDP<br>(National Economy)                          | Bank<br>of Spain | 288.1                | 320.0 | 302.3 | 297.0 | 288.7      | Public debt. non-financial<br>companies debt and<br>households and non-profit<br>institutions debt over GDP |
| 25. Debt in securities (other than<br>shares) and loans/GDP (Households<br>and non-profit institutions)    | Bank<br>of Spain | 81.4                 | 72.4  | 67.5  | 64.4  | 61.8       | Households and non-profit<br>institutions debt over GDP   |
| 26. Households and non-profit<br>institutions balance: financial assets<br>(quarterly average % chg.)      | Bank<br>of Spain | 0.6                  | 2.1   | 1.7   | 0.6   | -0.3       | Total assets percentage change (financial balance)  |
| 27. Households and non-profit<br>institutions balance: financial<br>liabilities (quarterly average % chg.) | Bank<br>of Spain | -1.8                 | -4.0  | -2.9  | 1.1   | -1.2       | Total liabilities percentage<br>change (financial balance)  |

Comment on "Financial Savings and Debt": During 2017Q3, the financial savings to GDP in the overall economy fell to 2% of GDP. There was also a decrease in the financial savings rate of households from 2.6% in 2016Q4 to 1.3% in 2017Q3. The debt to GDP ratio fell to 61.8%. Finally, the stock of financial assets on households' balance sheets registered a decrease of 0.3%, and there was a 1.2% fall in the stock of financial liabilities.

# D. Credit institutions. Business Development

| Indicator   | Source           | Average<br>2001-2014 | 2015  | 2016  | 2017<br>September | 2017<br>October | Definition and calculation  |
|---|------------------|----------------------|-------|-------|-------------------|-----------------|---|
| 28. Bank lending to other resident sectors (monthly average % var.)   | Bank<br>of Spain | 7.5                  | -4.0  | -4.1  | 0.4               | 0.2             | Lending to the private<br>sector percentage change<br>for the sum of banks,<br>savings banks and credit<br>unions   |
| 29. Other resident sectors' deposits<br>in credit institutions<br>(monthly average % var.)  | Bank<br>of Spain | 8.0                  | -0.1  | -0.1  | 1.1               | 0.6             | Deposits percentage change<br>for the sum of banks,<br>savings banks and credit<br>unions   |
| 30. Debt securities<br>(monthly average % var.)   | Bank<br>of Spain | 10.0                 | -15.2 | -11.6 | 0.1               | -2.8            | Asset-side debt securities<br>percentage change for the<br>sum of banks, savings banks<br>and credit unions   |
| 31. Shares and equity<br>(monthly average % var.)   | Bank<br>of Spain | 10.0                 | -5.9  | -1.0  | -0.5              | 0.1             | Asset-side equity and shares<br>percentage change for the<br>sum of banks, savings banks<br>and credit unions   |
| 32. Credit institutions. Net position<br>(difference between assets from<br>credit institutions and liabilities<br>with credit institutions) (% of total<br>assets) | Bank<br>of Spain | -2.1                 | -5.2  | -4.5  | -3.2              | -2.1            | Difference between the<br>asset-side and liability-side<br>"Credit System" item as a<br>proxy of the net position<br>in the interbank market<br>(month-end) |
| 33. Doubtful loans<br>(monthly average % var.)  | Bank<br>of Spain | 39.8                 | -22.4 | -13.6 | -5.5              | -1.9            | Doubtful loans. Percentage<br>change for the sum of<br>banks, savings banks and<br>credit unions  |
| 34. Assets sold under repurchase<br>(monthly average % var.)  | Bank<br>of Spain | -2.1                 | -30.8 | -22.2 | -7.1              | -6.0            | Liability-side assets<br>sold under repurchase.<br>Percentage change for the<br>sum of banks, savings banks<br>and credit unions                            |
| 35. Equity capital<br>(monthly average % var.)  | Bank<br>of Spain | 8.8                  | -1.8  | -0.3  | 0.3               | 0.5             | Equity percentage change<br>for the sum of banks,<br>savings banks and credit<br>unions   |

Comment on "Credit institutions. Business Development": The latest available data as of October 2017 show an increase in bank credit to the private sector of 0.2%. Data also show a growth in financial institutions deposit-taking of 0.6%. Holdings of debt securities fell by 2.8%. Doubtful loans decreased 1.9% compared to the previous month.

E. Credit institutions. Market Structure and Eurosystem Refinancing

| Indicator   | Source           | Average 2000-2013 | 2014    | 2015    | 2016<br>December | 2017<br>June | Definition and calculation   |
|---|------------------|-------------------|---------|---------|------------------|--------------|--|
| 36. Number of Spanish credit institutions   | Bank<br>of Spain | 199               | 138     | 135     | 124              | 123          | Total number of banks,<br>savings banks and credit<br>unions operating in Spanish<br>territory |
| 37. Number of foreign credit institutions operating in Spain  | Bank<br>of Spain | 73                | 86      | 82      | 82               | 84           | Total number of foreign<br>credit institutions operating<br>in Spanish territory               |
| 38. Number of employees   | Bank<br>of Spain | 246,418           | 203,305 | 203,305 | 202,954          | 189,280      | Total number of employees in the banking sector  |
| 39. Number of branches  | Bank<br>of Spain | 40,703            | 31,817  | 30,921  | 28,807           | 27,810       | Total number of branches in the banking sector   |
| 40. Recourse to the Eurosystem:<br>long term (total Eurozone financial<br>institutions) (Euro millions)                     | Bank<br>of Spain | -                 | 406,285 | 460,858 | 527,317          | 762,540(a)   | Open market operations<br>and ECB standing facilities.<br>Eurozone total                       |
| 41. Recourse to the Eurosystem:<br>long term (total Spanish financial<br>institutions) (Euro millions)                      | Bank<br>of Spain | -                 | ,338    | 122,706 | 138,455          | 170,445(a)   | Open market operations<br>and ECB standing facilities.<br>Spain total                          |
| 42. Recourse to the Eurosystem<br>(total Spanish financial institutions):<br>main refinancing operations (Euro<br>millions) | Bank<br>of Spain | 22,794            | 21,115  | 10,515  | I,408            | 96(a)        | Open market operations:<br>main long term refinancing<br>operations. Spain total               |

(a) Last data published: December 2017.

Comment on "Credit institutions. Market Structure and Eurosystem Refinancing": In December 2017, recourse to Eurosystem funding by Spanish credit institutions reached 170.45 billion euro.

MEMO ITEM: From January 2015, the ECB also offers information on the asset purchase programs. The amount borrowed by Spanish banks in these programs reached 303.4 billion euro in March and 2.37 trillion euro for the entire Eurozone banking system.

F. Credit institutions. Efficiency and Productivity, Risk and Profitability

| Indicator   | Source           | Average<br>2000-2013 | 2014      | 2015      | 2016<br>December | 2017<br>June | Definition and calculation   |
|---|------------------|----------------------|-----------|-----------|------------------|--------------|--|
| 43. "Operating expenses/gross operating income" ratio           | Bank<br>of Spain | 50.89                | 47.27     | 50.98     | 54.18            | 57.22        | Operational efficiency<br>indicator. Numerator and<br>denominator are obtained<br>directly from credit institu-<br>tions' P&L accounts |
| 44. "Customer deposits/<br>employees" ratio<br>(Euro thousands) | Bank<br>of Spain | 3,519.51             | 5,892.09  | 5,595.62  | 5,600.48         | 6,429.18     | Productivity indicator<br>(business by employee  |
| 45. "Customer deposits/branches"<br>ratio<br>(Euro thousands)   | Bank<br>of Spain | 21,338.27            | 40,119.97 | 36,791.09 | 39,457.04        | 46,215.17    | Productivity indicator<br>(business by branch)   |

### F. Credit institutions. Efficiency and Productivity, Risk and Profitability (continued)

| Indicator                                       | Source           | Average 2000-2013 | 2014   | 2015   | 2016<br>December | 2017<br>June | Definition and calculation  |
|---|------------------|-------------------|--------|--------|------------------|--------------|---|
| 46. "Branches/institutions" ratio               | Bank<br>of Spain | 205.80            | 142.85 | 229.04 | 139.84           | 135.64       | Network expansion<br>indicator  |
| 47. "Employees/branches" ratio                  | Bank<br>of Spain | 6.1               | 6.8    | 6.57   | 7.05             | 6.21         | Branch size indicator   |
| 48. "Equity capital<br>(monthly average % var.) | Bank<br>of Spain | 0.11              | 0.07   | 0.01   | -0.62            | 0.93         | Credit institutions equity capital variation indicator                              |
| 49. ROA   | Bank<br>of Spain | 0.45              | 0.49   | 0.39   | 0.26             | 0.31         | Profitability indicator,<br>defined as the "pre-tax<br>profit/average total assets" |
| 50. ROE   | Bank<br>of Spain | 6.27              | 6.46   | 5.04   | 3.12             | 3.87         | Profitability indicator,<br>defined as the "pre-tax<br>profit/equity capital"       |

Comment on "Credit institutions. Efficiency and Productivity, Risk and Profitability": In June 2017, most of the profitability and efficiency indicators improved for Spanish banks. Productivity indicators have also improved since the restructuring process of the Spanish banking sector was implemented.

# Social Indicators

### Table 1

# **Population**

|         |                     |                |                     |                                | Рор                                    | oulation           |                                    |                                |                                    |                                    |
|---------|---------------------|----------------|---------------------|--------------------------------|--|--------------------|------------------------------------|--------------------------------|------------------------------------|------------------------------------|
|         | Total<br>population | Average<br>age | 65 and older<br>(%) | Life expectancy at birth (men) | Life expectancy<br>at birth<br>(women) | Dependency<br>rate | Dependency rate<br>(older than 64) | Foreign-born<br>population (%) | New entries<br>(all nationalities) | New entries<br>(EU-27 born)<br>(%) |
| 2006    | 44,708,964          | 40.6           | 16.7                | 77.7                           | 84.2                                   | 47.5               | 24.6                               | 10.8                           | 840,844                            | 37.6                               |
| 2008    | 46,157,822          | 40.8           | 16.5                | 78.2                           | 84.3                                   | 47.5               | 24.5                               | 13.1                           | 726,009                            | 28.4                               |
| 2010    | 47,021,031          | 41.1           | 16.9                | 79.1                           | 85.1                                   | 48.6               | 25.0                               | 14.0                           | 464,443                            | 35.6                               |
| 2012    | 47,265,321          | 41.6           | 17.4                | 79.4                           | 85.1                                   | 50.4               | 26.1                               | 14.3                           | 370,515                            | 36.4                               |
| 2014    | 46,771,341          | 42. I          | 18.1                | 80.1                           | 85.7                                   | 51.6               | 27.4                               | 13.4                           | 399,947                            | 38.0                               |
| 2015    | 46,624,382          | 42.4           | 18.4                | 79.9                           | 85.4                                   | 52.4               | 28.0                               | 13.2                           | 455,679                            | 36.4                               |
| 2016    | 46,557,008          | 42.7           | 18.6                | 80.4                           | 85.9                                   | 52.9               | 28.4                               | 13.2                           | 534,574                            | 33.4                               |
| 2017*   | 46,528,966          | 42.9           | 18.8                |                                |  | 53.2               | 28.8                               | 13.2                           |                                    |                                    |
| Sources | PMC                 | PMC            | PMC                 | ID INE                         | ID INE                                 | PMC                | PMC                                | PMC                            | EVR                                | EVR                                |

ID INE: Indicadores Demográficos INE.

PMC: Padrón Municipal Continuo.

EVR: Estadística de Variaciones Residenciales.

Dependency rate: (15 or less years old population + 65 or more years old population)/ 16-64 years old population, as a percentage.

Dependency rate (older than 64): 65 or more years old population/ 16-64 years old population, as a percentage.

\* Provisional data.

# Table 2

# **Households and families**

|         |                           | F    | louseholds  |   | Nuptiality                 |  |              |                                    |   |                              |  |  |  |  |
|---------|---------------------------|------|---|---|----------------------------|--|--------------|------------------------------------|---|------------------------------|--|--|--|--|
|         | Households<br>(thousands) | •    | Households<br>with one person<br>younger than 65<br>(%) | Households<br>with one person<br>older than 65<br>(%) | Marriage<br>rate (Spanish) | Marriage<br>rate (foreign<br>population) | Divorce rate | Mean age at first<br>marriage, men | Mean age at<br>first marriage,<br>women | Same sex<br>marriages<br>(%) |  |  |  |  |
| 2006    | 15,856                    | 2.76 | 11.6  | 10.3  | 9.3                        | 9.5                                      | 2.86         | 32.2                               | 29.7                                    | 2.08                         |  |  |  |  |
| 2008    | 16,742                    | 2.71 | 12.0  | 10.2  | 8.5                        | 8.4                                      | 2.39         | 32.4                               | 30.2                                    | 1.62                         |  |  |  |  |
| 2010    | 17,174                    | 2.67 | 12.8  | 9.9   | 7.2                        | 7.9                                      | 2.21         | 33.2                               | 31.0                                    | 1.87                         |  |  |  |  |
| 2012    | 17,434                    | 2.63 | 13.7  | 9.9   | 7.2                        | 6.7                                      | 2.23         | 33.8                               | 31.7                                    | 2.04                         |  |  |  |  |
| 2014*   | 18,329                    | 2.51 | 14.2  | 10.6  | 6.9                        | 6.5                                      | 2.17         | 34.4                               | 32.3                                    | 2.06                         |  |  |  |  |
| 2015    | 18,376                    | 2.54 | 14.6  | 10.7  | 7.3                        | 6.5                                      | 2.08         | 34.8                               | 32.7                                    | 2.26                         |  |  |  |  |
| 2016    | 18,444                    | 2.52 | 14.6  | 10.9  | 7.5                        | 6.8                                      | 2.08         | 35.0                               | 32.9                                    | 2.46                         |  |  |  |  |
| 2017    | 18,507                    | 2.51 |   |   |                            |  |              |                                    |   |                              |  |  |  |  |
| Sources | LFS                       | LFS  | EPF   | EPF   | ID INE                     | ID INE                                   | ID INE       | ID INE                             | ID INE                                  | MNP                          |  |  |  |  |

# Table 2 (continued)

# **Households and families**

|         |                                     | Fertility                               |   |                                 |               |                                       |  |  |  |  |  |  |  |
|---------|-------------------------------------|---|---|---------------------------------|---------------|---------------------------------------|--|--|--|--|--|--|--|
|         | Median age at first child,<br>women | Total fertility rate<br>(Spanish women) | Total fertility rate<br>(Foreign women) | Births to single<br>mothers (%) | Abortion rate | Abortion by Spanish-born<br>women (%) |  |  |  |  |  |  |  |
| 2006    | 29.3                                | 1.31                                    | 1.69                                    | 28.4                            | 10.6          |                                       |  |  |  |  |  |  |  |
| 2008    | 29.3                                | 1.36                                    | 1.83                                    | 33.2                            | 11.8          | 55.6                                  |  |  |  |  |  |  |  |
| 2010    | 29.8                                | 1.30                                    | 1.68                                    | 35.5                            | 11.5          | 58.3                                  |  |  |  |  |  |  |  |
| 2012    | 30.3                                | 1.27                                    | 1.56                                    | 39.0                            | 12.0          | 61.5                                  |  |  |  |  |  |  |  |
| 2014    | 30.6                                | 1.27                                    | 1.62                                    | 42.5                            | 10.5          | 63.3                                  |  |  |  |  |  |  |  |
| 2015    | 30.7                                | 1.28                                    | 1.66                                    | 44.4                            | 10.4          | 65.3                                  |  |  |  |  |  |  |  |
| 2016    | 30.8                                | 1.27                                    | 1.70                                    | 45.8                            | 10.4          | 65.8                                  |  |  |  |  |  |  |  |
| Sources | ID INE                              | ID INE                                  | ID INE                                  | ID INE                          | MSAN          | MSAN                                  |  |  |  |  |  |  |  |

LFS: Labour Force Survey. EPF: Encuesta de Presupuestos Familiares. ID INE: Indicadores Demográficos INE. MNP: Movimiento Natural de la Población. MSAN: Ministerio de Sanidad, Servicios Sociales e Igualdad.

Marriage rate: Number of marriages per thousand population.

Divorce rate: Number of divorces per thousand population.

Total fertility rate: The average number of children that would be born per woman living in Spain if all women lived to the end of their childbearing years and bore children according to a given fertility rate at each age.

Abortion rate: Number of abortions per 1,000 women (15-44 years).

\*The magnitude change in 2014 LFS data is partly due to a methodological change.

Data refer to January-September.

#### Table 3

#### Education

|         | E   | ducatio   | nal attainr | nent  | Students                 | involved               | Education expenditure  |                            |   |  |                                   |
|---------|---|---|-------------|-------|--------------------------|------------------------|------------------------|----------------------------|---|--|-----------------------------------|
|         | Population<br>16 years<br>and older<br>with primary<br>education<br>(%) | Population<br>30-34 with<br>primary<br>education<br>(%) |             | · · / | Pre-primary<br>education | Secondary<br>education | Vocational<br>training | Under-graduate<br>students | Post-graduate<br>studies<br>(except<br>doctorate) | Public<br>expenditure<br>(thousands of € | Public<br>expenditure<br>) (%GDP) |
| 2006    | 32.9  | 8.4   | 15.6        | 25.3  | 1,557,257                | 630,349                | 445,455                | 1,405,894                  | 16,636  | 42,512,586                               | 4.31                              |
| 2008    | 32.1  | 9.2   | 16.1        | 26.9  | 1,763,019                | 629,247                | 472,604                | 1,377,228                  | 50,421  | 51,716,008                               | 4.63                              |
| 2010    | 30.6  | 8.6   | 17.0        | 27.7  | 1,872,829                | 672,213                | 555,580                | 1,445,392                  | 104,844   | 53,099,329                               | 4.91                              |
| 2012    | 28.5  | 7.5   | 17.8        | 26.6  | 1,912,324                | 692,098                | 617,686                | 1,450,036                  | 113,805   | 46,476,414                               | 4.46                              |
| 2014*   | 24.4  | 6.1   | 27.2        | 42.3  | 1,840,008                | 690,738                | 652,846                | 1,364,023                  | 142,156   | 44,846,415                               | 4.31                              |
| 2015    | 23.3  | 6.6   | 27.5        | 40.9  | 1,808,322                | 695,557                | 641,741                | 1,321,698                  | 171,043   | 46,648,800•                              | 4.34●                             |
| 2016•   | 22.4  | 6.6   | 28.1        | 40.7  | 1,778,620                | 687,692                | 651,722                | 130,7461                   | 184,745   |  |                                   |
| 2017    | 21.5  | 6.6   | 28.4        | 41.1  |                          |                        |                        |                            |   |  |                                   |
| Sources | LFS   | LFS   | LFS         | LFS   | MECD                     | MECD                   | MECD                   | MECD                       | MECD  | MECD                                     | Contabilidad<br>Nacional del INE  |

LFS: Labor Force Survey.

MECD: Ministerio de Educación, Cultura y Deporte.

INE: Instituto Nacional de Estadística.

\* The magnitude change in 2014 LFS data is partly due to a methodological change.

Provisional data.

Data refer to January-September.

# **Social protection: Benefits**

|         |                       |            | Contrib                  | utory ben            | Non-contributory benefits |           |                          |              |            |            |         |
|---------|-----------------------|------------|--------------------------|----------------------|---------------------------|-----------|--------------------------|--------------|------------|------------|---------|
|         |                       | Retirement |                          | Permanent disability |                           | Widowhood |                          |              |            |            |         |
|         | Unemployment<br>total | Total      | Average<br>amount<br>(€) | Total                | Average<br>amount<br>(€)  | Total     | Average<br>amount<br>(€) | Unemployment | Retirement | Disability | Other   |
| 2006    | 720,384               | 4,809,298  | 723                      | 859,780              | 732                       | 2,196,934 | 477                      | 558,702      | 276,920    | 204,844    | 82,064  |
| 2008    | 1,100,879             | 4,936,839  | 814                      | 906,835              | 801                       | 2,249,904 | 529                      | 646,186      | 265,314    | 199,410    | 63,626  |
| 2010    | 1,471,826             | 5,140,554  | 884                      | 933,730              | 850                       | 2,290,090 | 572                      | 1,445,228    | 257,136    | 196,159    | 49,535  |
| 2012    | 1,381,261             | 5,330,195  | 946                      | 943,296              | 887                       | 2,322,938 | 602                      | 1,327,027    | 251,549    | 194,876    | 36,310  |
| 2014    | 1,059,799             | 5,558,964  | 1000                     | 929,484              | 916                       | 2,348,388 | 624                      | 1,221,390    | 252,328    | 197,303    | 26,842  |
| 2015    | 838,392               | 5,641,908  | 1,021                    | 931,668              | 923                       | 2,353,257 | 631                      | 1,102,529    | 253,838    | 198,891    | 23,643  |
| 2016    | 763,697               | 5,731,952  | 1,043                    | 938,344              | 930                       | 2,364,388 | 638                      | 997,192      | 254,741    | 199,762    | 21,350  |
| 2017    | 722,724•              | 5,826,123  | 1,063                    | 947,130              | 936                       | 2,360,395 | 646                      | 903,576•     | 256,065    | 199,320=   | 19,216  |
| Sources | BEL                   | BEL        | BEL                      | BEL                  | BEL                       | BEL       | BEL                      | BEL          | IMSERSO    | IMSERSO    | IMSERSO |

BEL: Boletín de Estadísticas Laborales.

IMSERSO: Instituto de Mayores y Servicios Sociales.

\* Benefits for orphans and dependent family members of deceased Social Security affiliates are excluded.

• Data refer to January-November.

Data refer to January-October.

### Table 5

# **Social protection: Health care**

|         |                  | Exp               | enditure                                       |  |  | Resou  | irces    |  | Satis  | faction   | Patients<br>on waiting list                                      |   |
|---------|------------------|-------------------|--|--|--|--|----------|--|--|---|--|---|
|         | Total<br>(% GDP) | Public<br>(% GDP) | Total<br>expenditure<br>(\$ per<br>inhabitant) | Public<br>expenditure<br>(per<br>inhabitant) | Medical<br>specialists<br>per 1,000<br>inhabitants | Primary care<br>doctors per<br>1,000 people<br>asigned | nurses   | Primary<br>care nurses<br>per 1,000<br>people<br>asigned | With the<br>working of<br>the health<br>system | With medical<br>history and<br>tracing by family<br>doctor or<br>pediatrician | Non-urgent<br>surgical<br>procedures<br>per 1,000<br>inhabitants | Specialist<br>consultations<br>per 1,000<br>inhabitants |
| 2006    | 7.76             | 5.62              | 2,391  | 1,732  | 1.6  | 0.7  | 2.8      | 0.6  | 5.6  | 7.0   | 9.4  | 35.4  |
| 2008    | 8.29             | 6.10              | 2,774  | 2,042  | 1.8  | 0.8  | 3.0      | 0.6  | 6.4  | 7.0   | 9.2  | 37.5  |
| 2010    | 9.01             | 6.74              | 2,886  | 2,157  | 1.8  | 0.8  | 3.2      | 0.6  | 6.6  | 7.3   | 9.8  | 33.0  |
| 2012    | 9.09             | 6.55              | 2,902  | 2,095  | 1.8  | 0.8  | 3.1      | 0.6  | 6.6  | 7.5   | 11.8   | 35.9  |
| 2014    | 9.08             | 6.36              | 3,057  | 2,140  | 1.8  | 0.8  | 3.1      | 0.7  | 6.3  | 7.5   | 11.4   | 39.4  |
| 2015    | 9.16             | 6.51              | 3,180  | 2,258  | 1.9  | 0.8  | 3.2      | 0.7  | 6.4  | 7.5   | 12.2   | 43.4  |
| 2016    | 8.98             | 6.34              | 3,248  | 2,293  |  | 0.8  |          | 0.6  | 6.6  | 7.5   | 12.7   | 40.9  |
| Sources | OECD             | OECD              | OECD   | OECD   | INCLASNS   | INCLASNS   | INCLASNS | INCLASNS   | INCLASNS                                       | INCLASNS  | INCLASNS   | INCLASNS  |

OECD: Organisation for Economic Co-operation and Development. INCLASNS: Indicadores clave del Sistema Nacional del Salud.

# Notes

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