

## Spain's near and medium-term economic outlook: Progress and challenges

### WHAT MATTERS

The **Spanish economy** in 2018 and forecasts for 2019–2021

The **future of blockchain** in the European banking system

Accelerating the pace of **non-performing loan reduction** in Europe

A snapshot of **Spain's mortgage market**

The impact of **IFRS 16** on lease accounting

The need for caution on Spain's recent **minimum wage** hike

**Deficit reduction** in Spain: Uncertainty persists

Forward guidance and price stability: **The European Central Bank** seeks to chart a clearer path

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# SEFO

SPANISH AND INTERNATIONAL  
ECONOMIC & FINANCIAL OUTLOOK

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# Letter from the Editors

In the first issue of *Spanish and International Economic & Financial Outlook (SEFO)* of this year, we take a look at prospects for the Spanish economy in 2019-2021 against the backdrop of a challenging global, not least European, economic environment. Recent indicators point to the cooling of the European economy. Italy has just entered into recession as a result of the pressure on its risk premium, the uncertainties surrounding its public deficit roadmap amidst high public borrowings, and the banks' still high non-performing loan ratios. In France, the economy has slumped as a result of the *gilets jaunes* movement. But the biggest surprise has come from the Germany economy, most exposed to trade tensions, which has contracted in the third quarter of 2018 and has failed to show significant signs of recovery since. Finally, the uncertainty surrounding Brexit is also weighing on the European economy, particularly the UK, one of Spain's main trading partners, which is registering very low growth.

Within this context, we point out that in recent years, the Spanish economy has grown by more than 3%, outpacing the EU average and most of its large European peers, while also managing to maintain a substantial current account surplus. However, this pattern of strong growth with external surplus is losing momentum, due in large part to the deteriorating international context. The Spanish economy is expected to register relatively strong growth in 2019. However,

external shocks, such as trade tensions, the imbalances weighing on China's economy, a highly leveraged global economy and a surge in anti-European populist movements, could unleash a crisis of confidence and drain global growth more intensely than is currently anticipated. In such circumstances, Spain's high public deficit would leave scant room for deploying anti-cyclical fiscal policies. Domestically, maintaining momentum on the reform agenda will be necessary to support Spain's growth cycle, create jobs and remedy inequalities.

We then shift the focus to the financial sector, assessing first the prospects for the future of blockchain in the European banking system in the coming years and then providing an update on the status of NPL disposals at the EU level. Blockchain technology has sparked intense debate in recent years. In the financial industry, this debate has centred almost exclusively on the rise, and more recently on the relative decline, of cryptocurrencies and the risks of these instruments. However, blockchain technology has far wider implications for markets and banks. To get in front of emerging challenges, the European banking industry has spearheaded some key blockchain-based platforms, including for trade finance. These initiatives have recently been backed by the European Commission, which made the financial applications of blockchain technology a central part of its 2018 FinTech Action Plan.

As regards NPLs, since the European Commission approved its Action Plan on the Reduction of Non-Performing Loans in 2017, several institutional initiatives have emerged to achieve the Plan's goal. Among the most notable are the recently published EBA Guidelines on the management of non-performing and forbore exposures and a European Commission progress report, which includes an analysis of an ambitious proposal for an EU-wide transaction platform to boost non-performing asset sales. However, on-going pressure on banks from the European supervisor (SSM) suggests that the current pace of reductions is too slow and would fail to prevent some key economic risks from materialising down the road. Judging by the downward trend in NPLs in most European countries, it appears that this pressure has been effective and that Spain will continue to sell off non-performing assets.

On a related topic, we look at prevailing conditions in the Spanish mortgage market. Prior to the 2008 financial crisis, 20% of every 100 euros of housing loans extended in the eurozone were granted in Spain. Today, five years after the country's real estate bubble burst, that percentage stands at 5.2%. The housing market is recovering, however, with new housing loans registering double-digit year-on-year growth since April 2018. This has sparked renewed interest in how Spain's mortgage market compares to other eurozone economies, from business indicators to interest rates to borrowing terms and conditions, bank margins, rejection rates and household debt service ratios, among other indicators. While there has been a notable pick-up in Spain's mortgage market, the volume of mortgages granted, the size of new mortgages and the financial burden for households are all well below the highs of the past and there are no clear signs pointing to the emergence of another property bubble.

We then look at recent regulatory changes and their anticipated impact in various areas. First, we provide details on the new accounting model, IFRS 16, which has established new criteria and fixed treatment for all types of leases regardless of whether the risks of ownership of the asset are transferred to the lessee. By standardising the way

in which leases are accounted for, IFRS 16 seeks to ensure that reporting entities account for financing from operating leases on their balance sheets and that credit risk analysis is less biased. Some sectors—including airlines, retail and tourism/leisure—will be more affected by the new criteria than others and most market players had already taken steps to address associated challenges. Nonetheless, the broad implications of the new standard are only just beginning to be understood.

Second, we explore the possible impact of the increase to Spain's minimum wage. The recently approved increase in the minimum wage by 22.3%, to 900 euros per month in 2019—forecast to reach 1,000 euros in 2020—will make Spain pass from being one of the countries with the lowest minimum wages to one of the highest. This decision could be in part justified given the country's low current wage level and the decoupling of wages from labour productivity, although there are broad differences across sectors. However, the scale of the increase may be disproportionate or, at the very least, risky. It is not clear that a minimum wage is the best tool for addressing growing household income inequality as there is no clear correlation between wage levels and household poverty. Furthermore, evidence shows that disproportionate increases in the minimum wage may significantly impact employment for low-wage earners, older workers, youth, and other already vulnerable groups.

Lastly, we analyse Spain's uncertain medium-term fiscal outlook. With a structural deficit incompatible with fiscal stability and substantially higher than those seen in the EU, the fiscal landscape is undoubtedly one of the Spanish economy's biggest weaknesses. Facing the very real possibility of interest rate hikes, international financial market tensions and lower economic growth, the government has recently proposed a new fiscal strategy that includes upward revisions to the deficit targets for 2019–2021. Additionally, receiving Parliamentary support for the recently presented 2019 GSB will be difficult and the revenue estimates included in the project to achieve an ambitious 1.3% of GDP

target initially agreed upon with the EU will too be difficult to achieve.

We close this *SEFO* with an assessment of a topic of critical importance not only for Spain, but for all EU member states – challenges surrounding the ECB’s definition of price stability. By advocating monetary integration and through efforts to strengthen forward guidance, the ECB seeks to improve how Europe’s economic and monetary union functions. However, the politics and economics of the ECB’s unconventional monetary posture has bred confusion, much of which likely stems from the ambiguity surrounding the definition of price stability. Europe’s unique economic and monetary union and member state diversity have spawned divergent policies and perspectives on price stability. To provide more clarity, the Governing Council could promote financial market integration within the euro area, encourage market-structure convergence and construct a narrative that explains how prices can be stable for the euro area as a whole despite obvious differences in national inflation rates. While the ECB may not be able to eliminate all the ambiguity surrounding price stability, its efforts to construct a more cohesive monetary union can produce more effective monetary policymaking, both in perception and reality.

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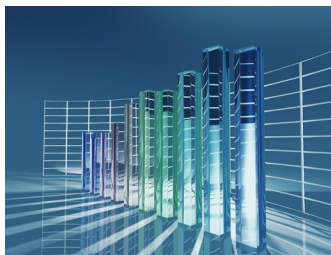


## What's Ahead (Next Month)

Month	Day	Indicator / Event
February	4	Social Security registrants and official unemployment (January)
	7	Industrial production index (December)
	11	<a href="#">Eurogroup meeting</a>
	15	CPI (January)
	21	Foreign trade report (December)
	28	Balance of payments monthly (December)
	28	Preliminary CPI (February)
	March	4
7		<a href="#">ECB monetary policy meeting</a>
8		Industrial production index (January)
11		<a href="#">Eurogroup meeting</a>
11		Retail trade (January)
13		CPI (February)
21-22		<a href="#">European Council</a>
21		Foreign trade report (January)
27		Balance of payments quarterly (4 <sup>th</sup> qr. 2018)
28		Preliminary CPI (March)
28		Non-financial accounts, State (February)
29		Quarterly National Accounts (4 <sup>th</sup> qr. 2018)
29		Institutional Sectors Non-financial Quarterly Accounts (4 <sup>th</sup> qr. 2018)
29		Retail trade (February)
29		Balance of payments monthly (January)

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# What Matters



## 5 **The Spanish economy in 2018 and forecasts for 2019–2021**

After three years of strong economic growth, Spain's economy is starting to lose steam. Regaining speed will, in part, depend on external factors related to the global economy, together with pushing forward on domestic reforms.

Raymond Torres and María Jesús Fernández

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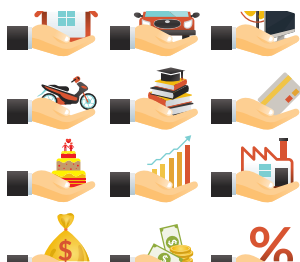


## 21 **The future of blockchain in the European banking system**

For European banks, the potential benefits of using blockchain technology do not diminish the controversy surrounding it. From scalability challenges to the “blockchain trilemma” of recording information correctly, cost efficiently and in a decentralised way, the European banking industry is navigating the risks and regulatory issues of blockchain as it takes a global lead in the adoption of this new technology.

Santiago Carbó Valverde and Francisco Rodríguez Fernández

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## 31 **Accelerating the pace of non-performing loan reduction in Europe**

Despite notable progress, European banks remain under pressure from legislative, regulatory and supervisory authorities to further reduce their non-performing loans. Within this context, European banks, including Spanish banks, are likely to continue their efforts to clean up their balance sheets.

Marta Alberni, Ángel Berges, Fernando Rojas and Federica Troiano, A.F.I.

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### 39 **A snapshot of Spain's mortgage market**

The notable recovery in Spain's housing market is bringing some relief to both banks and households. While the pick-up in the sector has raised concern over whether or not the country is once again building up imbalances, at present there is no clear evidence to support that a property bubble is forming.

Joaquín Maudos

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### 49 **The impact of IFRS 16 on lease accounting**

The entry into force of IFRS 16 –leases– on January 1<sup>st</sup>, 2019, changed the accounting standards on operating leases. Aiming for less bias and more uniformity, IFRS 16 stipulates that all lease agreements must be treated the same and accounted for using a traditional capitalisation formula.

Pablo Guijarro and Alexandra Cortés, A.F.I.

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### 57 **The need for caution on Spain's recent minimum wage hike**

The Spanish government has recently approved an increase in the minimum wage to 900 euros in 2019, the biggest increase in 40 years. While empirical evidence may support the need for such a measure, the potential risks should be carefully assessed.

Daniel Fernández Kranz

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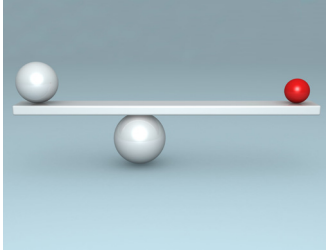


### 67 **Deficit reduction in Spain: Uncertainty persists**

Charged with bringing down a high structural deficit, Spain's new government has proposed a revised roadmap for fiscal consolidation. However, given the current political climate, receiving the necessary support remains a challenge.

Santiago Lago Peñas

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## 75 **Forward guidance and price stability: The European Central Bank seeks to chart a clearer path**

The European Central Bank's unconventional monetary policy stance has bred some confusion among euro area member states, especially over its definition of price stability. While the bank may not be able to eliminate all ambiguity, by advocating monetary integration, the ECB is working to improve the functioning of Europe's economic and monetary union and strengthen its forward guidance on monetary policy.

Erik Jones

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## Regulation and Economic Outlook

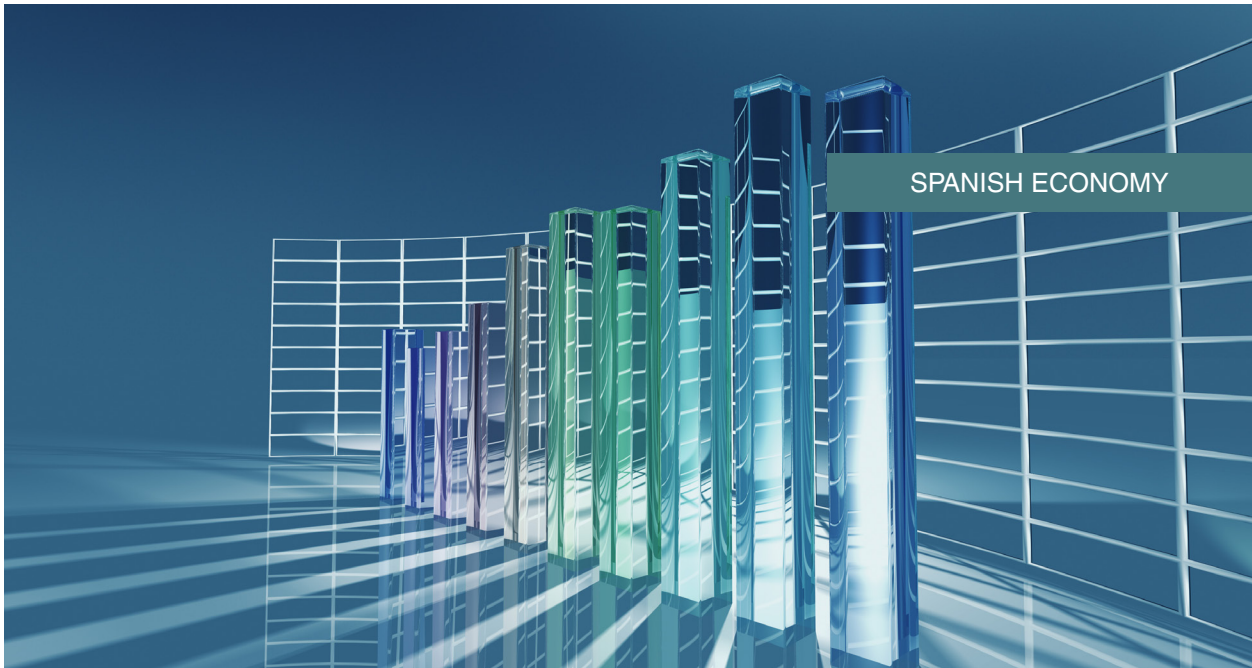
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# The Spanish economy in 2018 and forecasts for 2019–2021

After three years of strong economic growth, Spain's economy is starting to lose steam. Regaining speed will, in part, depend on external factors related to the global economy, together with pushing forward on domestic reforms.

Raymond Torres and María Jesús Fernández

**Abstract:** In recent years, the Spanish economy has grown by more than 3% while also managing to maintain a substantial current account surplus. However, this pattern of strong growth with external surplus is losing momentum, due in large part to a cooling European economy and the deteriorating international context. The Spanish economy is expected to register relatively strong growth in 2019. However, external shocks, such as trade tensions, the imbalances weighing on

China's economy, a highly leveraged global economy and a surge in anti-European populist movements, could unleash a crisis of confidence and drain global growth more intensely than is currently anticipated. In such circumstances, Spain's high public deficit would leave scant room for deploying anti-cyclical fiscal policies. Domestically, maintaining momentum on the reform agenda will be necessary to support Spain's growth cycle, create jobs and remedy inequalities.

“ The maintenance of the current account surplus even under strong growth is important from both a market confidence and financial sustainability standpoint, as all previous recessions have been preceded by a sharp deterioration in the balance of payments. ”

## Introduction

Economic growth in Spain has been lagging since the start of 2018, when the three-year recovery began to lose steam. Although the slowdown has been gradual—Spain continues to outperform the European average and create jobs—it is worth examining whether this phase of growth is sustainable.

This analysis is underpinned by key takeaways from 2018 and forecasts for 2019–2021, which update and expand on earlier forecasts for 2018–2021 (Torres and Fernández, 2018). The three years covered by this forward-looking analysis is the time horizon considered appropriate for testing the Spanish economy’s resistance to potential shocks (ESRB, 2018).

The forecasts pay special attention to the trend in the current account, not just GDP growth. Indeed, in recent years, the Spanish economy has grown by more than 3% while also managing to maintain a substantial current account surplus. This is important from both a market confidence and financial sustainability standpoint, as all previous recessions have been preceded by a sharp deterioration in the balance of payments.

There is another scenario worth considering as well, one articulated around a reform agenda. This policy simulation examines the impact on growth and the current account, as well as the Spanish economy’s key weaknesses: unemployment and public deficit.

## The Spanish economy in 2018

Although not all fourth quarter indicators are in yet, the Spanish economy is expected to have grown by 2.5% in 2018. Whereas the quarterly rate of growth was steady at 0.6% in the first

three quarters of the year, indicators point to faster growth of 0.7% in the fourth quarter. These rates are high relative to the eurozone, but down year on year, which is why growth is tracking lower than in 2017, when the economy expanded by 3% (Exhibit 1.1).

Growth is in line with both the year-end Funcas forecasts and the consensus forecasts of the group of analysts tracked by Funcas (although those forecasts were revised upwards during the first half of 2018, they were cut in the second half). There are nevertheless significant differences in these forecasts in terms of the composition of growth.

The expectation was that growth would slow primarily from an easing of domestic demand, specifically consumer spending, while foreign demand would continue to have a positive impact. However, domestic demand has held up remarkably well, with growth even accelerating from 2017, driven by higher momentum across the board. Rather, the slowdown is entirely attributable to deterioration in the foreign sector, where the net contribution to growth has gone from slightly positive in 2017 to detracting from growth around 0.5pp in 2018, shaped by a sharp downturn in exports of both goods and services (particularly tourism and non-tourism services) (Exhibit 1.2).

Growth in private consumption is expected to be very similar to that observed in 2017. In nominal terms, growth in this heading slowed due to lower inflation, but outpaced growth in gross disposable household income (GDHI), as has been the case since the start of the recovery. This caused household savings to dip further, to 4.1% of GDHI, a record low since the beginning of the series in 1999.



“ Although it is too soon to talk about an imbalance, the borrowing requirement of Spanish households continues to rise and soon their leverage will, too. ”

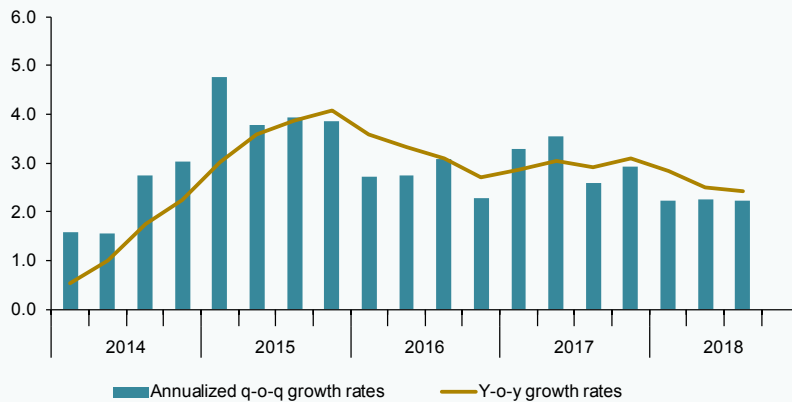
A drop in household savings, coupled with growth in household investing, increased the household borrowing requirement to 1.4% of GDP (Exhibit 5.1). Having recorded

a net lending position from the start of the crisis until 2016, Spain’s households have been net borrowers since 2017. Nevertheless, household leverage continued to come down

Exhibit 1

### 1.1. GDP

Y-o-y growth rates



### 1.2. Contribution to GDP growth

Percentage points and growth rates

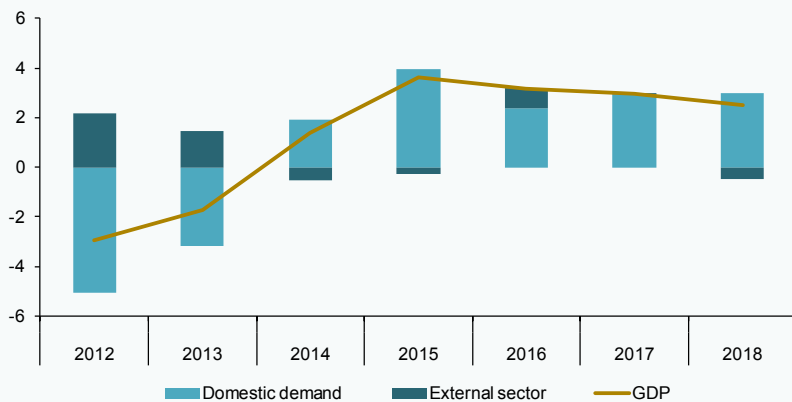
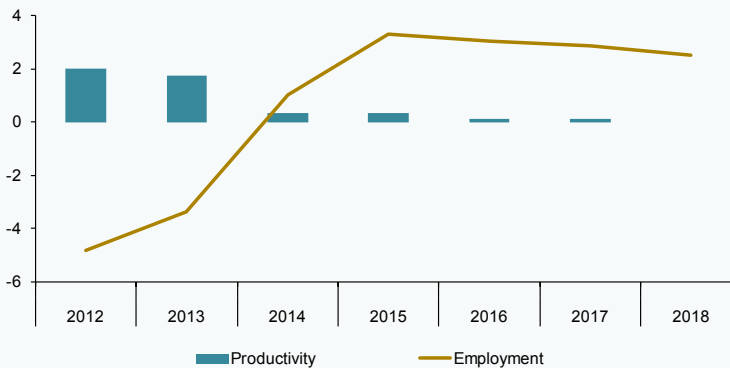


Exhibit 1

### 1.3. Employment and productivity

Growth rates

(Continued)



Source: National Statistics Institute.

(Exhibit 6), even though growth in consumer credit was healthy. Although it is too soon to talk about an imbalance, the borrowing requirement of Spanish households continues to rise and soon their leverage will, too. These variables should be monitored.

Investment in capital goods also proved more dynamic than anticipated, growing more than in 2017. This variable continues to be underpinned by healthy balance sheets, low interest rates and a recovery in corporate profit margins (which nevertheless remain below pre-crisis levels according to the Bank of Spain's numbers). As has been the case since 2009, on aggregate, firms funded this investment effort from internally generated funds. Indeed, Spain's corporates were net lenders once again in 2018 (Exhibit 5.2). As a result, their borrowings continued to decline relative to GDP and currently stand below the eurozone average (Exhibit 6).

Investment in construction accelerated in 2018 thanks to non-residential construction, primarily public works; and although housing construction decelerated, it remained strong. The real estate market remained buoyant: house sales registered 11% growth to September and house prices increased by 3.2% in the

first nine months of the year, according to the Ministry of Public Works figures, or 6.7%, according to the National Statistics Institute. However, this trend fluctuated by region, with price increases of over 10% in Madrid, Barcelona, Palma de Mallorca, San Sebastián and Málaga, while other regional capitals saw lower growth and even price contraction (Ministry of Public Works, 9M18).

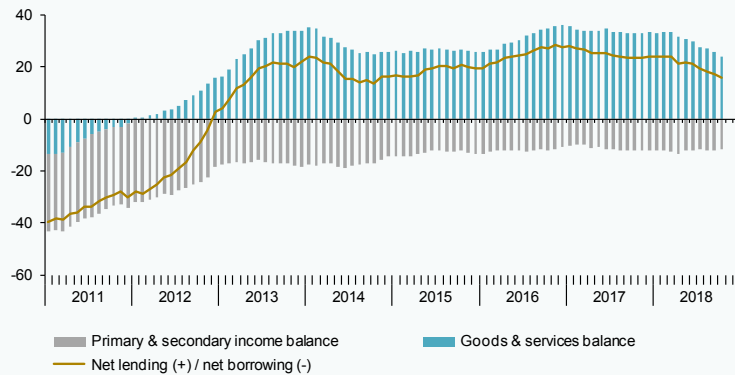
Growth in exports slowed significantly across the board for goods and services, particularly tourism and non-tourism services, with growth estimated at 1.9% compared to 5.2% in 2017. In goods exports, the slowdown was more pronounced than the easing in global trade or imports from Spain's export markets. Growth in imports was 3.7%, in line with the average elasticity relative to final demand observed in recent years. As a result, growth in imports outpaced that of exports, with net trade detracting from GDP growth.

This negative contribution, coupled with higher oil prices for much of the year and an increase in the income deficit, narrowed the surplus in the current account of the balance of payments to an estimated 0.7% of GDP, compared to 1.8% in 2017 (Exhibit 2).

Exhibit 2

**Balance of payments**

EUR billion, cumulative last 12 months



Source: Bank of Spain.

The construction sector saw the strongest growth, while the manufacturing industry registered its lowest rate of growth since the start of the recovery, a sign of weak exports. The manufacturing sector's performance was also affected when car production halted in September, triggered by the entry into force of new emissions regulations. Growth in non-market services accelerated, but slowed in all other services, due mainly to the modest expansion sustained by sectors most closely related to tourism.

The number of full-time equivalent jobs increased by 2.5%, implying zero growth in apparent labour productivity (Exhibit 1.3). Employment growth was highest in the construction sector. According to the *Labour Force Survey (EPA)*, pending fourth quarter numbers, employment is also expected to have increased by 2.5% (Exhibit 3.1). The active population contracted slightly (for

the first time since 2011), while the average unemployment rate was 15.3% (the lowest since 2008), which by most estimates is right around the NAWRU.

Social Security contributor numbers point to higher growth in employment in 2018: 3.1% (Exhibit 3.2). Sharp growth in the number of contributing wage earners on indefinite contracts stands out at 4.8%, having accelerated year on year, compared to 3.6% growth of those on temporary contracts, which contracted. These trends—acceleration in indefinite arrangements *versus* deceleration in temporarily arrangements—are also evident in the *EPA* numbers, although less pronounced.

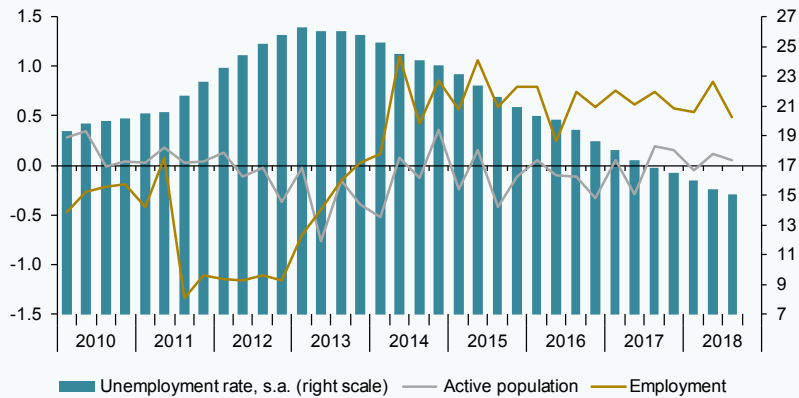
The overall public deficit is estimated at 2.7% of GDP, down 0.3pp from 2017. Tax revenue increased by more than expected, around 6%, but spending also registered sharp

“ The construction sector saw the strongest growth, while the manufacturing industry registered its lowest rate of growth since the start of the recovery, a sign of weak exports. ”

Exhibit 3

### 3.1. Employment and unemployment (LFS)

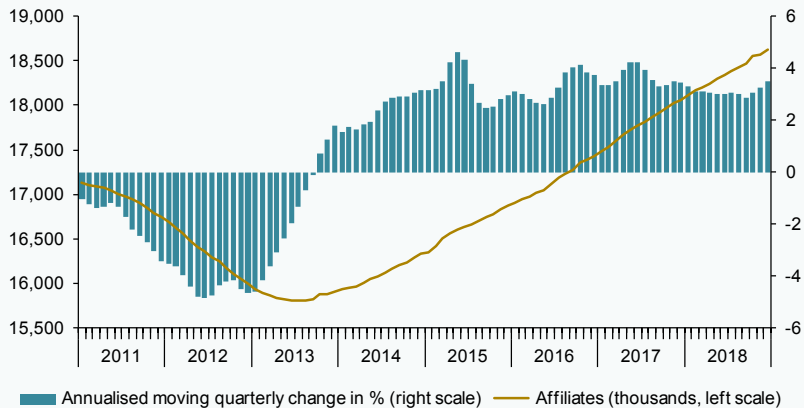
Annualised quarterly change and percentage



Source: National Statistics Institute and Funcas.

### 3.2. Social Security affiliates

Seasonally-adjusted data



Source: Ministry of Labour and Funcas.

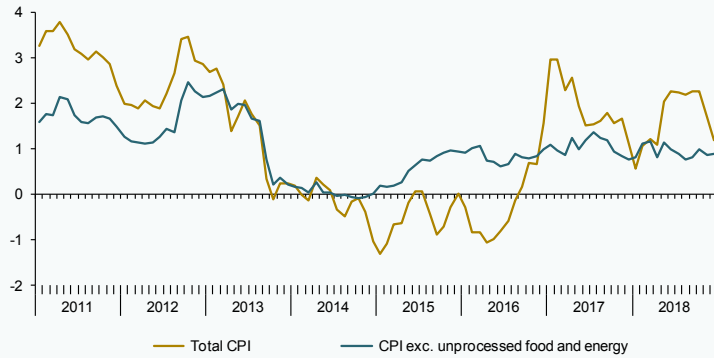
growth, particularly pension expenditure. Public employee remuneration and public investment also increased, but to a lesser extent. The ratio of public borrowings to GDP ended the year at 97.4% (Exhibit 7).

Finally, inflation averaged 1.7% in 2018, down 0.3pp year on year, shaped by energy product prices as well as the components of core inflation, which averaged 0.9% (Exhibit 4).

Exhibit 4

### Consumer Prices Index

Change y-o-y in %

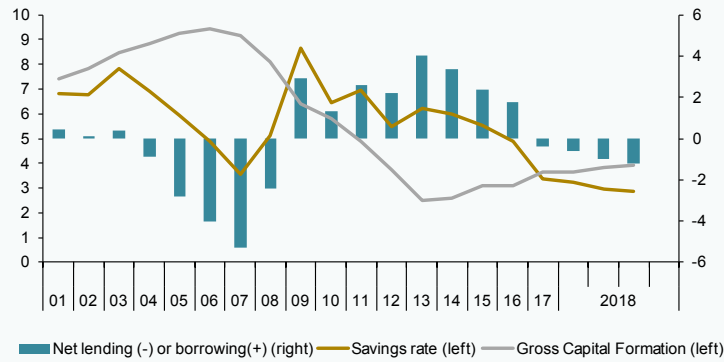


Source: National Statistics Institute.

Exhibit 5

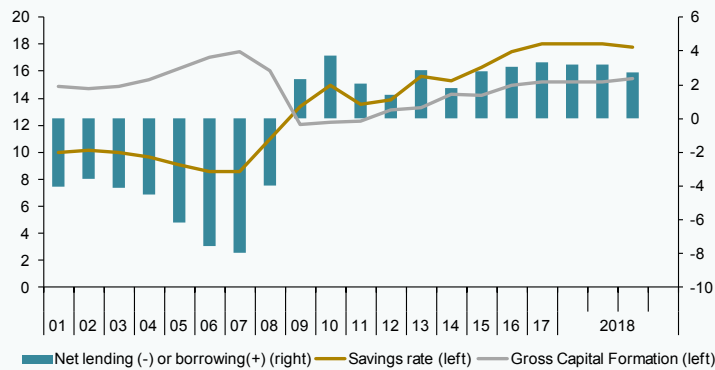
### 5.1. Households: Savings rate and financial balance

Percentage of GDP, 4-quarter moving sum



### 5.2. Non-financial corporations: Savings rate and financial balance

Percentage of GDP, 4-quarter moving sum

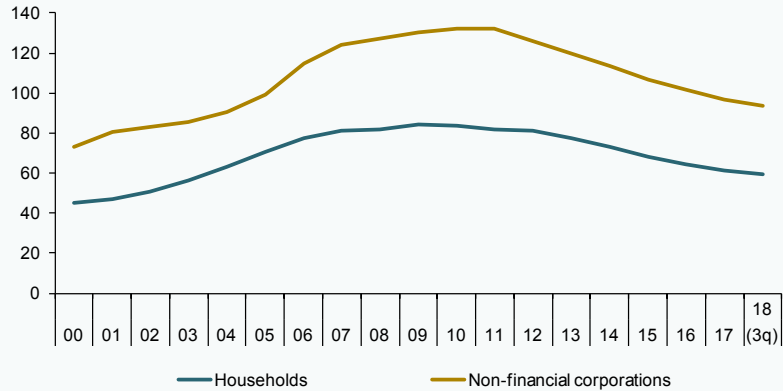


Source: National Statistics Institute.

Exhibit 6

**Private sector indebtedness**

Percentage of GDP

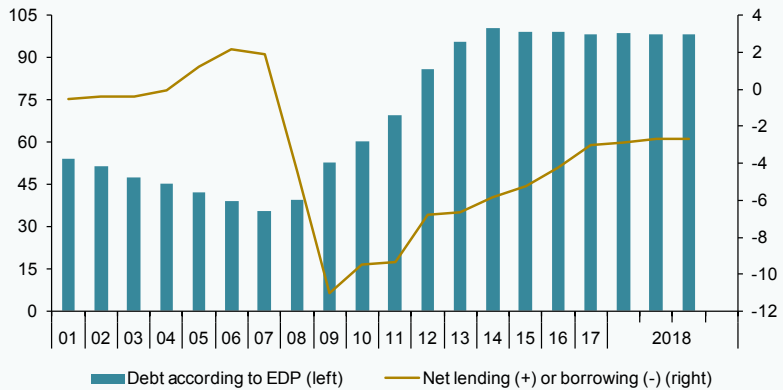


Source: Bank of Spain.

Exhibit 7

**Government balance (excl. financial entities bailout) and debt**

Percentage of GDP, 4-quarter moving sum



Source: National Statistics Institute.

**International context and macroeconomic policy: The outlook for 2019–2021**

*A deteriorating international environment*

The international environment has deteriorated unexpectedly. In addition to the trade row between the US and China, the world’s two

largest economies, protectionist measures have been proliferating, weakening global trade. This situation is making things harder for the Chinese government, which is also tackling a sharp slowdown in domestic demand. Elsewhere, rate tightening by the Federal Reserve is pushing up borrowing costs for emerging economies most exposed

“ Both the World Bank and the IMF have cut their forecasts for global GDP growth. ”

to dollar-denominated debt, particularly Argentina and Turkey.

In light of these factors, the global economy is expected to slow. Both the World Bank and the IMF have cut their forecasts for global GDP growth. These forecasts have been factored into the scenario contemplated by Funcas, which assumes growth in export markets of 3.5% in 2019 and 2020 (down 0.2pp from the last set of forecasts) and 3.8% in 2021.

The European economy has also cooled, as evidenced by prevailing economic sentiment, consumer confidence and industrial output indicators. Italy has just entered into recession as a result of the pressure on its risk premium, the uncertainties surrounding its public deficit roadmap amidst high public borrowings, and the banks' still high non-performing loan ratios. In France, the economy has slumped as a result of the *gilets jaunes* movement.

But the biggest surprise has come from Germany, the country most exposed to the trade tensions. The German economy contracted in the third quarter of 2018 and has failed to show significant signs of recovery since. Moreover, Germany's companies are finding it hard to hire skilled labour as unemployment nears all-time lows. Finally, the uncertain *denouement* of Brexit is also weighing on the European economy, particularly the UK, one of Spain's main trading partners, which is registering very low growth.

As a result, the growth forecasts for the eurozone have been trimmed to 1.4% for 2019, 0.2pp down from the last set of forecasts. The region is expected to post similar growth in 2020 and then stage a slight recovery in 2021.

#### **Macroeconomic assumptions**

Monetary policy is expected to remain expansionary during the projection period

as a result of weak growth in Europe coupled with contained inflation, which is tracking well inside the annual target of 2%. The European Central Bank is expected to stick with its plans to roll back its bond repurchasing activity and to delay its benchmark rate tightening until the end of 2019 or early 2020. As a result, current forecasts contemplate an even smoother increase in long-term interest rates.

As for fiscal policy, the forecasts assume the rollover of Spain's general state budget and layer in measures already taken, including public pay and pension increases on the spending side. On the revenue side, the numbers include the increases already decided on Social Security earnings caps and the impact on tax receipts of the increase in the minimum wage in 2019.

Note that the forecasts do not factor in the new budgetary plan recently approved by the Spanish government. That decision reflects the margin for change in the course of the impending parliamentary approval process and the uncertain timing of the effectiveness of a potential new budget (probably no sooner than the middle of the year).

#### **Forecasts for 2019–2021**

Growth is forecast at 2.1% in 2019, 0.1pp down from the last set of forecasts (Table 1). The foreign sector is expected to detract from growth by 0.3pp on the back of slower growth in exports as the global economy weakens. The current account surplus is expected to narrow to 0.6% of GDP.

Domestic demand should remain buoyant, although growing less than in previous years. The slowdown in private consumption is expected to be very slight as the reduced margin for spending from the decline in the

Table 1 **Economic forecasts for Spain, 2019-2021**

Annual rates of change in %, unless otherwise indicated

	Actual data				Funcas forecasts			
	Average 1996-2007	Average 2008-2013	Average 2014-2017	2017	2018	2019	2020	2021
<b>1. GDP and aggregates, constant prices</b>								
<b>GDP</b>	3.8	-1.3	2.8	3.0	2.5	2.1	1.8	1.7
Final consumption households and NPISHs	3.6	-2.2	2.5	2.5	2.5	2.2	1.8	1.6
Final consumption general government	4.3	0.7	1.1	1.9	2.1	1.3	1.2	1.2
Gross fixed capital formation	6.4	-7.4	4.8	4.8	5.6	4.0	3.0	2.1
Construction	5.9	-10.7	3.4	4.6	6.0	4.1	3.1	2.2
Residential construction	7.8	-12.5	6.6	9.0	7.3	5.0	4.1	2.7
Non-residential construction	4.2	-8.7	0.8	0.6	4.7	3.1	2.0	1.5
Capital goods and other products	7.5	-2.2	6.2	5.0	5.2	3.8	2.9	2.1
Exports goods and services	6.6	1.7	4.7	5.2	1.9	2.0	2.4	2.5
Imports goods and services	8.7	-4.1	5.1	5.6	3.7	3.1	2.9	2.5
<b>National demand (a)</b>	4.5	-3.1	2.8	2.9	3.0	2.4	1.9	1.6
External balance (a)	-0.7	1.8	0.0	0.1	-0.5	-0.3	-0.1	0.1
GDP, current prices: € billion	--	--	--	1,166.3	1,207.0	1,252.4	1,292.3	1,334.5
% change	7.4	-0.8	3.3	4.3	3.5	3.8	3.2	3.3
<b>2. Inflation, employment and unemployment</b>								
GDP deflator	3.5	0.5	0.5	1.2	0.9	1.7	1.4	1.6
<b>Household consumption deflator</b>	3.1	1.8	0.4	1.7	1.7	1.2	1.3	1.5
Total employment (National Accounts, FTEJ)	3.4	-3.3	2.6	2.9	2.5	1.7	1.4	1.3
Productivity (FTEJ)	0.4	2.0	0.2	0.1	0.0	0.3	0.3	0.3
Wages	7.5	-1.1	3.1	3.5	3.8	4.3	2.8	2.9
Gross operating surplus	6.9	-0.3	3.2	5.0	2.7	2.7	3.6	3.7
Wages per worker (FTEJ)	3.3	2.3	0.2	0.3	1.0	2.1	1.3	1.3
Unit labour costs	2.9	0.3	0.0	0.2	1.0	1.8	1.0	1.0
<b>Unemployment rate (LFS)</b>	12.5	20.2	20.8	17.2	15.3	13.9	12.7	11.6



Table 1 **Economic forecasts for Spain, 2019-2021**

Annual rates of change in %, unless otherwise indicated

(Continued)

	Actual data				Funcas forecasts			
	Average 1996-2007	Average 2008-2013	Average 2014-2017	2017	2018	2019	2020	2021
<b>3. Financial balances (% of GDP)</b>								
National saving rate	22.4	19.8	21.9	23.0	22.6	22.8	23.0	23.2
- of which, private saving	18.6	23.0	24.2	23.9	22.7	22.4	22.3	22.6
National investment rate	26.9	23.1	20.4	21.1	21.9	22.3	22.6	22.9
- of which, private investment	23.0	19.2	18.2	19.1	19.8	20.2	20.6	20.9
<b>Current account balance with RoW</b>	-4.5	-3.2	1.6	1.8	0.7	0.6	0.4	0.4
National net lending (+) / net borrowing (-)	-3.7	-2.8	1.9	2.2	1.0	0.8	0.6	0.5
- Private sector	-2.8	5.9	6.6	5.2	3.7	3.0	2.5	2.4
- <b>Public sector (general government deficit)</b>	-0.9	-8.6	-4.7	-3.1	-2.7	-2.1	-1.9	-1.9
- <b>General gov. deficit excl. financial inst. bailouts</b>	-0.9	-7.9	-4.6	-3.0	-2.7	-2.1	-1.9	-1.9
Public debt according to EDP	52.2	67.2	99.2	98.1	97.4	95.9	94.8	93.6
<b>4. Other variables</b>								
<b>Eurozone GDP</b>	2.5	-0.3	1.9	2.3	2.0	1.4	1.4	1.6
Household saving rate (% of GDI)	10.2	10.1	7.8	5.5	4.1	4.1	3.8	3.7
Household gross debt (% of GDI)	93.1	127.7	105.7	100.2	96.9	94.0	92.0	89.6
Non-financial corporates gross debt (% of GDP)	90.3	128.0	104.7	96.5	91.9	87.2	83.3	79.4
Spanish external gross debt (% of GDP)	90.8	158.6	167.5	166.6	167.6	166.3	166.3	165.8
12-month EURIBOR (annual %)	3.74	1.90	0.12	-0.14	-0.17	0.08	0.45	1.15
10-year government bond yield (annual %)	5.00	4.74	1.85	1.56	1.43	1.54	1.75	2.00

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

Sources: 1996-2017: National Statistics Institute and Bank of Spain; Forecasts 2019-2021: Funcas; 2018: Funcas estimate.

“ Despite the slowdown, the Spanish economy will continue to create jobs and the unemployment rate is expected to fall to 13.9%. ”

savings rate will be partially offset by higher growth in household income as a result of several factors, including increases in the minimum wage, public sector pay and pensions. Investment in capital goods is also expected to ease due to the downturn in global economic prospects, the lack of stimulus via rate cuts and the likelihood that momentum will just run out of steam.

Despite the slowdown, the Spanish economy will continue to create jobs and the unemployment rate is expected to fall to 13.9%. Compensation per employee is expected to increase by 2.1%, the highest rate since 2009, thanks to raises in the minimum wage and public sector wages. In light of the weak forecast growth in productivity, unit labour costs are expected to increase by 1.8%, in line with the eurozone average.

The budget assumptions suggest that growth in tax revenue will outpace GDP growth, while spending should trail slightly below. That should facilitate cutting the deficit to 2.1% of GDP, down 0.6pp from 2018. Despite the correction, the deficit would still exceed the target of 1.3% (and even the government-adjusted target of 1.8%). The spending items expected to sustain the highest growth are public pay and pensions. Debt servicing costs are expected to be largely the same as in 2018 and begin to increase from 2020.

The slowdown is expected to last until 2021, when growth is forecast to be close to the

Spanish economy's potential output, which is estimated at between 1.6% and 1.7%. This would still be sufficient to push the unemployment rate down to 11.6%, only slightly above 2008 levels. Factors such as the low savings rate, the rise (albeit very moderate) in interest rates and the limits on public spending derived from the deficit are expected to gradually slow the rate of growth in domestic demand. Low growth in international markets and productivity (the key to enhancing Spain's export competitiveness) are expected to narrow the current account surplus even more, to just 0.4% of GDP. Finally, the economic slowdown will weigh on the deficit-cutting effort. Public borrowings would remain at 93.6% of GDP at the end of 2021.

Growth in wages is expected to decrease in 2020 and 2021 relative to that forecast for 2019, heavily influenced by one-off factors, but should be higher than that seen in recent years. This, coupled with scant productivity gains, is similarly expected to drive higher growth in ULCs compared to recent growth. Overall, Spanish firms should remain competitive throughout the entire projection period.

### **An alternative scenario: Factoring in reforms**

The forecasts presented here assume no specific measures will be taken to boost the economy's long-term performance, which is why growth approaches its potential towards

“ The slowdown is expected to last until 2021, when growth is projected to be close to its potential, estimated at between 1.6% and 1.7%. ”

the end of the projection period and the current account surplus trends towards zero. However, in an alternative scenario of reforms, the prospects would improve considerably.

An alternative scenario layers in a reform agenda that would take full effect from 2020. That agenda would include reforms designed to reduce the incidence of temporary work arrangements weighing on productivity and the generation of human capital, improving how markets for goods and services work and stimulating investment in new technologies, innovation and education.

The result would be an increase in annual growth of productivity from 0.2% at present to 1% (the average rate of growth in Germany and France). [1] This positive ‘shock’ would be relatively small, therefore, as the gap in economic efficiency relative to the eurozone’s two biggest economies would remain the same. Elsewhere, in keeping with international experience, the impact of the reforms would be gradual, producing measured productivity gains. Finally, there is no consensus on how much the reform effort would impact growth in productivity. [2] This scenario should therefore be considered an estimate, and is intended more as an

illustration of the macroeconomic effects of potential reforms.

Bearing these considerations in mind, the main outcomes of the productivity gains delivered by the reforms would be: (i) greater competitiveness on the part of Spanish enterprises and a stimulus for exports; and, (ii) higher returns on investment. The increased GDP deriving from these effects would trickle down to job creation and wage income, fuelling domestic demand and attenuating social deficits.

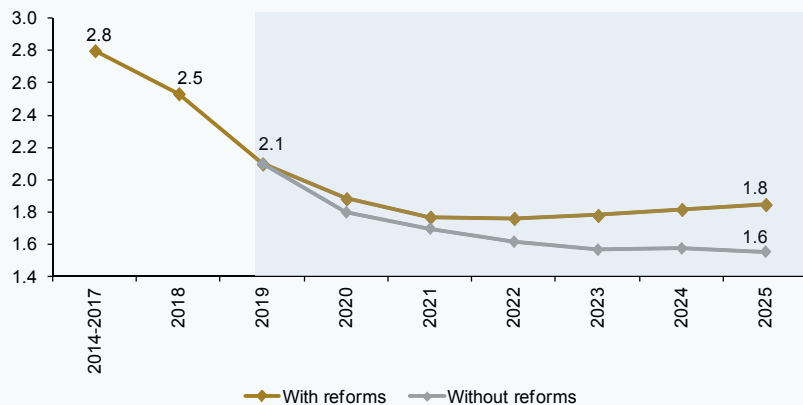
As a result, the Spanish economy would grow by around 0.2pp more in the reform scenario than in the status quo scenario (Exhibit 8.1). Elsewhere, the momentum in exports would make it possible to maintain a current account surplus (about 0.7% of GDP), a surplus destined to disappear in the absence of such reforms. Finally, the unemployment rate would be around one point lower than in the baseline scenario (Table 2). Higher growth and the ability to maintain a current account surplus would also facilitate deleveraging (as illustrated by the relatively fast reduction in public and foreign debt shown in Table 2).

Exhibit 8

### Projections for 2019-2025, alternative scenarios

#### 8.1. GDP growth

Annual growth rates



Source: Actual data: National Statistics Institute; Forecasts: Funcas.

Exhibit 8

**Projections for 2019-2025, alternative scenarios**

**8.2. Current account balance**

% of GDP

(Continued)



Source: Actual data: Bank of Spain; Forecasts: Funcas.

Table 2

**Unemployment rate and debt projections for Spain in 2025, alternative scenarios**

	2018	2025	
		With reforms	Without reforms
Unemployment rate	15.3	7.4	8.6
Public debt (% of GDP)	97.4	90.3	93.4
Gross external debt (% of GDP)	167.6	159.1	164.2

Source: Funcas.

**Future risks to Spain's economy**

In short, the Spanish economy is expected to register relatively strong growth in 2019. However, the risk of a pronounced deterioration in the international environment has increased. Factors such as the trade row between the US and China, the imbalances weighing on China's economy, a highly leveraged global economy and a surge in anti-European populist movements, could unleash a crisis of confidence and

drain global growth more intensely than is currently anticipated. In such circumstances, Spain's high public debt position would leave scant room for deploying anti-cyclical fiscal policies.

Another risk, this time on the domestic front, is that reform could be slow to gain the momentum necessary to prolong Spain's growth cycle, create jobs and remedy social inequalities.

## Notes

[1] For this policy simulation exercise, the benchmark was productivity per hour worked, not GDP per person employed. It is therefore assumed that reforms would increase total factor productivity.

[2] For an exhaustive analysis, see Cuadrado and Moral-Benito (2016).

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# The future of blockchain in the European banking system

For European banks, the potential benefits of using blockchain technology do not diminish the controversy surrounding it. From scalability challenges to the “blockchain trilemma” of recording information correctly, cost efficiently and in a decentralised way, the European banking industry is navigating the risks and regulatory issues of blockchain as it takes a global lead in the adoption of this new technology.

Santiago Carbó Valverde and Francisco Rodríguez Fernández

**Abstract:** Blockchain technology has sparked intense debate in recent years. In the financial industry, this debate has centred almost exclusively on the rise, and more recently on the relative decline, of cryptocurrencies and the risks of these instruments. However, blockchain technology has far wider implications for markets and banks. To get in front of emerging challenges, the European banking industry has spearheaded some key

blockchain-based platforms, including for trade finance. These initiatives have recently been backed by the European Commission, which made the financial applications of blockchain technology a central part of its 2018 FinTech Action Plan.

## **What is blockchain?**

Blockchain is probably the most talked- and written-about technology of recent years.

Although configurations can vary, blockchain can be understood as a distributed ledger technology (DLT) in which information is recorded in a large ledger in “blocks” that are linked and encrypted to be secure and unalterable. Blockchain’s key virtue is decentralisation, which enables information to be recorded without the need for intermediaries. It is paradoxical, then, that financial institutions –the ultimate “middlemen”– stand to benefit from blockchain disintermediation.

### **Applications of blockchain in the European banking sector**

The trajectory of blockchain in the European banking industry has been marked by several distinct phases. 2017 was a year of experimentation and strategic configuration, while 2018 was devoted to testing the technology and rolling out DLT-based initiatives. Will 2019 be the year blockchain technology finally takes off in Europe’s banking sector?

It is hard to be certain, but Europe finds itself at an interesting juncture. While BigTech players in Europe have been scarce, European banks have emerged as leaders in the adoption of these new financial technologies (mainly via cooperation platforms). Meanwhile, regulatory initiatives have been developed to promote, or at least provide, legal protection for blockchain applications in the EU.

Throughout 2018, the European Commission pursued several initiatives that suggest blockchain may play a key role in the configuration of the Digital Single Market (DSM), a target that the banking industry is working to meet. It was hardly surprising when the EU invited major European firms and start-ups to a DSM forum in 2018 to create

the International Association for Trusted Blockchain Applications (IATBA), in which Spain and its banks are strongly represented. The EU expects the IATBA to be fully operational by the first quarter of 2019 and to become the public face of technological cooperation and development in the region, competing with Asia and the US in the DLT arena.

### **Recent blockchain initiatives in Spain’s banking industry and beyond**

Europe’s banks have pioneered some of the world’s most important DLT-based platforms, with Spain’s financial institutions playing an important role in most of them. In 2018, some Spanish banks began promoting blockchain transaction use cases in certain fields, such as asset securitisation and loan approval. To an extent, these initiatives have been test environments for analysing how these types of transactions can be sped up, at what cost and at what level of security.

Early results appear promising. As in other areas of technological uptake, these initiatives are not only being led by the supply side, but also by growing demand from non-financial corporates for blockchain-based banking services. In a 2018 Cognizant survey of 1,570 senior executives at large European firms, 42% said they expected that banking and financial services would be where blockchain would have the biggest impact in the coming years (Cognizant, 2018).

Perhaps the best example to date of DLT addressing corporate demand for more agile financial services is in large-scale trade finance. In a field where bookkeeping, financing and payment transactions for large-scale exports can take days and even weeks to close (a single transaction can involve multiple firms across the globe), international

“ In a 2018 survey of senior executives at large European firms, 42 percent said they expected banking and financial services to be the areas where blockchain would have the biggest impact in coming years. ”



banks have begun to cooperate. Spearheaded by European banks, this collaboration has enabled trade transactions to be automated and monitored as never before.

Table 1 shows the world's top five trade finance platforms. Four of the five are markedly European in profile (three of the five include Spanish banks): Voltron, Marco Polo, Batavia and We.Trade. The fifth, the Hong Kong Trade Finance Platform (HKTFP) was developed by the Monetary Authority of Hong Kong and is expected to be operational in 2019.

These platforms cover multiple activities, from transaction payments and credit underwriting

to the execution of trades via smart contracts, all at speeds that allow transactions to close within 24 hours. Although it is too soon to tell, a growing share of global trade will likely be channelled through these platforms thanks to cooperation between technology firms and financial institutions. This collaboration is strengthened further by cooperation among the various platforms themselves, with some banks participating in more than one platform at the same time.

As Table 1 shows, DLT-based trade finance is currently dominated by large financial institutions, but there are also initiatives at the national level involving smaller players

**Table 1 International initiatives and the role of European banks in blockchain-based trade finance platforms**

	VOLTRON	MARCO POLO	BATAVIA	WE.TRADE	HKTFP
Technology partners	R3 and CryptoBLK	R3 and TradelX	IBM	IBM	Hong Kong Monetary Authority
Member banks	HSBC, BBVA, Natwest, Bangkok Bank, BNP Paribas, ING, USBancorp, Mizuho, Scotiabank, SEB, CTBC Bank, Intesa Sanpaolo	Natixis, Standard Chartered, Natwest, Bangkok Bank, BNP Paribas, ING, SMBC, OP Bank, Commerzbank, DNB	BMO, UBS, Erste, Caixabank, Commerzbank	HSBC, Société Générale, Santander, Unicredit, Natixis, KBC, Deutsche Bank, Nordea, Rabobank	HSBC, Standard Chartered, DBS, ANZ, Hang Seng Bank, Bank of China, BEA
Core activity	Digitisation of paper-based letters of credit (generally generated manually) to speed up transaction turnaround and reduce fraud	Improving recordkeeping systems to speed up payments and the discounting of receivables	Development of smart contracts to enable the tracking and monitoring of trade transactions in real time	Using smart contracts to enable the development of receivable discounting and invoicing capabilities for European SMEs	Digitisation of the production chain and recordkeeping for corporate transactions and connection with other platforms
Milestones	In May 2018, it completed a letter of credit for a shipment of soybeans from Argentina to Malaysia in 24 hours (the standard turnaround time without blockchain is 5 to 10 days)	In October 2017, it was the first platform to digitally discount receivables and simultaneously secure credit risk for an undisclosed logistics company	In April 2018, it ran two pioneering import pilots that automatically monitored each stage of the import of German cars and Austrian textiles into Spain	In July 2018, this platform announced it was operational in 11 European countries and that it had completed 7 "live" or real-time trades involving 10 European firms	Activity is expected to begin in early 2019

Source: CBInsights (2018) and authors' own elaboration.

and technology providers. One example in Spain is the alliance of Cecabank and Grant Thornton, which created the country's first Blockchain Banking Consortium in May 2017, Niuron. The Niuron platform includes eight banks (in addition to Cecabank) that share banking apps based on blockchain technology: Abanca, Bankia, Caixabank, Caixa Ontinyent, Ibercaja, Kutxabank, Liberbank and Unicaja Banco. Niuron has two objectives: 1) to provide an observatory from which to monitor the technology and generate technical, legal and business know-how; and, 2) to back joint, blockchain-based banking initiatives aimed at transforming the sector, from biometric identification to data protection or regulatory compliance.

### **The blockchain trilemma**

Given the possibilities blockchain offers for the banking industry and the success of many of the pilot initiatives outlined above, why has this technology not seen faster development and uptake? The answer lies with the original vehicle for blockchain: cryptocurrencies. Their volatility, alternative uses (which authorities cannot always control) and, above all, the recent and significant loss of value and confidence, have created some unease in the market.

Some economists have focused their criticism on the correction of digital currencies' valuations. While blockchain advocates insist that it is not the application (currency) that counts, but the underlying technology (blockchain), critics have countered that defence. The Project Syndicate blog recently stated:

*In reality, blockchain is one of the most overhyped technologies ever. For starters, blockchains are less efficient than existing databases. When someone says they are running something "on a blockchain," what they usually mean is that they are running one instance of a software application that is replicated across many other devices. The required storage space and computational power is substantially greater, and the latency higher, than in the case of a centralized application. Blockchains that incorporate*

*"proof-of-stake" or "zero-knowledge" technologies require that all transactions be verified cryptographically, which slows them down. Blockchains that use "proof-of-work," as many popular cryptocurrencies do, raise yet another problem: they require a huge amount of raw energy to secure them. (Roubini, 2018).*

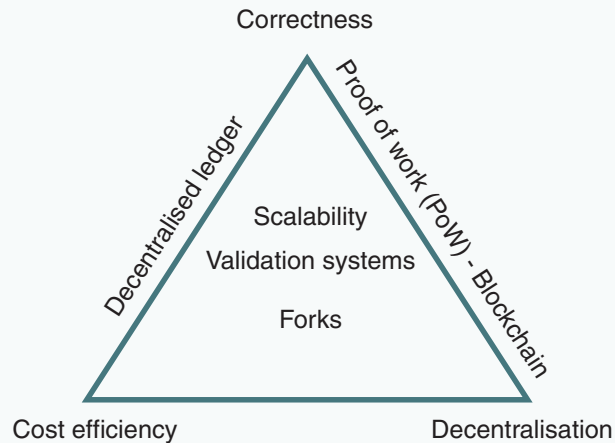
And, ironically:

*For the moment, the real question is if and when global regulation will stamp out privately constructed systems that are expensive for governments to trace and monitor. Any single large advanced economy foolish enough to try to embrace cryptocurrencies, as Japan did last year, risks becoming a global destination for money-laundering. (Japan's subsequent moves to distance itself from cryptocurrencies were perhaps one cause of this year's gyrations.) In the end, advanced economies will surely coordinate on cryptocurrency regulation, as they have on other measures to prevent money laundering and tax evasion. (Rogoff, 2018).*

The shadow cast by cryptocurrencies is not the only problem facing DLTs. The blockchain economy itself faces technological limitations that can be summed up by the "blockchain trilemma" (a term coined by economists Abadi and Brunnermeier, 2018) or the "scalability trilemma" (originally described by Ethereum founder, Vitalik Buterin [2015]). The blockchain trilemma is illustrated in Exhibit 1.

Because the blockchain is written by anonymous users, consensus is reached by making the ledger publicly viewable and verifiable. As Exhibit 1 shows, a DLT should ideally record all information correctly and in a cost-efficient, decentralised manner that avoids concentration of power.

The issue is that no ledger to date has been able to satisfy these three conditions simultaneously. Many blockchain applications fail to reach sufficient operating scale to reduce their energy consumption and other

Exhibit 1 **The blockchain trilemma**

Source: Abadi and Brunnermeier (2018) and authors' own elaboration.

costs (computing, verification, time) below the costs of centralised ledgers. Scalability is also important to verify that records (a financial transaction, for example) are correct. However, not all potential users will have access to the computing capabilities needed to verify the algorithms in various parts of the blockchain, thus limiting its size and, sometimes, decentralisation. This issue is further complicated when verification technology is divided into one or more technologies or the verification protocol of a blockchain network is changed. This phenomenon is known as a “fork” and is a common problem with cryptocurrencies that have several versions.

Without being too technical, verification implies (among other issues) the ability to add a “solution” to the algorithm so that the blockchain can continue to be written. Blockchain provides the “proof of work” that verifies the correctness of the information recorded. Other protocols, such as “proof of stake” have been put forward to enable faster verification. Proof-of-work systems sometimes make it too costly to verify records. Although costs are lower with a proof-of-stake system, decentralisation is lost (as this protocol implies fewer participants and more

centralised control) — another example of the trilemma.

It has been suggested that in certain contexts, centralisation could be the “lesser evil”, or the part of the trilemma that could be “sacrificed”. Specifically, the concentration of verification systems could make sense when transactions are relatively delimited among a smaller group. However, this route breaks with an essential part of the DLT philosophy (decentralisation) and introduces possible market power rents more typical of intermediation.

In the financial sector, it could make sense to sacrifice some decentralisation in exchange for an equivalent cost savings in markets where competition is already high. In the banking industry, for example, margins have fallen considerably and competition has increased due to, among other things, the push for digitisation, growing competition from non-banks and cost cutting. The trade finance example presented earlier suggests the potential for significant efficiency gains, even at the price of using somewhat more centralised protocols.

“ In the financial sector, it could make sense to sacrifice some decentralisation in exchange for equivalent cost savings in markets where competition is already high. ”

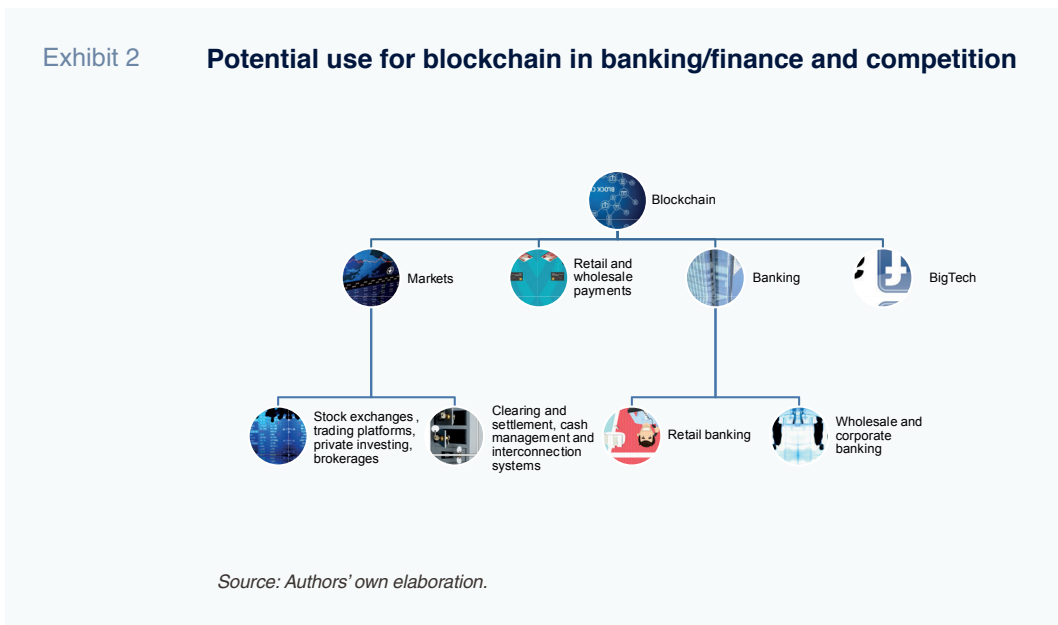
As shown in Exhibit 2, there is a range of possible applications for blockchain in banking and finance. In the markets, blockchain can make equity trades faster and more secure, paving the way for more open and competitive trading. It could also make it easier to verify private investments and provide access to more potential suppliers. It too enables the development of more secure or complementary asset clearance, settlement and custody systems. Paradoxically, blockchain could even make it possible to manage and account for something as unelectronic as cash more efficiently, enhancing traceability and ownership recordkeeping.

Payments is another area of significant development for DLTs. The limitation in this case is the failure of cryptocurrencies like Bitcoin to live up to their expectations. The utility of cryptocurrencies as a store of value or speculative asset may be up for debate, but

there is general consensus that they have not worked as a means of payment. Regardless, the large card operators and other electronic payment instruments are already developing and testing blockchain technology to shorten settlement times for national and, above all, international payments. Payments may be ripe for blockchain expansion in the near future.

In banking, there are broad possibilities in both the retail and wholesale segments. Beyond the realm of trade finance, there is scope for using distributed ledgers to improve efficiency, turnaround times and verification in areas such as:

- Real-time lending underpinned by borrower risk management based on smart contracts;
- Property valuations and verification;



- Development of tailored personal financial tools;
- Management of liquidity and cash, virtual portfolios and management of currencies/remittances;
- Audit and control of counterparty risk;
- Mitigation of operational risk; and
- Regulatory compliance.

Finally, in the environment depicted in Exhibit 2, it is important not to forget BigTech players like Facebook, Apple, Amazon, Google and Netflix. The use of DLTs is the natural next step for companies that control the key input for distributed ledgers: information. This may imply faster customer access systems for their own financial transactions, stepping up competitive pressure on the banks.

### **International regulation and risks of blockchain: A European perspective**

The definitive development of blockchain technology in the European banking system will depend largely on how it is regulated. As Table 2 shows, the EU stands out in the international arena in its efforts to promote the use of blockchain technology. It is important to single out the regulatory and supervisory debate on the most extensive application of blockchain technology to date: cryptocurrencies. Although the International Monetary Fund has urged the main global central banks to make progress on creating so-called central bank digital currencies (CBDCs), both the European Central Bank and, more vehemently, the US Federal Reserve, are reluctant to go much further than experimental tests and do not deem it

necessary, for the time being, to launch their own CBDCs.

However, the scope for blockchain expansion goes well beyond private or monetary authority virtual currencies. Once again, Europe stands out. In March 2018, the European Commission set up a blockchain technology taskforce, and that same month launched a FinTech Action Plan that prominently featured blockchain-based projects. Indeed, the first objective listed in the Action Plan is to enable the financial sector to make use of the rapid advances in new technologies, such as blockchain, artificial intelligence and cloud services.

While the Action Plan seeks to make markets safer and easier for new players to access, its three main objectives are to enable innovative business models to reach scale in the EU, to support the uptake of technological innovation in the financial sector, and to enhance cybersecurity and integrity in the financial sector.

The UK has been home to regulatory and supervisory pioneers. The Financial Conduct Authority (FCA) has created laboratories to simulate the market launch and oversight of FinTech companies, or the so-called “regulatory sandbox”. Projects that analyse how blockchain could assist with regulatory compliance in financial services are a particularly important part of this endeavour. Within the sandbox, the FCA is running Project Innovate, which is targeted specifically at financial firms that use DLT.

These testing grounds, action plans and nascent regulations on the use of blockchain in banking and finance also consider the risks that must be managed for appropriate uptake

“ The European Commission’s FinTech Action Plan aims to enable innovative business models to reach scale in the EU, support the uptake of technological innovation and enhance cybersecurity and integrity in the financial sector. ”

“ If blockchain technology cannot be shared among operators or platforms, or is so exclusive that it makes competitors incompatible, demand and large-scale adoption are unlikely. ”

of these technologies. First, they share the industry’s concerns about profitability. To the extent that the proposed applications or solutions involve too many costs (mainly due to scalability problems), market launches

will not be viable. However, applications and platforms that do not allow for a certain degree of standardisation and interoperability do not appear to be very viable. Once again, scalability is the issue. If the technology cannot

**Table 2 International regulatory initiatives related to blockchain**

European Commission	<ul style="list-style-type: none"> <li>- The European Commission’s blockchain technology taskforce has been working since March 2018.</li> <li>- In March 2018, the European Commission launched a FinTech Action Plan with implications for blockchain technology and the financial sector.</li> <li>- As early as 2016, the European Commission made virtual currency exchange platforms and custodian wallet providers “obliged entities” under the fourth Anti-Money Laundering Directive.</li> </ul>
European Central Bank	Despite acknowledging the potential significance of blockchain technology, in September 2018 the ECB said that it was still fragile technology and too soon to contemplate a European digital currency.
International Monetary Fund	<ul style="list-style-type: none"> <li>- The IMF has insisted on the need for regulations to mitigate risks while permitting the development of blockchain technologies but has also emphasised the need for coordination.</li> <li>- Since 2016, it has been issuing reports that identify the risks and benefits of DLTs, particularly in the financial industry.</li> <li>- In November, IMF Managing Director Christine Lagarde said it would be advisable for central banks to consider developing their own digital currencies.</li> </ul>
The Financial Conduct Authority (FCA), UK	<ul style="list-style-type: none"> <li>- The FCA is analysing the ways in which blockchain could assist with regulatory compliance in the financial services arena.</li> <li>- It is working on Project Innovate for the development of financial firms that use DLT, which it has been nurturing since 2016 in its regulatory sandbox.</li> </ul>
Germany’s Federal Financial Supervision Agency (BaFin)	This authority has mainly taken a preventative stance, signalling that the absence of a European DLT authority may lead to issues in areas such as money laundering.
Central Bank of Sweden	This monetary authority is analysing the ways in which digital currencies can accelerate (even more) the substitution of cash with electronic payment methods in Sweden.
US Federal Reserve	The Federal Reserve has been working with IBM since 2018 on the development of blockchain-based digital payment systems for possible use as a central bank currency in the future. However, in December 2018, the Fed said that it was not convinced that a DLT-enabled central bank digital currency is advisable.

Source: CBInsights (2018) and authors’ own elaboration.

be shared among operators or platforms, or is so exclusive as to create incompatibilities among competitors, large-scale adoption is unlikely (demand-wise).

Finally, the supervisors have their eye on how blockchain could introduce new risks to financial stability, especially in terms of counterparty and operational risks if the proposed applications fail. However, they are also looking at potential benefits in the areas of privacy, compliance and transparency from an oversight standpoint.

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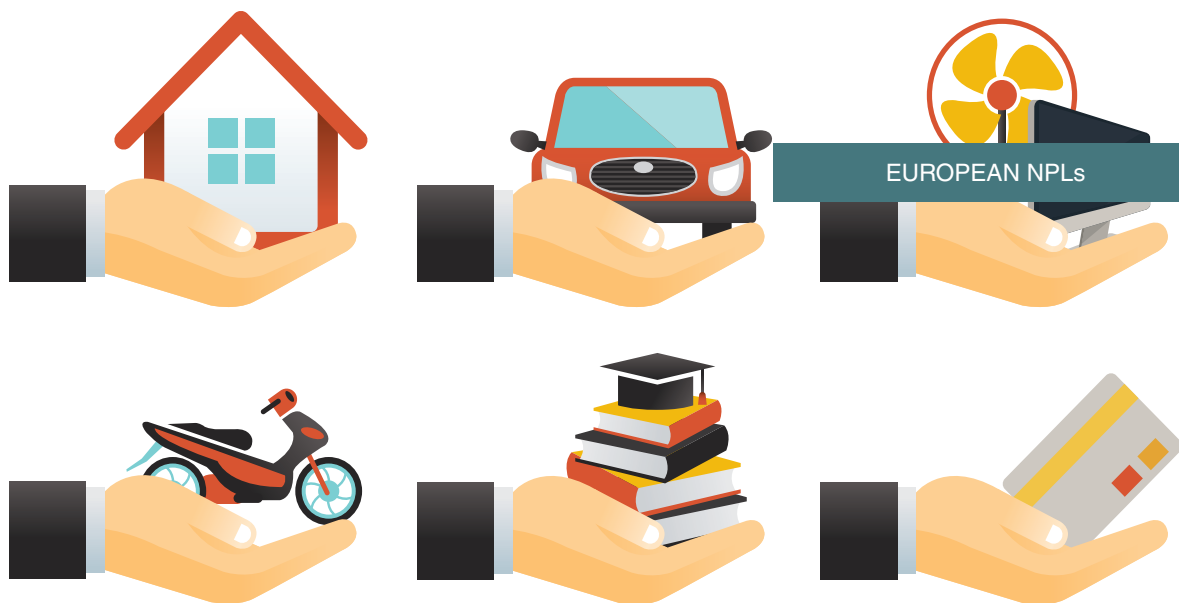
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# Accelerating the pace of non-performing loan reduction in Europe

Despite notable progress, European banks remain under pressure from legislative, regulatory and supervisory authorities to further reduce their non-performing loans. Within this context, European banks, including Spanish banks, are likely to continue their efforts to clean up their balance sheets.

Marta Alberni, Ángel Berges, Fernando Rojas and Federica Troiano

**Abstract:** Since the European Commission approved its Action Plan on the Reduction of Non-Performing Loans in 2017, several institutional initiatives have emerged to achieve the Plan's goal, notably the recently published EBA Guidelines on the management of non-performing and forborne exposures and a European Commission progress report, which includes an analysis of an ambitious proposal for an EU-wide transaction platform

to boost non-performing asset sales. However, on-going pressure on banks from the European supervisor (SSM) suggests that the current pace of reductions is too slow and would fail to prevent some key economic risks from materialising down the road. Judging by the downward trend in NPLs in most European countries, it appears that this pressure has been effective and that Spain will continue to sell off non-performing assets.

## European initiatives to reduce non-performing loans

As European and Spanish banking systems seek to reinforce their solvency, the reduction of non-performing loans (NPLs or NPEs), which includes non-performing and forborne exposures, has become a priority at every institutional level. Over the last several years, a host of initiatives have been set in motion to accelerate this process.

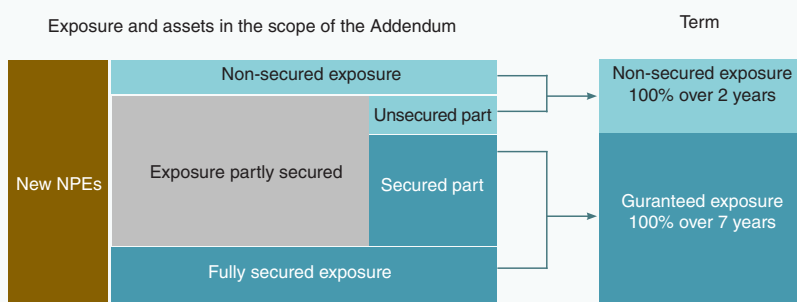
In July 2017, the European Commission and European Parliament launched the highest-level initiative to date: an *Action Plan* to reduce NPLs in Europe. Under the Action Plan:

- Structural reforms will pave the way to harmonise non-performance management procedures and debt recovery frameworks.
- Secondary markets for NPLs will be promoted through the development of new platforms that will establish common rules and oversight standards to eliminate the asymmetries typical to markets such as these.
- On the regulatory front, the European Banking Authority (EBA), as mandated in the Action Plan, has drawn up *Guidelines* [1] that stress the need for banks, particularly those

with NPL ratios of five percent or higher, to include a specific action plan for managing and reducing NPLs in their overall business strategy. Banks have been asked to define ambitious yet plausible reduction targets and timeframes based on the full range of strategic alternatives available. The EBA Guidelines also identify key aspects to be included in business strategies on the governance of the NPL reduction effort, including steering and decision-making, operating model, internal control framework and monitoring of these activities.

- Finally, on the supervisory front, the European Central Bank (ECB) published initial *Guidance* for banks on NPLs, followed by an *Addendum* in March 2018 that provides direction on accountability. The Addendum lays out the ECB’s supervisory expectations for individual banks on the level of prudential provisions for non-performing exposures, which are calculated based on comparative analysis and a bank’s own fundamentals. The quantitative expectations (*i.e.* real schedules) of any exposure reclassified from standard to non-performing (from April 1<sup>st</sup>, 2018, onwards) are shown in Table 1.

Table 1 **Treatment of new NPEs**



Source: Afi, European Central Bank. [2]

“ The reduction of non-performing exposures by European banks is a top priority, with initiatives rolled out at every institutional level. ”

In addition to the ECB publications and the scheme depicted in Table 1, the European Commission has issued a proposal outlining its position on capital requirements for bad loans depending on the collateral banks' hold (movable or immovable).

All these legislative, regulatory and supervisory initiatives have put pressure on banks to accelerate efforts to reduce NPLs. Judging by the downward trend in NPLs in most European countries (see Exhibit 1), it appears that this pressure has been effective.

Exhibit 1

**Trends in NPLs and coverage ratios at the consolidated level**

€ m, %

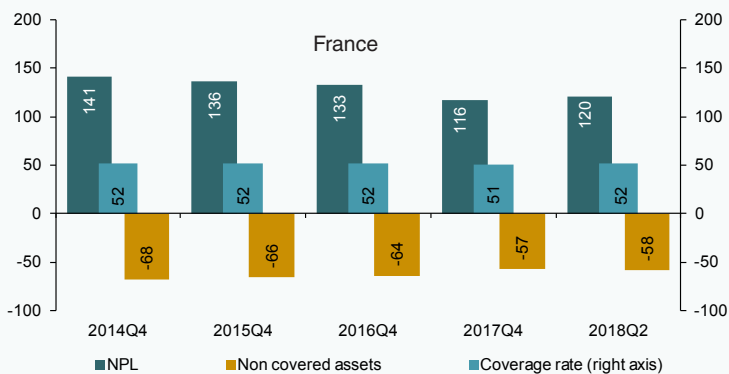
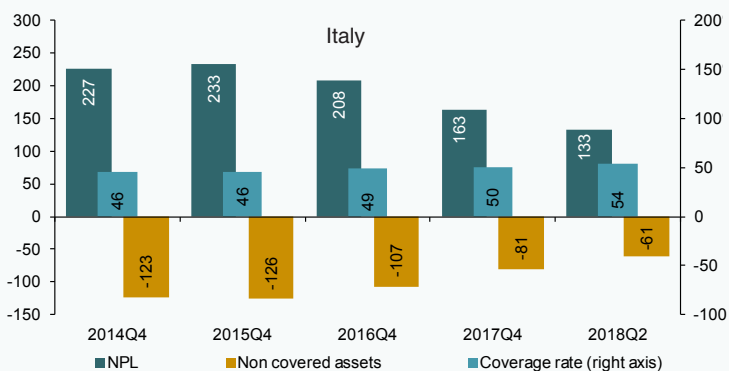
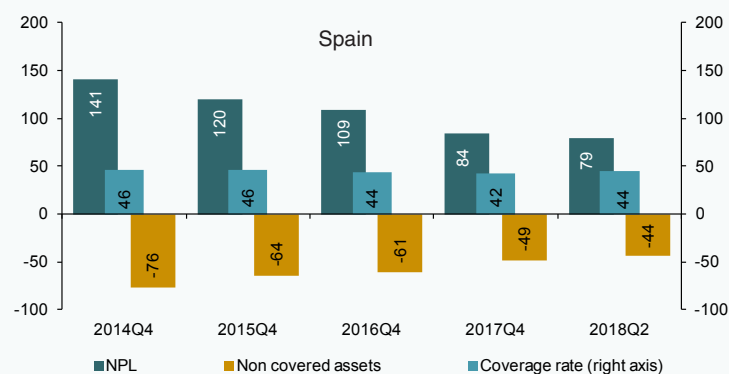
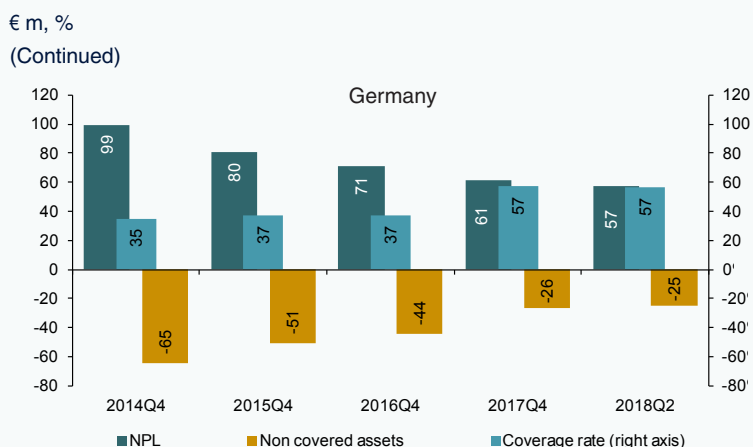


Exhibit 1

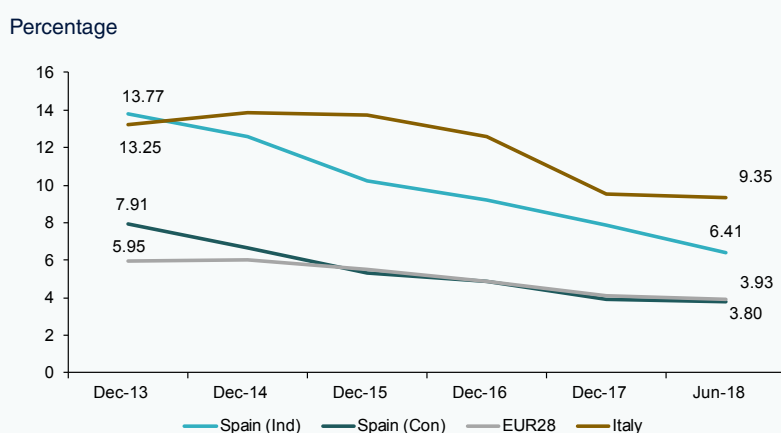
### Trends in NPLs and coverage ratios at the consolidated level



Source: European Central Bank, Afi.

Exhibit 2

### Trends in the NPL ratio



Source: European Central Bank, Afi.

If the Spanish figures are analysed at the individual level (without the banks' international businesses, or the consolidated level), as in Exhibit 2, we can see that the balance sheet clean-up effort has been even more intense. The NPL ratio has dropped by seven points from a high of nearly 14 percent in 2013 to 6.4 percent as of June 2018.

#### NPL flows in Spain

Although the data shows that NPLs in Spain have dropped significantly, the ratio is still

considerably higher than the European average. What still needs to be done?

Exhibit 3 breaks down trends in non-performing exposures (non-performing and forborne) in Spain into inflows (new NPLs) and outflows, distinguishing between outflows caused by the sale of portfolios and all other outflows, a category that includes recoveries and write-offs.

This analysis reveals that banks have indeed been successful in reinforcing their balance

Exhibit 3

## NPL inflows and outflows (sales and other), by year

	2014	2015	2016	2017	2018
Initial balance	272,370	251,473	211,479	192,022	152,175
Entries	40,361	34,834	32,223	28,912	12,305
%s/NP	14.82	13.85	15.24	15.06	8.09
↓ ↓ ↓ ↓ ↓					
Non-performing assets (Non-Performing + Foreclosed)					
1S18					
113,258					
↓ ↓ ↓ ↓ ↓					
Sales	7,172	6,799	4,155	24,117	48,267
% over entries	2.29	2.37	1.70	10.92	29.35
Rest of outflows	54,082	68,029	47,542	44,642	2,955

Source: European Central Bank, Afi.

sheets: total non-performing exposures have declined from 272 billion euros at the start of 2014 to an estimated 113 billion euros by mid-2018, a net reduction of 160 billion euros.

This net reduction in non-performing assets is even more noteworthy given that, year on year, banks have sustained inflows of NPLs to the tune of 40 billion euros in the initial years after the crisis and around 30 billion in later years. It is surprising that the pace of new NPLs has remained so buoyant in recent years, given that they have been marked by annual GDP growth of over three percent, a significant drop in unemployment, a recovery in property prices and interest rates close to zero.

Two factors may have caused this apparent paradox: (i) at the time of the crisis and immediately afterwards, banks may have

delayed recognition of non-performance to contain the rise in their NPL ratios; or, (ii) out of caution, may have anticipated a reclassification trend for loans that were not technically non-performing, but would likely be soon.

Despite this paradox, it is clear that the derecognition of forbore exposures more than offset the recognition of new NPLs, and that this effort was sufficient to generate a significant (160 billion euro) reduction in the overall stock of non-performing exposures from the series high.

Looking again at the trend in outflows, it is worth highlighting the contribution made by the sale of portfolios of non-performing assets. An estimated 120 billion euros of non-performing assets have been sold in this manner, with a little over 80 billion euros

“ The significant reduction in NPLs is evidence of efforts by Spanish banks to clean up their balance sheets and outpace a surprisingly strong wave of new NPLs. ”

in the last 18 months alone, clear evidence of the pressure exerted by regulatory and supervisory authorities.

### Institutional pressure to continue reducing non-performing exposures

Judging by the European supervisor’s (SSM) persistent non-performance concerns, evident in its Risk Map for 2019 (see Exhibit 4), this institutional pressure is likely to continue.

This unwavering concern and pressure on the banks from the SSM implies scant recognition of the efforts of European banks, particularly Spanish entities, to accelerate the reduction of non-performing assets.

This stands in contrast to the European Commission, which at the end of 2018 published its third progress report on reducing NPLs and risks in the context of the Banking Union (see Table 2). In that report, the Commission acknowledges the significant effort made by European banks, particularly Spanish and Italian banks, and lists all the NPL management projects and initiatives either planned or underway.

Perhaps the most ambitious and interesting project to date is a proposal to create an

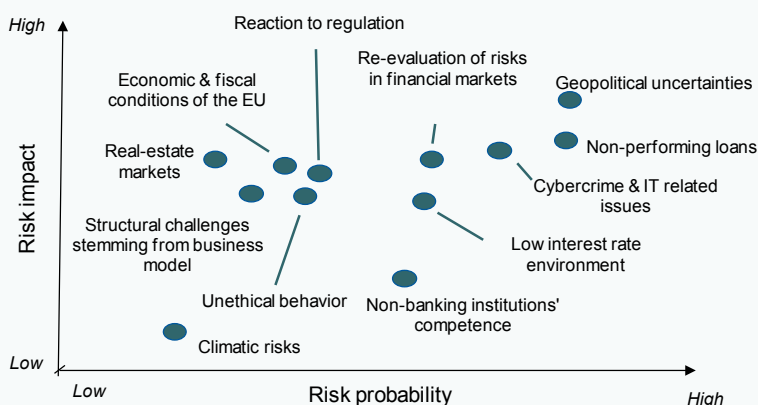
NPL transaction platform to continue to stimulate asset sales, particularly at the level seen in 2018. Given that the NPL market is still relatively undeveloped, the Commission believes that a transaction platform would help to enhance the market, making it more efficient and liquid, correcting the problem of information asymmetry, increasing coordination among creditors and deepening the investor base.

This platform would be open to all types of professional sellers and buyers, although preferably from countries within the European Union. The idea is to provide a standard and consistent service to large investors while also improving efficiency.

To help meet this target, the European Commission has proposed an exhaustive package of measures delivered through two main initiatives (in addition to the European-wide platform): 1) drafting a legal framework at the EU level to strengthen and boost the resolution of these assets; and, 2) developing a non-binding blueprint for the creation of asset management companies (akin to SAREB, or the so-called *bad bank*, in Spain).

All the proposed measures point to a tough position on NPLs. This may be because the

Exhibit 4 SSM Risk Map for 2019



Sources: ECB, National Competent Authorities.

Table 2

**NPL management initiatives underway or imminent**

Ongoing	Comparison of national credit and insolvency frameworks	The European Commission is carrying out comparative exercises between different European jurisdictions on different types of loan execution. The results of these exercises were partially presented on the 21 <sup>st</sup> of February and on the 20 <sup>th</sup> of June 2018, shedding light on the lack of access to meaningful data.
	Emphasis on insolvency	Since 2013, national recommendations on issues related to insolvency have been issued in 12 member states, Spain among them. In 2018, these recommendations were implemented in half of the member states. In May 2019, the Commission will issue its recommendations to the Council on national recommendations.
Imminent	Guidelines on the generation, management and supervision of loans	The EBA is drafting guidelines on the generation and supervision of bank loans. The arguments discussed will include risk, solvency analysis, the evaluation of guarantees and the monitoring of risk in different credit services. The period of discussion by the EBA will take place at the beginning of 2019.
	Development of macroprudential policies on the future management of NPLs	The European Systemic Risk Board (ESRB) should publish macroprudential policies on the emergence of NPLs at the start of 2019.
	Better disclosure of the requirements on the quality of assets	The EBA has developed a guide on NPLs and restructured and refinanced exposures. This Guide was published at the end of 2018 and should be applied by the end of 2019.
	Strengthen NPLs' data structure for prospective platforms	The creation of a platform for NPLs would allow the presence of an e-market where the holders of NPLs and investors can exchange information. These platforms will reduce information asymmetries and transaction costs, allowing banks to clean up their balance sheets.

Source: European Commission (Third Progress Report on the reduction of non-performing loans and further risk reduction in the Banking Union, November 2018).

supervisor fears the current pace of correction is not fast enough to prepare for certain adverse scenarios in the European banking sector.

Two percent is considered the target “floor” for the NPL ratio and best practice in Europe. If the rate of reduction in non-performing assets over the last three years were extrapolated, it would take a long time –about another three years– to reach this threshold and banks would likely face an interruption in the economic cycle before they had finished cleaning up their balance sheets.

In short, at the current pace of convergence it would take too long to prevent some of the economic scenarios in the SSM’s risk map, or other risks that have not yet been anticipated. We can therefore expect the supervisor to continue to exert pressure on banks and will

likely see Spanish banks continue to sell non-performing assets as part of this effort.

### Notes

[1] The EBA recently published the final version of these Guidelines, <http://www.eba.europa.eu/-/eba-publishes-final-guidance-on-management-of-non-performing-and-forborne-exposures>

[2] Note that at the time of the Addendum’s publication, the aim was to make schedules applicable across the board. However, in July 2018, the ECB published a note advising that the schedules would be determined at the individual level.

**Marta Alborni, Ángel Berges, Fernando Rojas and Federica Troiano. A.F.I. – Analistas Financieros Internacionales, S.A.**

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## A snapshot of Spain's mortgage market

The notable recovery in Spain's housing market is bringing some relief to both banks and households. While the pick-up in the sector has raised concern over whether or not the country is once again building up imbalances, at present there is no clear evidence to support that a property bubble is forming.

Joaquín Maudos

**Abstract:** Prior to the 2008 financial crisis, 20% of every 100 euros of housing loans extended in the eurozone were granted in Spain. Today, five years after the country's real estate bubble burst, that percentage stands at 5.2%. The housing market is recovering, however, with new housing loans registering double-digit year-on-year growth since April 2018. This has sparked renewed interest in how Spain's

mortgage market compares to other eurozone economies, from business indicators to interest rates to borrowing terms and conditions, bank margins, rejection rates and household debt service ratios, among other indicators. While there has been a notable pick-up in Spain's mortgage market, the volume of mortgages granted, the size of new mortgages and the financial burden for households are all well

“ While Spain’s mortgage market is recovering, business volumes are still far below pre-crisis levels. ”

below the highs of the past and there are no clear signs pointing to the emergence of another property bubble.

### Introduction

In 2006, at the height of the real estate bubble, mortgages in Spain peaked at 1,342,171 and loans to households for house purchases (mortgages or housing loans) totalled 170 billion euros. After the bubble burst, the number of mortgages plummeted, bottoming out at 199,703 in 2013 (down 85% from 2006). That year, the value of the mortgages extended by Spanish banks amounted to 21.86 billion euros (down 87% from 2006). Since then, the housing market has been recovering little by little, and in 2017 the number of mortgages rose to 312,843. In the first three quarters of 2018, that figure increased 9.7% year-on-year and the value of new loans climbed 14.4% year-on-year to 32.43 billion euros. [1]

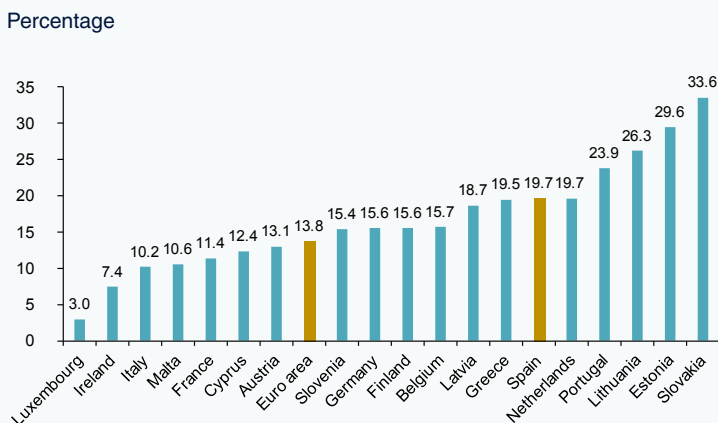
While Spain’s mortgage market is recovering, we are still very far from the business

volumes observed before the crisis. In fact, Spanish banks currently account for 5.2% of mortgages granted for the purchase of homes in the eurozone, significantly below its 20% share in 2006. The recovery in house prices and mortgage volumes in recent months (new mortgages are growing in the double digits) has sparked renewed interest in analysing this segment of the loan market. As the banking crisis and excesses of the past fade from view, we can now take a fresh look at how Spain’s mortgage market compares to other eurozone economies, from business activity to interest rates, borrowing terms and conditions, bank margins, rejection rates and household debt service ratios and other indicators.

### Business activity

The Spanish banking sector ranks sixth in the eurozone in terms of mortgages over total assets (Exhibit 1), a sign of the importance of this segment to Spanish banks’ business. Mortgages currently account for 19.7% of

Exhibit 1 **Weight of housing loans over total bank assets, October 2018**



Source: ECB.

the Spanish bank sector's assets, which is 5.8pp above the eurozone average and above the levels observed in the main European economies (10.2% in Italy, 11.4% in France and 15.6% in Germany). The overall stock of mortgages stands at 519 billion euros, making Spain the third largest market in size, behind only Germany and France. The mortgage pool peaked at 665.2 billion euros at the end of 2010, but since then has contracted by 22%. Following this contraction, the market has returned to its size in 2006.

Although the deleveraging process began in 2010, the pace of growth had begun to slow much earlier, in the middle of 2006, when the market was expanding at an annual rate of 35% or nearly triple the eurozone average. Growth in the Spanish mortgage market has been trailing that of the eurozone since 2009 (the lag peaked at nearly 7pp at the end of 2017). Although the gap has been narrowing, it remains at 4.7pp. Whereas the eurozone mortgage market registered growth of 3.3% between October 2017 and October 2018, in Spain the market contracted by 1.4%. The contraction in Spain contrasts with expansion of 4.8% in Germany, 7% in France and 1.3% in Italy.

Although the stock of mortgages continues to fall in Spain, new housing loans have been registering strong growth in recent months. Spanish banks extended 14.8% more new housing loans year-on-year in the 12 months to October 2018 and growth has been in the double digits since April of that year. Again, this trend contrasts with that of the eurozone, where new mortgages (trailing 12 months) have been contracting since the end of 2017. By market, new mortgages are contracting in France and Italy and registering modest growth of just 1.7% in Germany. Between November 2017 and October 2018, Spanish

banks extended mortgages totalling 43.5 billion euros.

Since the end of 2017, a higher percentage of banks report that demand for mortgages is growing than report the opposite, with a net percentage of 21pp in the second quarter of 2018, albeit falling to 3.4pp in the third quarter. According to Spanish banks, stronger consumer confidence and low borrowing costs and house prices are the factors contributing to increased demand for mortgages.

### Interest rates

The rate of interest charged on loans for house purchases has generally tended to be lower in Spain than in the eurozone, typically by around 100 basis points (bp). That spread has narrowed somewhat in the last three years, but remains at 91bp today. The average rate of interest charged on mortgages was 1.21% in Spain as of November 2018 *versus* 2.12% in the eurozone (Exhibit 2b). That is lower than the rates charged in all the major European bank sectors: 2.45% in Germany, 1.98% in France and 2.01% in Italy. Among the eurozone countries, only Portugal and Finland boast lower mortgage interest rates than Spain.

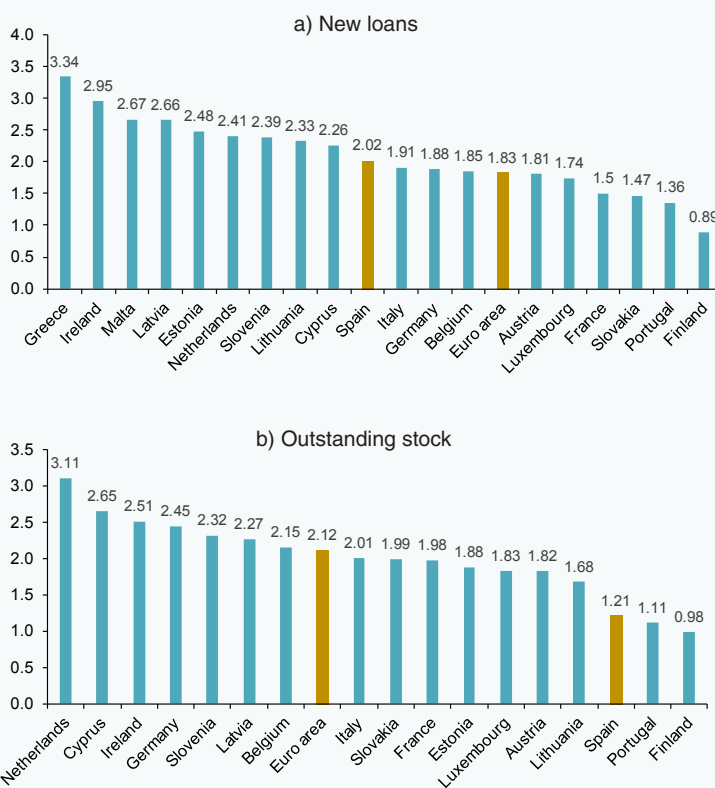
The situation changes when we look at the new loans being extended by banks rather than the prevailing average rate on the stock of outstanding mortgages. By that measure (November 2018), the rate currently charged in Spain is slightly above the eurozone average (19bp higher): 2.02% *versus* 1.83% in the EMU (Exhibit 2a). The Spanish banks are setting a higher rate of interest on new mortgages than their counterparts in Italy (1.91%), Germany (1.88%) and France (1.5%), within an interval marked by two extremes: Greece (3.34%) and Finland (0.89%). Since the middle of 2012, the rates charged in Spain have been very similar to the eurozone average.

“ According to Spanish banks, stronger consumer confidence and low borrowing costs and house prices are the factors contributing to increased demand for mortgages. ”

## Exhibit 2

### Interest rates on housing loans, November 2018

Percentage



Source: ECB.

### Bank margins

The trend and level of margins applied by Spanish banks on mortgages compared to the average (unweighted, as the ECB does not provide the figure for the EMU) for the eurozone bank sectors are related with the interest rate analysis above. Thus, margins have been relatively similar since 2014. They have been largely stable for the last three years at around 180–190bp. The most recent figures (dated October 2018) show a margin in Spain of 190bp, which is 10bp above the eurozone average. Of the 19 EMU countries, Spain ranks thirteenth in terms of margins applied, ahead of Italy (121bp), France (127bp) and Germany (176 bp).

### Fixed versus floating rates

Another area of interest when analysing the mortgage market is fixed *versus* floating interest rates. With the sharp drop in the ECB's benchmark rate to address the recent crisis (Euribor has been in negative territory since 2016), there is now greater incentive to apply for fixed-rate mortgages to hedge the risk of rate increases in the future. This phenomenon is very evident in Spain: since September 2008, when the ECB began to cut its benchmark rates, the percentage of floating-rate mortgages has fallen by over half, from 90% to 38% by October 2018. The weight of floating-rate mortgages has also fallen in the eurozone on average, although less intensely: from 34.5% to 19.2%. In Spain, floating-rate

“ 29% (23.1 billion euros) of all non-performing loans on Spanish banks' books are now mortgages – the same percentage as in March 2008, before the crisis. ”

mortgages have always been in the majority, although this has corrected sharply to move closer in line with the eurozone, particularly since 2012. Since January 2018, the difference has been less than 20bp and since August 2017 fixed-rate mortgages have predominated.

Compared to the rest of the eurozone countries, the percentage of floating-rate mortgages in Spain (38%) is higher than in the biggest economies (30.2% in Italy, 11.5% in Germany and 2.2% in France). This percentage stands at over 90% in Cyprus, Latvia, Finland, Lithuania and Poland.

### Non-performing loans

In Spain, non-performance has always been significantly lower on housing loans than in other loan segments, although it has been affected by the economic cycle. This ratio rose from under 1% in 2007, before the start of the crisis, to a high of 6.3% in March 2014 (which was less than half the level of 13.6% at which the NPL ratio peaked for the

private residential sector), going on to trend lower to 4.4% in June 2018, 1.9pp below the overall private sector NPL ratio. Of all non-performing loans on the Spanish banks' books, 29% (23.1 billion euros) are now mortgages, the same percentage as in March 2008, before the crisis.

### Loan approval criteria

For two and a half years (from early 2016 until the middle of 2018), Spanish banks have been easing the credit standards used to approve mortgages, as the percentage of entities that reported an easing of their criteria to the ECB was 11pp higher than those that had reported a tightening (Exhibit 3). In the third quarter of 2018, the net percentage of responses is zero. Compared to the eurozone average, that easing started sooner in Spain and has been somewhat more intense.

Since 2016, the factors contributing to the easing of the housing loan approval criteria used by Spanish banks have been a perception

Exhibit 3

### Changes in credit standards applied to the approval of loans to households for house purchase and contributing factors

Net percentage

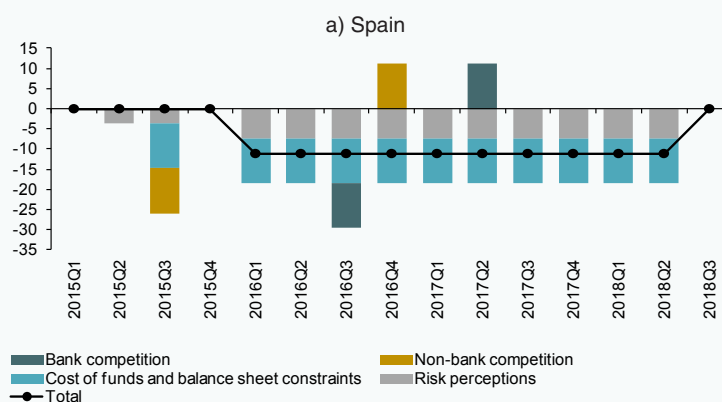
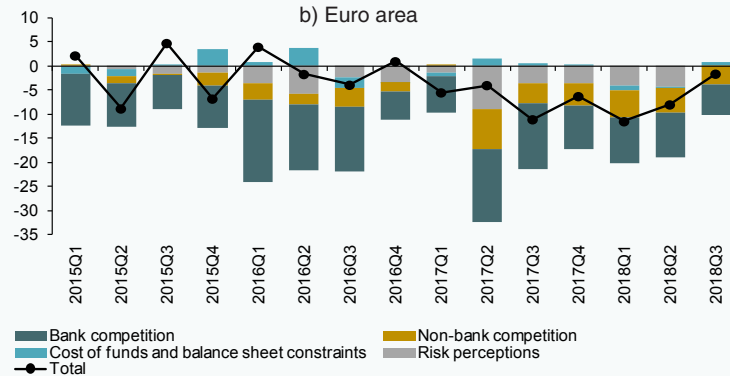


Exhibit 3

### Changes in credit standards applied to the approval of loans to households for house purchase and contributing factors

Net percentage

(Continued)



Note: The net percentage is the difference between the percentage of banks surveyed that had reported tightening criteria and the percentage that had reported easing, and the factors contributing to the tightening/easing.

Source: ECB.

that transaction risk has diminished and an improvement in the banks' access to financing. In contrast, in the eurozone, the same trend has been driven above all by growth in competition (from other banks but also from non-banks), but also by a perception of diminished risk.

### Housing loan terms and conditions

As Spanish banks have eased their mortgage approval criteria in recent years, they have also been easing loan terms and conditions. Again, they began to do so much sooner and with far greater intensity than their eurozone peers. The improvement has materialised in

Exhibit 4

### Changes in terms and conditions for loans to households for house purchase

Net percentage

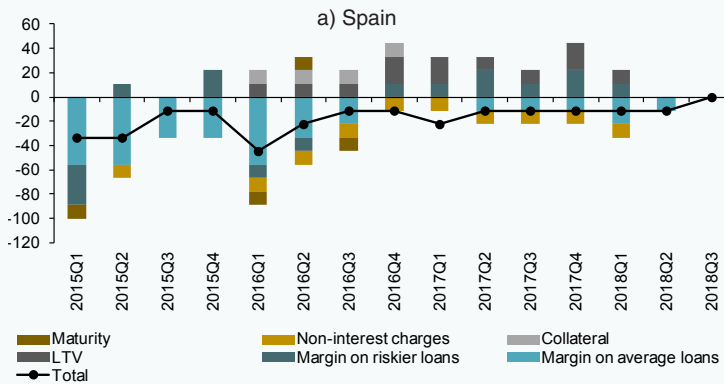
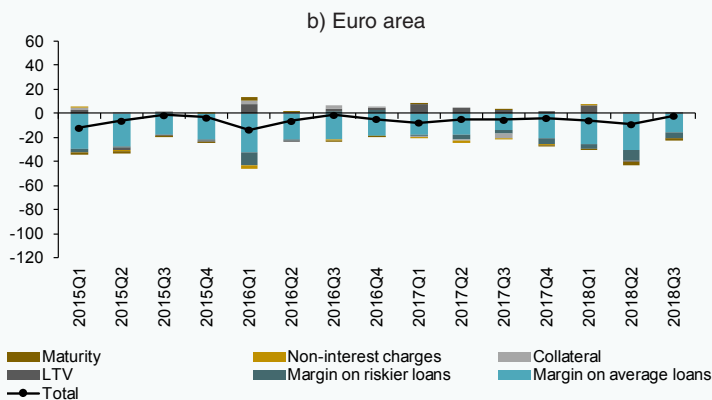


Exhibit 4

## Changes in terms and conditions for loans to households for house purchase

Net percentage

(Continued)



Note: The net percentage is the difference between the percentage of banks surveyed that had reported tightening terms and conditions and the percentage that had reported easing, and the factors contributing to the tightening/easing.

Source: ECB.

both the margins applied and in non-interest rate charges (fees and commissions). In contrast, they have become more stringent with collateral, especially loan-to-value (LTV) demands. They are also applying higher margins to riskier loans. By comparison, the easing in the terms and conditions applied by eurozone banks has been shaped primarily by a reduction in margins. However, the scope for improving mortgage terms and conditions appears to be declining: in the third quarter of 2018 (the last ECB bank lending survey conducted), the net percentage of responses was 0 in Spain and -2pp in the eurozone (Exhibit 4).

### Mortgage rejection rate

The housing loan rejection rate is another indicator providing valuable information about changes in the banks' willingness to award mortgages. In Spain, as of the third quarter of 2018, 11pp more banks reported easing their rejection rate relative to those that reported the opposite; the net percentage has been negative nearly every quarter for years. In the eurozone, the net percentage

also used to be negative, but less so. However, in the last two surveys conducted in 2018, the net percentage was positive, at 3pp in the most recent quarter. These figures therefore confirm the relatively greater intensity with which Spain is easing access to mortgages, with the percentage of banks reporting higher mortgage application approval rates continuing to outweigh the percentage reporting higher rejection rates.

### Mortgage debt service

The recovery in the mortgage market also depends on the debt service burden for the borrower, which depends on several factors: the rate of interest on the loan, the non-interest rate charges (fees and commissions), the amount to be repaid each year and their disposable income. The lower the debt service ratio, the higher, in theory, the demand for mortgages and the lower the transaction risk for banks.

The Bank for International Settlements (BIS) has been estimating and tracking the household debt service ratio quarterly for

“ Spain stands out globally as one of the countries where the household debt service ratio has fallen most sharply since the 2008 financial crisis. ”

selected countries, including Spain, since 1999. According to its figures, Spanish households had to earmark 11.9% of gross disposable income to servicing mortgages as of September 2008. The peak hit at the height of the crisis when households were highly leveraged, but since then the debt service ratio has been coming down slowly, bottoming out at 6.6% in March 2018 (latest figure available), a return to 2003 levels.

In 2018, Spanish households' debt service ratio was similar to that of their counterparts in Germany (6.1%) and France (6.2%), higher than that of Italian households (4.4%) and lower than that of households in the UK (9.4%) and the US (8.2%). Spain stands out globally as one of the countries where the household debt service ratio has fallen most sharply since the 2008 financial crisis. In fact, of the countries tracked by the BIS series, this ratio has fallen by more only in Denmark: 7.5pp compared to 5.3pp in Spain.

## Conclusions

- Although the stock of mortgages continues to decline in Spain, new housing loans are recovering, registering double-digit year-on-year growth since April 2018. Despite this growth, the volume of loans extended during the last 12 months (43.5 billion euros) was only a quarter of the volume extended at the peak of 2006, demonstrating that we are still far from bubble-level business volumes. Back then, 20% of every 100 euros of housing loans extended in the eurozone were granted in Spain; today, that percentage stands at 5.2%.
- Although the rate of interest charged on new mortgages is slightly above the eurozone average (2.02% vs. 1.83%), the average rate on outstanding stock on the banks' books is less (1.21% vs. 2.12%).

- The margin applied by Spanish banks to mortgages has been relatively stable since 2014 and is now similar to the average in the eurozone (just 10bp higher).
- The sharp drop in benchmark interest rates has stimulated a drastic change in the mortgage mix, with the weight of floating-rate loans falling from 90% in 2008 to 38% in 2018. That percentage remains higher than in the main European economies.
- The information provided by the bank lending survey conducted regularly by the ECB clearly shows that the terms of access to mortgages have improved considerably in Spain, even though the banks are now demanding more collateral and charging higher commissions. In parallel, the banks have eased their loan approval criteria and lowered their loan rejection rates.
- Spain stands out in the world as one of the countries where the household debt service ratio has fallen the most: in 2018, Spain's households had to earmark 6.6% of their disposable income to debt servicing (interest expense and principal repayments), 5.2pp less than in 2008.
- Although house prices are recovering, Spain is still far from the levels seen when the real estate bubble burst. In addition, the volume of mortgages granted, the size of new mortgages and financial burden implied for households are all comfortably below the highs of the past. As a result, the overall snapshot gleaned from the universe of available indicators is that there are no objective reasons to believe that a property bubble is forming.



## Notes

[1] This paper falls under the scope of research project ECO2017-84828-R under the Spanish Ministry of the Economy, Industry and Competitiveness.

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# The impact of IFRS 16 on lease accounting

The entry into force of IFRS 16 –leases– on January 1<sup>st</sup>, 2019, changed the accounting standards on operating leases. Aiming for less bias and more uniformity, IFRS 16 stipulates that all lease agreements must be treated the same and accounted for using a traditional capitalisation formula.

Pablo Guijarro and Alexandra Cortés

**Abstract:** A new accounting model, IFRS 16, has established new criteria and fixed treatment for all types of leases regardless of whether the risks of ownership of the asset are transferred to the lessee. By standardising the way in which leases are accounted for, IFRS 16 seeks to ensure that reporting entities account for financing from operating leases on their balance sheets and that credit risk analysis is less biased. Some sectors –including airlines, retail and tourism/leisure– will be more

affected by the new criteria than others and most market players had already taken steps to address associated challenges. Nonetheless, the broad implications of the new standard are only just beginning to be understood.

## **Background: A standard with uniformity as its goal**

Under the current accounting model (IAS 17 and associated interpretations), reporting entities must distinguish between operating

and finance leases. If all risks are transferred from the lessor to the lessee, the arrangement is considered a finance lease and reporting entities must recognise both an asset and a liability. If, on the other hand, the risks are not transferred, the lease qualifies as an operating lease and reporting entities recognise the annual lease expense as an operating expense in their statements of profit and loss.

The new accounting model (IFRS 16) sets a fixed treatment for all leases. Regardless of whether the risks of ownership of the asset are transferred to the lessee, the latter must account for the lease using a traditional capitalisation formula.

The overriding objective is to have reporting entities reflect the financing represented by operating leases on their balance sheets. Given that leases are currently treated differently depending on the contract, the credit risk analysis conducted by financial institutions and the universe of market agents may be biased.

Under the current accounting framework, leases are recognised differently in reporting entities' financial statements. However, an analysis of the virtues of IFRS 16 and its implications raises three important issues:

- The use of operating leases is not a decision taken exclusively to enhance leverage ratios, but rather reflects the choice of a more flexible mechanism over traditional asset financing methods (Europe Economics, 2017).
- The use of operating leases is, to a significant degree, more of a sector trend than a decision taken at the individual company level.
  - We do not observe asymmetries in any given sector (discussed later) — the new accounting framework will certainly modify

financial statements, but the impact will be similar for all reporting entities (Europe Economics, 2017; IASB, 2016).

- Credit rating agencies, and by extension market analysts, have already taken stock of the need to adjust the financial statements of companies that have tended to rely on operating leases, to ensure that their ratings properly reflect the risk incurred by financiers seeking to fund these types of firms.

As a result, despite the change in the accounting information that will be disclosed by these reporting entities, the agents using that information were already aware of the discrepancies, so the conclusions of their risk assessments should not change substantially.

For the time being, the new standard only affects reporting entities applying the International Financial Reporting Standards (IFRS), as it has not yet been fully incorporated into the Spanish General Accounting Plan.

## **Lessees: The most impacted by IFRS 16**

### ***Accounting implications***




What are the main accounting implications of IFRS 16 for lessees? (Lessor accounting is not set to change.)

First, the changes in how operating leases are accounted for will affect lessees' balance sheets as well as their statements of profit and loss. In cash flow statements, the only impact will be the reclassification of the various items (as cash flows under the leases will not be altered).

- *On the asset side of the balance sheet:*
  - Lessee reporting entities will see their assets increase by the amount of operating

“ Risk analysts were already making adjustments to mitigate the uneven treatment of leases. ”

Table 1 **IFRS 16: Main changes in the statement of profit and loss [1]**

Framework	IAS 17	IFRS 16
Category	Operating leases	All leases
Revenue	x	x
Operating costs	"Single lease expense -> 1. Depreciation 2. Interest expense"	
EBITDA		
Depreciation and amortisation		Depreciation of the right of use
EBIT		
Finance costs		Interest under the lease
Profit before tax		

Source: Afi.

leases they are party to (recognised as leased or rights-of-use assets).

- This balance will be recognised at the present value of the lease payments to be made over the term of the agreement.
- Leases with a term of less than 12 months and leases of low-value assets (phones, computers, tablets, etc.) will continue to be recognised as operating expenses.
- *On the liability side of the balance sheet:*
  - Liabilities will similarly increase by the amount of their binding obligations under their lease agreements (as if they were a financial liability).
  - This change may impact associated leverage ratios (e.g. the ratio of debt/EBITDA).
- In profit and loss (see Table 1):
  - The former operating expense in respect of leases (recognised above EBITDA) will be replaced by two line items:
    - Depreciation of the right to use the asset (presented below EBITDA); and,
    - Lease interest expense, which, given that it is a finance expense, will be recognised below operating profit (EBIT).
  - As a result, IFRS 16 will imply an increase in reported operating profit (EBITDA and EBIT), as the lease charges (representing the financing component of the agreement) will be moved below these line items.

#### **Measurement of lease agreements: Key issues to keep in mind**

The key variables determining the amount at which operating leases are recognised for accounting purposes are:

- The lease term;
- The rate of interest to be used for discounting/measurement purposes; and,
- Any options in the agreement.

## *Term*

The lease term is defined as the non-cancellable period of a lease, together with the periods covered by an option to extend or terminate the lease, depending on the probability of exercising those options.

The term is not, therefore, an objective variable. Based on this definition, a lessor's past practice regarding the period over which it has typically used particular types of assets (whether leased or owned), and its economic reasons for doing so, may provide information that is helpful in assessing the lease term.

It is important to stress that although the standard stipulates that leases with a term of under 12 months continue to be treated as operating expenses, there are two exceptions:

- The shorter the non-cancellable period of a lease, the higher the probability of renewing due to the costs of finding a replacement asset; and,
- A related factor is the importance of the underlying asset to the lessee's operations: the unique or strategic nature of these assets would make it very difficult to justify the use of very short lease terms.

## *Interest rate used for measurement purposes*

Reporting entities can use one of two interest rates for lease recognition purposes:

- The interest rate implicit in the lease: the rate of interest that causes the present value of the lease payments and the unguaranteed residual value to equal the sum of the fair value of the underlying asset and any initial direct costs of the lessor.
- The lessee's incremental borrowing rate (mandatory for existing leases on the date of

first-time application of IFRS 16): the rate of interest that a lessee would have to pay to borrow over a similar term, and with similar security, the funds necessary to obtain an asset of similar value in a similar economic environment.

In practice, the implicit rate tends not to be observable, so it is likely that reporting entities will resort to using their incremental borrowing costs to discount their leases to present value.

The interest rate is a more objective variable than the lease term, but as the former is conditioned by the latter, the failure to model realistic terms could lead to measurement bias.

## *Lease term options*

In determining the lease term and assessing the length of the non-cancellable period of a lease, an entity shall apply the definition of a contract and determine the period for which the contract is enforceable.

A lease is no longer enforceable when the lessee and the lessor each has the right to terminate the lease without permission from the other party with no more than an insignificant penalty.

Lease termination options come in several forms:

- Only the lessor has the option to terminate the lease: the lease term will include the non-cancellable period and the period covered by the option.
- Only the lessee has the option to terminate the lease: the lease term will be shortened by the option period depending on the probability that the option will be exercised.

“ The standard allows for a certain amount of discretion in determining the lease's term, which in turn has an impact on the discount rate. ”

- Both the lessor and the lessee have the option to terminate the lease: in this event, it will be assumed there is no obligation to extend the lease agreement, and therefore the lease term coincides with the non-cancellable period.

**Implications for risk and valuation metrics**

In terms of analysing the creditworthiness of a company, the most significant changes anticipated are:

- Less financial autonomy for reporting entities, as the percentage of third-party borrowings over total assets will increase;
- Changes in the amounts of EBITDA and EBIT reported; (IASB, 2016); and,
- Changes in leverage ratios (net debt/EBITDA), the direction of which will depend on borrowing changes associated with the leases recognised and the proportionate reduction in operating expenses in the statement of profit and loss. Because this ratio tends to be part of the standard covenants included in borrowing agreements, it will be important to ensure there are no covenant breaches as a result of these changes.

There may also be changes in the valuation metrics commonly used in the markets, such

as company valuations that rely on earnings performance. In share purchase agreements, in which a valuation multiple benchmarked to EBITDA was negotiated before IFRS 16 came into effect, the changes implied by the new standard effectively imply an increase in business valuations. It is important to factor these considerations into ongoing M and A negotiations to minimise the risk of prices being paid down the line that do not reflect the current business reality.

**Sectors most affected and implications for risk analysis**

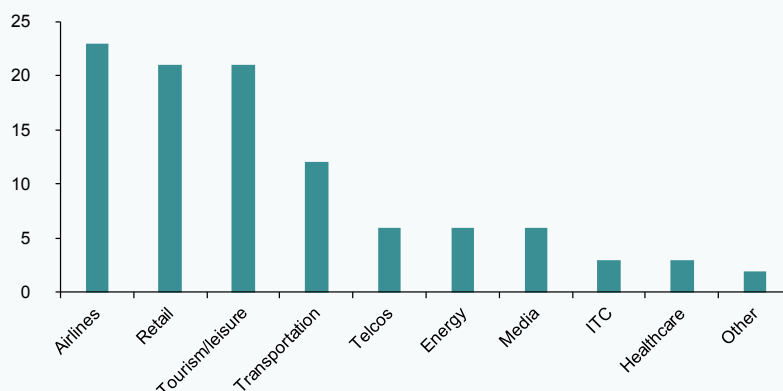
**Sectors most affected**

Three sectors will be more exposed to the new accounting criteria: airlines, retail and tourism/leisure. Each of these sectors have traditionally used operating leases as a key tool for configuring operating assets, and the new rules will lead to the recognition of new borrowings and assets on their balance sheets.

Based on global estimates by the IASB, the weight of operating leases as a percentage of total assets stands at over 20 percent in these three sectors. Other sectors, such as telecommunications, energy and media, are exposed to operating leases to a lesser degree (about five percent of total assets) (see Exhibit 1).

Exhibit 1

**Weight of present value of operating leases as a percentage of total assets at the global level**



Source: IASB.

It is likely that the biggest changes to classic credit risk assessment ratios will be concentrated in these three sectors, although companies in other sectors will logically also be affected by IFRS 16.

### ***Implications for risk assessment***

Rating agencies, and the credit analyst community in general, had already formulated procedures over the years for adjusting the information provided in companies' financial statements to properly reflect the risk posed by trading their securities or funding them. Those methodologies are not exactly the same as those proposed in IFRS 16.

The approach taken by the rating agencies has consisted of one of two options:

- Determining the present value of the company's leases using the minimum lease instalments payable, subject to a cap (set as a multiple of lease payments); or,
- Applying a sector-appropriate multiple to the lease payments made by the company.

These adjustments, which are analytical (the agencies do not question the veracity of the financial disclosures), have been made across the board regardless of the specific accounting standards applied (US GAAP or IFRS). The multiples and assumptions used to measure leases have been fine-tuned over time to factor in changes in the economic environment, as well as the risks to which various sectors are exposed.

Beyond the realm of the rating agencies, several surveys of financial sector professionals have found that it is common to make adjustments when companies use operating leases without distinguishing between company size or sector (Europe Economics, 2017).

For all these reasons, the introduction of IFRS 16 should not impact the credit ratings of affected companies nor the conclusions drawn about the company's credit risk, as all operating leases have been treated as incremental borrowings, altering the snapshot directly observable from the financial statements.

However, the subjective nature of the new accounting standard's definition of the lease term (and, by definition, the discount rate applicable) could trigger discrepancies in the analytical adjustments currently performed, prompting asymmetries in the conclusions drawn from a company's financial disclosures.

### **Assessment of the new standard**

#### ***The need for IFRS 16***

Companies use operating leases not only for reasons related to their leverage ratios, but because they are flexible. If the use of operating leases can be considered a sector-specific practice, did the criteria really need to change when all market players were already aware of the need to adjust companies' financial disclosures to properly reflect credit risk (regardless of the formula used to finance their assets)?

#### ***Greater subjectivity in formulating financial statements***

The measurement of leases for accounting purposes —contracts that are not traded on an organised market— involves a significant amount of subjectivity. The level of discretion allowed in determining the lease term, and the knock-on effect on the discount rate, could mean that financial statements will actually fail to provide reliable information.

It is vital that reporting entities select measurement assumptions aligned with their business realities and not criteria designed to minimise the impact on the financial

“ IFRS 16 introduces lease measurement criteria that do not coincide exactly with the analytical adjustments made by credit rating agencies, possibly leading to asymmetrical risk assessments. ”



statement. The probability that reporting entities will provide biased information (possibly inconsistent with the risk metrics used in the financial industry to value lease agreements) cannot be dismissed, possibly impeding the interpretation of the information companies publish.

### **Valuation guidelines**

In practice, an asset is not financed completely by borrowings. Therefore, the financing cost or incremental borrowing cost to be applied must, to a degree, factor in the contribution of a company's own funds that any financier would insist on. As a result, the cost of debt or incremental borrowing cost should end up at an intermediate point between the company's cost of senior debt and its cost of equity or subordinated debt.

However, IFRS 16 does not consider the use of capital structure-weighted costs. This is a deviation from the risk assessment exercises that any financier would perform, and casts a significant shadow over whether the new accounting standard can create more standardised financial disclosures.

### **Notes**

[1] The arrows denote changes in the corresponding heading with respect to the accounting treatment under IAS 17.

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## The need for caution on Spain's recent minimum wage hike

The Spanish government has recently approved an increase in the minimum wage to 900 euros in 2019, the biggest increase in 40 years. While empirical evidence may support the need for such a measure, the potential risks should be carefully assessed.

Daniel Fernández Kranz

**Abstract:** The recently approved increase in the minimum wage by 22.3%, to 900 euros per month in 2019 - forecast to reach 1,000 euros in 2020 - will make Spain pass from being one of the countries with the lowest minimum wages to one of the highest. This decision could be in part justified given the country's low current wage level and the decoupling of wages from labour productivity, although there are broad differences across sectors. However, the scale of the increase may be disproportionate or, at the very least, risky. It is not clear that a minimum

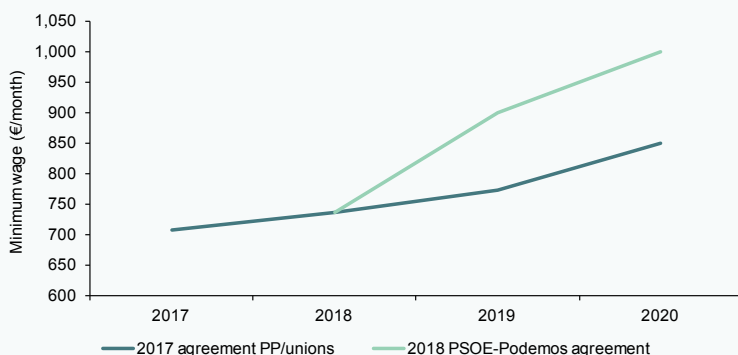
wage is the best tool for addressing growing household income inequality as there is no clear correlation between wage levels and household poverty. Furthermore, evidence shows that disproportionate increases in the minimum wage may significantly impact employment for low-wage earners, older workers, youth, and other already vulnerable groups.

### Introduction

The Spanish government's draft budget for 2019 includes a 22.3 percent hike in Spain's

Exhibit 1

### Minimum wage agreed by PP party and unions in December 2017 versus that agreed by PSOE-Podemos in October 2018



Source: Author's own elaboration.

statutory minimum wage to 900 euros. The proposal stems from a recent pact struck by political parties PSOE and Podemos and sets a course for the minimum wage that could raise it to 1,000 euros by 2020. The pact implements the biggest increase and highest value in real terms since 1977; it also overshoots by 17.6% what the Partido Popular (PP) government agreed with the unions for 2020 in December 2017 (Exhibit 1). Moreover, that agreement had been based on the delivery of two conditions that no longer hold: annual GDP growth of over 2.5% and annual job creation of 450,000.

The proposal has sparked criticism and support in equal measures. There are those who see the minimum wage increase as a step in the right direction towards reducing growing wage inequality in Spain and addressing the phenomenon known as working poverty. Others fear that the measure will not effectively reduce poverty and inequality and will instead trigger job losses

among the very segments of the population it is intended to help.

### A closer look at Spain's minimum wage

To analyse minimum wage coverage, Felgueroso and Jansen (2018) use Social Security data that captures the work histories of 4% of all contributors in Spain (CWHS, from 2005 to 2017). Coverage is defined as the percentage of employees who earn a salary equivalent to or lower than the newly negotiated minimum wage. According to their research, at a minimum wage of 900 euros, coverage would range, depending on the month, between 7.6% and 8.9% of the workforce and at a minimum wage of 1,000 euros, between 11.9% and 13.0%. This average coverage ratio masks wide differences between groups of workers and regions. For example, for young people under 24, coverage would be 29.3%, and for the least skilled workers, coverage would range between 19%

“ These regional differences raise a concern: a disproportionate increase in the minimum wage could push groups in the labour force already at risk of exclusion out of the job market ”

“ Based on available indicators, the increase in minimum wage proposed by the government would mean that Spain would go from being a country with one of the lowest minimum wages to one of the highest. ”

and 25.5%. Their analysis also suggests that those covered by the minimum wage are more likely to suffer job insecurity: 50% change jobs within a year, a percentage that has risen to 60% since 2014.

As for regional differences, if the increase in minimum wage proposed by the current government was implemented, regions with the highest rates of unemployment would have the highest coverage levels in 2020 and see the biggest jumps in that ratio (Exhibit 2). For example, in the Canary Islands, where unemployment stands at 20%, an increase in the minimum wage to 1,000 euros in 2020 would have the effect of increasing the coverage ratio by 15.3 percentage points, from 4.3% in 2018 to 19.6% in 2020. The Kaitz index [1] would increase from 56% of the median wage in 2018 to 73.1% in 2020. At the other end of the spectrum, in Navarre, where the unemployment rate is 10%, the

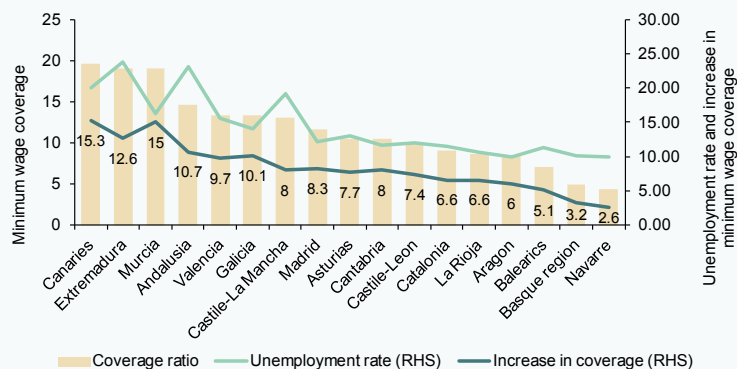
proposed increase in the minimum wage would have a very limited impact on this region's very low coverage ratio: it would increase from 1.8% to 4.4%. These regional differences raise a concern: a disproportionate increase in the minimum wage could push groups in the labour force already at risk of exclusion out of the job market.

Turning to the Kaitz index, which relates the minimum wage to average or median wages, Exhibit 3 ranks Spain 31<sup>st</sup> among OECD countries.

Exhibit 3 shows how big an impact the increase in minimum wage proposed by the Spanish government would have. Of 31 OECD countries, Spain ranked third to last in 2017 (before the 8% increase implemented in 2017), with only Mexico and the US having lower minimum wages as a percentage of

Exhibit 2

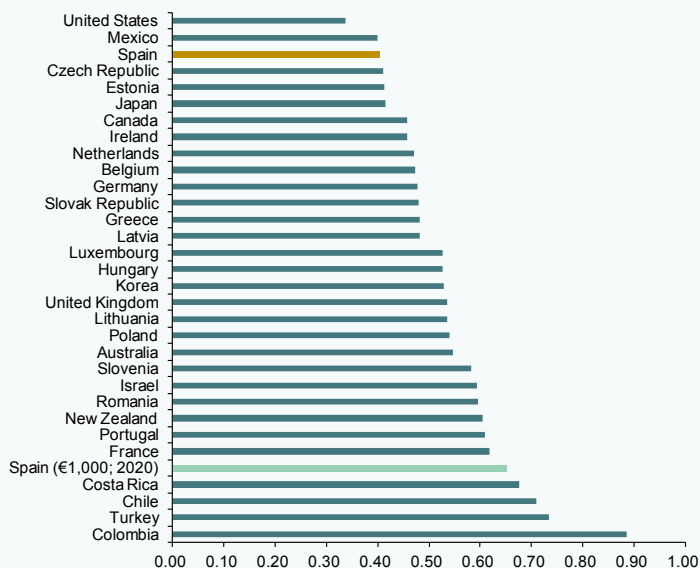
**Minimum wage (€1,000) coverage and unemployment, by region**



Sources: Coverage and change in coverage, Felgueroso and Jansen (2018); unemployment rate, 2Q18 economically active survey.

Exhibit 3

Kaitz index: Minimum wage as a percentage of median wage (2017)



Sources: OECD and Felgueroso and Jansen (2018) for Spain (€1,000; 2020).

median wages. If the government’s proposal were to be implemented, in 2020, Spain would rank fifth overall, with a Kaitz index of close to 65%, surpassing all its benchmark economies. The Kaitz index also illustrates the regional differences mentioned earlier. Using Felgueroso and Jansen’s (2018) data, in the Canaries this index would increase from 56% of the median wage in 2018 to 73.1% in 2020, while in Navarre it would increase from 40.5% to 52.9%.

In sum, based on available indicators, the increase in minimum wage proposed by the government would mean that Spain would go from being a country with one of the lowest minimum wages to one of the highest. Coverage ratios for the least privileged groups in Spain would rise to almost 30%.

### Support for a minimum wage increase

There are two groups of theories for explaining the job market and each yields a different prediction of the impact of a minimum

wage increase. The most classical theories assume that wages are equivalent to the marginal product of labour and an increase in the minimum wage would leave marginal employees, whose productivity is below the minimum wage, without a job. According to this theory, the minimum wage always destroys jobs as the point of equilibrium is equivalent to the marginal product of labour. The scale of job loss depends on the elasticity of labour demand, which can vary by sector and types of workers, usually higher (*i.e.*, greater job loss) for the very groups the minimum wage is intended to help (young people and less skilled workers).

Card and Krueger (1994) launched the first modern challenge to the idea that the minimum wage significantly reduces employment among the least skilled. They studied changes in employment in fast-food chains in the US, comparing adjacent states before and after one increased its minimum wage. They did not find any real effect on employment; in fact, on occasion they identified a slight positive effect.

“ The reasons for wage decoupling in Spain are not clear, but there appear to be major differences from one sector to the next. ”

To explain these results, and similar findings in subsequent studies, economists have come up with an alternative theoretical framework to explain the labour market: that because wages are the result of negotiations between companies and workers (the former having greater power), employee wages tend to be below the marginal product of labour. According to this line of reasoning, an increase in the minimum wage should not have a significant impact on employment and will tend to correct employers' surplus bargaining power.

The second school of thought (wages resulting from negotiations and the growing power of companies) has gained support in recent years as a result of evidence such as that provided by Benmelech, Bergman and Hyunseob (2018). Those authors analysed the effect of local labour market concentration in the US in terms of wages. Using data from the US census between 1977 and 2009, they found that employer concentration has increased considerably at the local level over time. This concentration, measured using a normalised Hirschman Herfindhal Index (HHI), has increased from 0.70 between 1977 and 1981 to 0.76 between 2002 and 2009 (as per this normalised index, a reading of 1 implies a single employer in the county in question). The authors find that in keeping with the growing power in the labour market, there is an inverse correlation between employer concentration at the local level and wages, and that this correlation is more pronounced the higher the concentration and increases over time. According to this study, a portion of the increase in wage inequality in the US is attributable to employers' growing power in the labour market.

The relevance of this analysis to the case of Spain depends on the likelihood that a minimum wage earner works in a sector with growing employer power. In this respect, Benmelech *et al.* (2018) find that manufacturing industries facing strong competition from China were among

the most affected industries, suggesting an important role for low skilled labor.

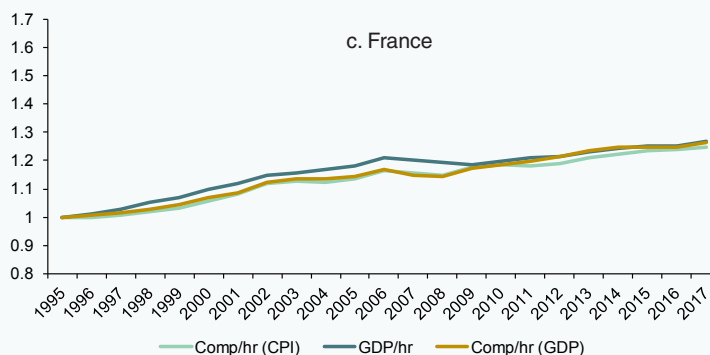
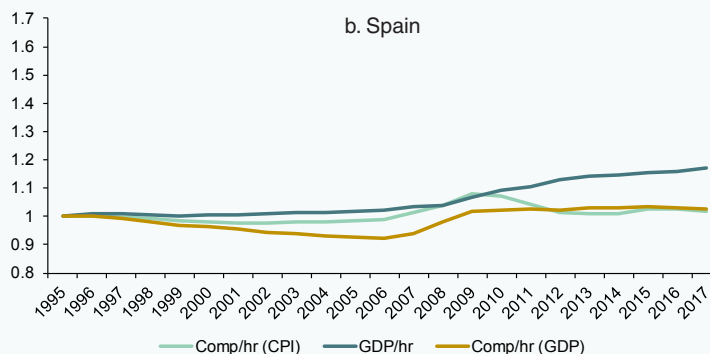
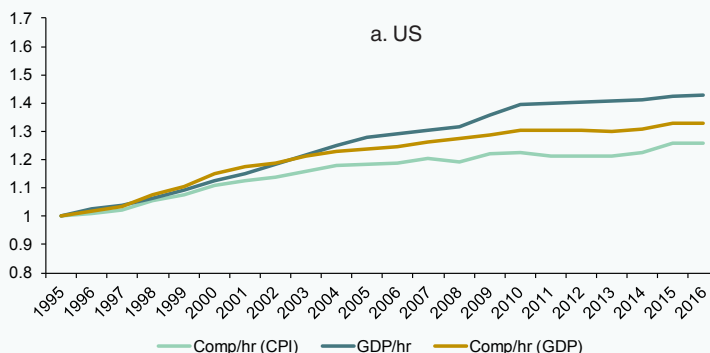
A different but related line of research has found that growth in wages has been lower than that in labour productivity in many countries in recent decades. This trend has been coined “wage decoupling” (from productivity). According to the OECD (2018), based on an average of 27 countries analysed, between 1995 and 2013, labour productivity increased by 30% in real terms, while average wages increased by 23% and median wages by just 15%. This evidence completely contradicts the theories that assume equilibrium wages are equal to the marginal product of labour and, therefore, lends support to the implementation of policies designed to combat inequality, such as minimum wages.

Exhibit 4 shows the trend in GDP per hour worked and the average wage per hour worked, deflated by CPI and separately by the production price index (GDP deflator) in the US, Spain and France. As shown in the exhibit, wages have decoupled significantly from productivity in the US and Spain, but not in France. In the US, hourly wages (deflated by CPI) increased by 17 percentage points less than productivity between 1995 and 2016 (+42% productivity vs. +25% wages). [2] In Spain, the difference between the two series is similar, *i.e.*, 15 percentage points (between 1995 and 2017), but is shaped by stagnation in real wages (which increased by just 2% throughout the period) and very moderate growth in productivity (+17% throughout the period). The growth in productivity has been significant only from 2008 and is attributable to a composition effect, *i.e.*, the destruction of less productive jobs during the economic crisis. The reasons for wage decoupling in Spain are not clear, but there appear to be major differences from one sector to the next. The OECD study (2018) reveals very low or no decoupling when the primary, housing and public sectors are stripped from the analysis.

Judging by Exhibit 4, the decoupling of wage purchasing power (Comp/hr, (CPI)) from productivity in Spain is a relatively recent phenomenon since the economic crisis that became more pronounced during

the subsequent recovery. However, the wage series deflated by the production price index (Comp/hr, (GDP)) reveals increasing decoupling from productivity throughout the entire period. [3]

Exhibit 4 Wage decoupling from productivity



Source: Author's own elaboration, based on OECD data.



In conclusion, in Spain, there appears to be a similar trend to that being observed in other developed economies where wage growth has trailed productivity gains in recent decades – a trend that provides arguments against classic labour market theory and lends support to measures designed to reduce wage inequality, such as a minimum wage. However, in the absence of more exhaustive analysis of the drivers, the level of decoupling of wages from productivity appears to depend on the wage measure used and it varies by sector.

### Weak correlation between minimum wage and poverty

Jimeno (2018) argues that the minimum wage does not significantly reduce income inequality or poverty because increases in the minimum wage can benefit workers earning low wages, but not necessarily low-income households. For example, in Spain, just 10% of the population living under the poverty threshold are workers who earn the minimum wage. The correlation between being a low earner and a member of a poor household is weak for three reasons.

First, the majority of poor households whose head is aged between 18 and 64 do not have any members in employment, so the minimum wage has no direct effect. Second, in Spain, many workers are poor because they either have precarious contracts that frequently interrupt their employment against their will, or they can only get part-time work. These workers are similarly not affected directly by the minimum wage. Finally, many low earners, particularly young people, are not members of poor households. Several experts maintain that there are other types of policies that are more effective in terms of reducing inequality and poverty, such as universal basic income or a negative income tax.

### Estimated impact of minimum wage increases in Spain

There are few recent studies on the impact of minimum wage increases on employment in Spain, but most find relatively insignificant effects on employment in general, even on higher-risk groups, such as youth (*e.g.*, Blázquez, Llorente and Moral, 2011 and Cebrián *et al.*, 2010). However, these findings should be viewed with caution. Adjusted for inflation, the minimum wage was virtually flat in Spain between 1980 and 2004, but has since increased gradually. This increase was concentrated during a period of strong economic growth in Spain that ended with the crisis that began in 2008. According to Blázquez, Llorente and Moral (2011), the corresponding increases in the minimum wage and youth unemployment rate at this time can also be explained by a competitive and highly dynamic labour market and a structural change in demand for employment.

Although in most developed countries the minimum wage increases with worker age, this is not the case in Spain, where the minimum wage has been the same for youth and adults since 1998. The fact that the adult minimum wage is low in Spain could explain the lack of evidence of adverse effects on total employment (Galán and Puente, 2015; Jansen, 2016), [4] but that does not imply a lack of adverse effects for young workers.

Using data from the continuous work history sample (CWHS), Galán and Puente (2015) have estimated the effect of the significant increase in the minimum wage in Spain between 2005 and 2010 on the individual probability of losing one's job. They found that older people experienced the biggest increase in the probability of losing their jobs relative to other age brackets, even the youngest workers (whose productivity is low). In fact, the increase in the probability of losing one's

“ Although in most developed countries the minimum wage increases with worker age, this is not the case in Spain, where the minimum wage has been the same for youth and adults since 1998. ”

job was twice as high for older workers than younger workers.

Specifically, the average probability of losing employment within one year for affected workers between 16 and 24 years old increased from 11.2% to 24.9% as a result of the accumulated increases of the minimum wage during the period analysed (2005-2010), while the corresponding impact for workers over 45 was much higher, rising to 49.9%.

According to the researchers, the reason for this counter-intuitive outcome is the expectation that younger workers will increase their productivity by more than their older peers, whose productivity curve is flat at that stage of their lives. As a result, an employer faced with a uniform increase in the minimum wage may find it more profitable to keep younger employees and let go of older employees.

Based on the results of Galán y Puente (2015), the Bank of Spain (2017) simulates the effects on employment of an increase of the minimum wage of up to 950 euros in 2020. According to this simulation, aggregate employment would be reduced by 1.4% and the employment of directly affected workers (mainly young people and those over 45) would be reduced by 11.3%.

In a more recent study (BBVA, 2017), a slightly lower negative impact is estimated from the increase in the minimum wage in 2017 (+8%), between one and two tenths of the total employment in the long term. According to this study, which analysed the results of two meta analyses that collated over 200 studies of how employment responds to changes in the minimum wage in different economies, periods and sections of the population, the average elasticity was around  $-0.1$ , *i.e.*, a 10%

increase in the minimum wage would result in a reduction in employment of 1%.

Finally, AIRef (2018) simulates the effects of the rise in the minimum wage expected for 2019 and estimates a drop in total employment of 0.15% in 2019 (24,000 fewer jobs). It also notes, but does not estimate, the possibility of a more significant fall in employment in the medium to long term.

### **Effects of Germany's new minimum wage**

In 2015, Angela Merkel's government, in coalition with the socialist party, introduced a first-time ever minimum wage at the federal level. That wage was initially set at 8.5 euros an hour in 2015, where it remained in 2016, and was increased to 8.84 euros in 2017 and 2018. The German case presents an excellent opportunity to study the effects of a sharp change in the minimum wage (zero to 8.5 euros) in an economy similar to Spain. However, the way this policy has been designed in Germany is considerably different from the Spanish structure in several respects, and these differences need to be considered when interpreting the results of the few studies conducted to date.

First, at the time of its introduction, several carve-outs were worked in for a transition period which ran until December 31<sup>st</sup>, 2016. Also, youth under the age of 18 and apprentices are permanently exempt and the new minimum wage does not apply to people doing a voluntary or mandatory internship of up to three months during their schooling, training or studies. Nor does it apply to long-term job seekers during their first six months in employment. Finally, it is important to note that the minimum wage is equivalent to approximately 48% of the median wage, which is well below the 65% that would be

“ The German case presents an excellent opportunity to study the effects of a sharp change in the minimum wage (zero to 8.5 euros) in an economy similar to Spain. ”

reached in Spain in 2020 were the increases currently on the table to be implemented.

There are not many studies of the effects of the minimum wage in Germany, but two stand out. Caliendo *et al.* (2018) argue that the minimum wage introduced in 2015 did not affect all regions in Germany evenly. They use those regional differences to estimate the effects of the minimum wage on employment (difference in differences analysis). The analysis covers a short period: the first two years following the introduction of the minimum wage. The researchers did not find significant effects on employment. They calculate a loss of 140,000 jobs (0.4% of the total), virtually all of which were attributable to the loss of marginal jobs. According to the authors, the lack of effects may be due to the use of other adjustment mechanisms or non-stringent compliance with the new standard.

In the other study of note, Bruttel, Baumann and Dütsch (2017) also looked at a short time period (2015–2016) and found little impact on employment. According to these researchers, the new minimum wage has triggered significant wage growth for low-wage earners, whereas the adverse impacts on employment have been limited to date. The preliminary evidence suggests that companies in the sectors most affected by the measure have responded by reducing working hours and/or increasing employment intensity and product prices. Some have pared back non-wage benefits, reduced employee turnover and attempted to compensate for higher wages by hiring more skilled workers. They also consider that non-compliance may be working as an adjustment mechanism.

However, these moderate effects mask significant differences by worker categories, with adverse effects concentrated among

younger workers and those with more precarious contracts. They found that in 2016 (2015), for example, while total employment in Germany increased by 1.8% (1.4%), employment among youth aged 18 to 24 increased by just 0.6% (–0.1%) and employment among those on part-time contracts fell by 0.9% (–3.1%). These authors estimate a coverage ratio of approximately 11%, *i.e.*, they calculate that in 2014, 11.3% of workers in Germany were earning less than the minimum wage of 8.50 euros an hour. However, the coverage ratio increased to 26.9% for youth aged 18 to 24 (similar to the 29% estimated for Spain by Felgueroso and Jansen) and 38.7% for part-time workers.

### Conclusions

The current Spanish government has recently approved increasing the minimum wage to 900 euros in 2019, the biggest increase in 40 years. The minimum wage in Spain is low in comparison with other OECD economies and given the decoupling of wages from labour productivity, the increase in the minimum wage could be in part justified. However, the scale of the minimum wage increase could be described as overly ambitious, or at the very least risky, given evidence that disproportionate increases in the minimum wage can have an adverse effect on employment for groups it is intended to help, such as youth.

It is also not clear whether a minimum wage is the best tool for addressing growing household income inequality as there is no clear correlation between wage levels and household poverty. For all these reasons, the advisable course of action would be to propose gradual increases in the minimum wage to study the impact of these measures on employment in the groups affected. It would also be advisable to establish different minimum wages for different groups of

“ It is not clear whether a minimum wage is the best tool for addressing growing household income inequality as there is no clear correlation between wage levels and household poverty. ”

workers, as has been done in Germany, where the minimum wage for young workers with little work experience is lower.

## Notes

- [1] The Kaitz index is defined as the ratio between the minimum wage and the average (or median) wage for a given group.
- [2] In the US, the comparison between trends in wages and productivity is affected by the choice of wage deflator. Growth in real wages is lower (and wage decoupling from productivity higher) when deflated using CPI rather than the GDP deflator.
- [3] The appropriateness of the measure depends on the purpose of the analysis. The readings deflated by CPI enable a comparison of the trend in productivity with that in the purchasing power of wages. The readings deflated by the GDP deflator are a more stringent test of the classical labour market theory which holds that wages and productivity should etch out similar trends (as both series are deflated using the same price index).
- [4] In the case of the increases made between 2005 and 2010, only between 0.6% and 0.9% of the total number of workers per year were affected.

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# Deficit reduction in Spain: Uncertainty persists

Charged with bringing down a high structural deficit, Spain's new government has proposed a revised roadmap for fiscal consolidation. However, given the current political climate, receiving the necessary support remains a challenge.

Santiago Lago Peñas

**Abstract** Spain's fiscal outlook is far from clear. With a structural deficit incompatible with fiscal stability and substantially higher than those seen in the EU, the fiscal landscape is undoubtedly one of the Spanish economy's biggest weaknesses. Facing the very real possibility of interest rate hikes, international financial market tensions and lower economic growth, the PSOE government has recently proposed a new fiscal strategy that includes upward revisions to the deficit targets for 2019–

2021. Additionally, receiving Parliamentary support for the recently presented 2019 GSB will be difficult and the revenue estimates included in the project to achieve an ambitious 1.3% of GDP target initially agreed upon with the EU will too be difficult to achieve. [1]

## Introduction

In 2018, Spain deviated significantly from its Stability Programme target, albeit in line

“ Facing a difficult political landscape, the new government opted to take an alternative approach to deficit reduction. ”

with revised estimates provided when the General State Budget for 2018 (2018-GSB) was approved. In April, the since departed Partido Popular (PP) government presented an updated version of the 2018–2021 Stability Programme, with a deficit target of 2.2% of GDP for 2018. [2] With the previous year's budget rolled over, the PP also worked to negotiate a 2018-GSB that required the support of other parties with seats in the Lower House.

Over the course of those negotiations, expenditure and tax concessions were added that gradually made meeting the deficit target an increasingly tough proposition (Lago-Peñas, 2018). Just when that process was in the final stages, a no-confidence vote ousted the PP from power in June, putting Spain's socialist party, the PSOE, into government with an even fewer number of seats in the Lower House than held by the PP.

The new government opted to take an alternative approach. First, it accepted the draft 2018-GSB it had inherited, assuming it would garner ample support in the House, as it had been drafted and supported by the parties now in opposition and the timing of the entire process was significantly off track. Second, it notified the European Commission that it would miss the deficit target initially agreed for 2018 because the budget dynamics it inherited would require sharp and swift adjustment and do considerable harm to growth in Spain. Although the Commission has not been explicit about this, all signs suggest the rationale of the new government has been accepted and that ending the year with a deficit of less than 3% will be sufficient to avoid a fine. [3] The even more complicated fiscal situation in other countries has undoubtedly helped (Conde-Ruiz, García and Rubio-Ramirez, 2018). Finally, the PSOE decided to focus on the 2019-GSB, in which it could crystallise its own programme

and agreement with its main political ally (Podemos).

This new fiscal strategy, which includes upward revision of deficit targets for 2019–2021, was presented in July (Ministry of Finance, 2018a) and was rapidly dismissed by the leaders of the PP and Ciudadanos, which between them have a majority in the Senate and must approve the change. This legal requirement has created a barrier that the government has not been able to surmount, despite several attempts to rewrite the law to this end.

As of January 2019, nothing has changed. Today we are looking at two different deficit target roadmaps: one approved in April 2018 and still in effect today, and another proposed by the current government that received majority support in the Lower House on December 20<sup>th</sup>, 2018. According to the government, this proposal would have been acceptable to the European Commission, but it was formally rejected by the Senate on December 27<sup>th</sup>.

### Outlook for the end of 2018

The budget outturn figures to October 31<sup>st</sup> show a significant deficit reduction (Exhibit 1). Leaving local authorities aside, the deficit to end October stood at 1.07% of GDP, compared to 1.7% in the first ten months of 2017, a reduction of 0.63 percentage points of GDP. Meanwhile the figures for local authorities (to September 30<sup>th</sup>) point to a slightly smaller surplus in 2018 than in the same period of 2017: 0.36% *versus* 0.47%. Putting all the data together, by the last quarter of the year, the deficit was running half a point lower year-on-year, sufficient to meet the revised target, but not the original deficit target of 2.2%.

Projections compiled by various public and private institutions for the year show an unusual degree of consensus and are in line with the figures above. As of January, the Funcas consensus deficit forecast (Funcas, 2019), the Spanish supervisory institutions (AIReF, 2018b and Bank of Spain, 2018) and the international institutions (IMF, 2018; OECD, 2018; European Commission, 2018a) are all expecting a deficit of 2.7% of Spanish GDP in 2018.

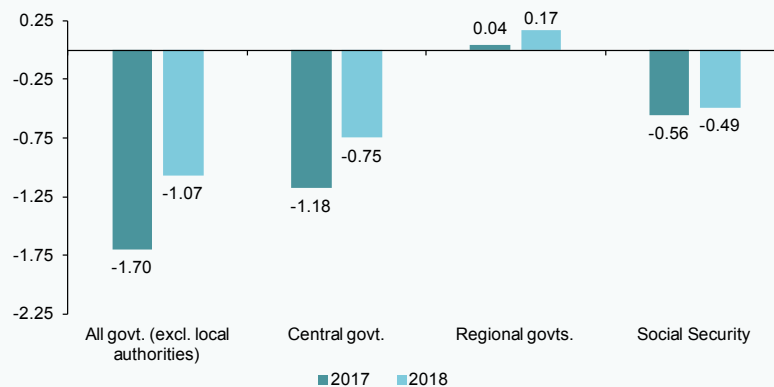
One positive takeaway is that regional and local governments have ceased to be a problem. Although international analysts have highlighted the impact of the decentralised government structure on the delivery of fiscal targets in the past, both regional and local governments are set to meet their original targets for 2018 and, combined, may generate a small surplus (~0.1pp) that will partially mitigate the shortfalls anticipated at the central government and Social Security levels. Despite sharp growth in employment in recent years, Social Security has been unable to generate a surplus.

Returning to aggregate numbers, Exhibit 2 shows one of the main effects of the developments of 2018. Aside from the cycle’s positive impact on public accounts, the structural deficit has not notably declined, returning once again to over 3%. In fact, the trend since 2015 clearly shows the deficit correction effort of recent years has been driven exclusively by the economic situation. The structural deficit remains at levels clearly incompatible with fiscal stability and the necessary reduction in public borrowings – currently around 100% of GDP. The contrast with the overall trend in the European Union is evident, with the EU’s structural deficit substantially lower (around 1%) and dropping over the last five years. The fiscal landscape is without a doubt one of the Spanish economy’s biggest weaknesses, with interest rate hikes, international financial market tensions and lower economic growth all plausible scenarios.

Political consensus would be valuable and useful on three fronts. First, there is a pressing need to reform the Spanish tax system to generate higher, more efficient and more

**Exhibit 1** Government deficit (-) / surplus (+) to October 31<sup>st</sup> for 2017 and 2018

Percentage of GDP



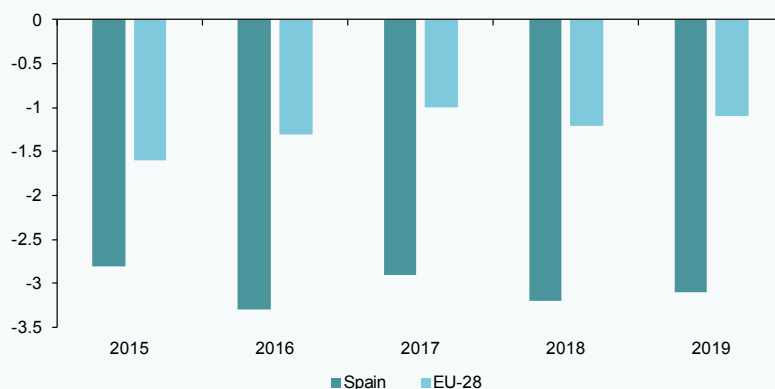
Source: Author based on Ministry of Finance report (2018b).

“ The fiscal landscape is without a doubt one of the Spanish economy’s biggest weaknesses, with interest rate hikes, international financial market tensions and lower economic growth all plausible scenarios. ”

Exhibit 2

**Estimated (cyclically-adjusted) structural budget balances, 2015-2019**

Percentage of GDP



Source: Author, based on European Commission figures (2018a).

equitable tax revenue, as well as eliminate all manner of tax breaks and reduce fraud. Second, reconfiguring the structural income and expense structure of Social Security in light of the recent analysis of sustainability issues by the AIREF, Spain’s independent fiscal institution (IFI) (AIREF, 2019). Lastly, performing a widespread and rigorous assessment of the social return on spending to reconsider programmes with fewer benefits for society, projects with a negative social surplus and current expenditure. The spending review being conducted by the AIREF (<http://www.airef.es/es/spending-review/>), as mandated by the central government, is a step in the right direction, but is clearly insufficient given the major institutional and cultural shortcomings of evaluating public policies in Spain (Albi and Onrubia, 2016).

**An uncertain future**

The Spanish government presented a budgetary plan for 2019 in October of last year that aims to meet a deficit target of 1.8% and has been examined by the European Commission (2018b) and the AIREF (2018a). The response from the European Commission can be described as moderately pessimistic. It acknowledges that the plan implies a downward adjustment to the budget imbalance, but calls it insufficient. The Commission is forecasting a deficit of 2.1% in 2019 (0.3pp above the government target) shaped mainly by a revenue shortfall. Specifically, the Commission views as overly optimistic the forecasts for tax receipts from new taxes on financial transactions and certain digital services (the so-called Google tax), the impact of adopting best international practices for the control of tax fraud and



the positive impact of the planned increase in the Social Security earnings cap. In total, it expects tax revenue to come in 0.2pp of GDP below the government's forecasts. It also believes the various promises and new initiatives in pensions, education, R&D and social policy will cost Spain 0.1pp more than forecast. The Commission warns of the risk of non-compliance and the scant progress that has been made in reducing the structural deficit.

The AIReF (2018a) is more generous in its assessment, considering the delivery of the 2019 target feasible (but not probable). It assigns a probability of 48% to meeting the target, which is halfway between its 60% threshold for qualifying an event as probable and 40% as improbable. This greater optimism is partly due to the fact that the AIReF assessment includes the increase in the Social Security earnings cap, a new development that was not in the draft sent to Brussels and which is estimated to generate an additional 0.1pp of revenue (between 1 and 1.1 billion euros).

Starting with revenue, the estimates compiled by Spain's IFI separate the government's forecasts into three main areas: the new tax on certain digital services; the effort to stamp out fraud; and the forecast increase in receipts from the wealth tax. The AIReF is forecasting revenue from the digital services tax of a maximum of 968 million euros, compared to the government's forecast of 1.2 billion euros. As for the gains from tighter control over tax fraud, the institution is forecasting revenue of between 200 and 270 million euros, well below the 500 million euros in the budgetary plan. Finally, the 339 million euros of additional revenue from wealth taxes estimated by the government is not factored in because it is entirely up to the regional governments to determine what wealth tax rates to apply.

In sum, the shortfall detected by the AIReF would be offset by the increase in the Social Security cap, with the 7.18 billion euros of additional revenue included in the budgetary draft falling within the IFI's confidence interval of between 6.07 and 7.7 billion euros. On the spending side, the AIReF endorses the government's figures except for the estimated cost of restating pensions, the increase in the minimum and non-contributory pensions and the elimination of co-payments for the most vulnerable pensioners. Compared to the budgetary draft estimate of 2.53 billion euros, the AIReF estimates additional expenditure of 2.89 billion euros, 361 million more than the government.

In short, the government's budgetary plan for 2019 is thought to be close to being able to meet a deficit target of 1.8%. With certain adjustments, such as those introduced since its initial presentation, it is already on target within a reasonable level of confidence. However, as the AIReF explicitly states in its report, "there is little margin for accommodating potential deviations in the estimated impact of the measures announced", and less margin still to head into budget negotiations. As we saw with the 2018-GSB, this tends to result in higher spending commitments and lower revenue collection forecasts. In recent weeks, the situation has become even more complicated. On January 11<sup>th</sup>, the government presented its draft 2019-GSB in which it assumes that until the Senate opposition to the new roadmap is resolved, 1.3% is the deficit to be targeted. And that requires squeezing out an additional 6.2 billion euros (0.5pp of GDP).

The draft 2019-GSB shows the extreme difficulty of reconciling three objectives. First, the expenditure and revenue projections must be proven technically feasible. Second, the accounts must sufficiently reflect the commitments made to increase spending

“ In short, the government's budgetary plan for 2019 is thought to be close to being able to meet a deficit target of 1.8%. ”

“ Although the challenge is formidable, the government has a few elements in its favour. ”

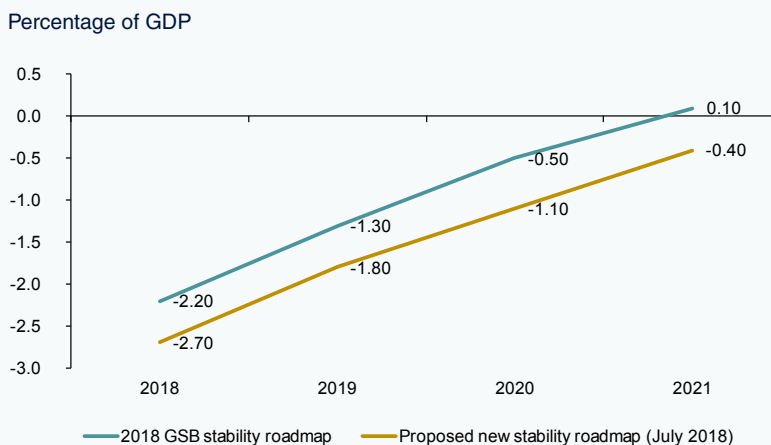
and tax collection with the parties to the left of the PSOE and which are already featured in the budgetary plan. Third, as noted above, the government must carve out additional room for financial manoeuvring to secure the support it needs to get the draft through parliament.

Essentially, what the government has opted to do is maintain its original budgetary plan without introducing additional measures with a significant impact on either revenue or spending. Of the 0.5pp of additional deficit-cutting required, 0.2pp must be delivered by the regional governments according to the Stability Programme. The plan assumes that the remaining 0.3pp would be offset via higher tax revenue elasticity. Based on forecast real and nominal GDP growth of 2.2% and 3.8%, respectively, the draft 2019-GSB models growth in tax receipts of over 10%. In comparison with preliminary estimates for tax collection in 2018, corporate income tax is expected to increase by 13.7%, VAT by 11.7%

and the so-called special duties by 11.8%. Even considering the impact of the increases in taxation contemplated in the budgetary plan, these figures are very high in light of past experience and available studies. Against this backdrop, delivery of the revenue forecasts, while feasible in the budgetary plan, looks improbable in the 2019-GSB. On the spending side, meanwhile, the negotiations will likely only exert upward pressure.

At this juncture, the probability of passing the AIREF's and the European Commission's budget feasibility tests and simultaneously garnering majority support in the Lower House is low, unless the Senate's opposition to resetting the deficit roadmap can be surmounted in the weeks to come. The resistance displayed by the Partido Popular to date makes this improbable. As shown in Exhibit 3, the new roadmap is similar to that approved by the last government, except for a one-time difference of 0.5pp in 2018 as a

**Exhibit 3 Budget deficit (-) and surplus (+) targets, 2018-2021**



Source: Author, based on Ministry of Finance report (2018a).

result of the 2018-GSB, which was essentially drawn up and negotiated by the PP. [4]

What the new government wants to do is to treat that deviation as a step change, and adjust the deficit between 2019 and 2021 at exactly the same pace as originally planned. Therefore, it is foreseeable that the PP will oppose the 2019-GSB because it implies a different mix of expenditure and revenue than it pursued consistently while in government.

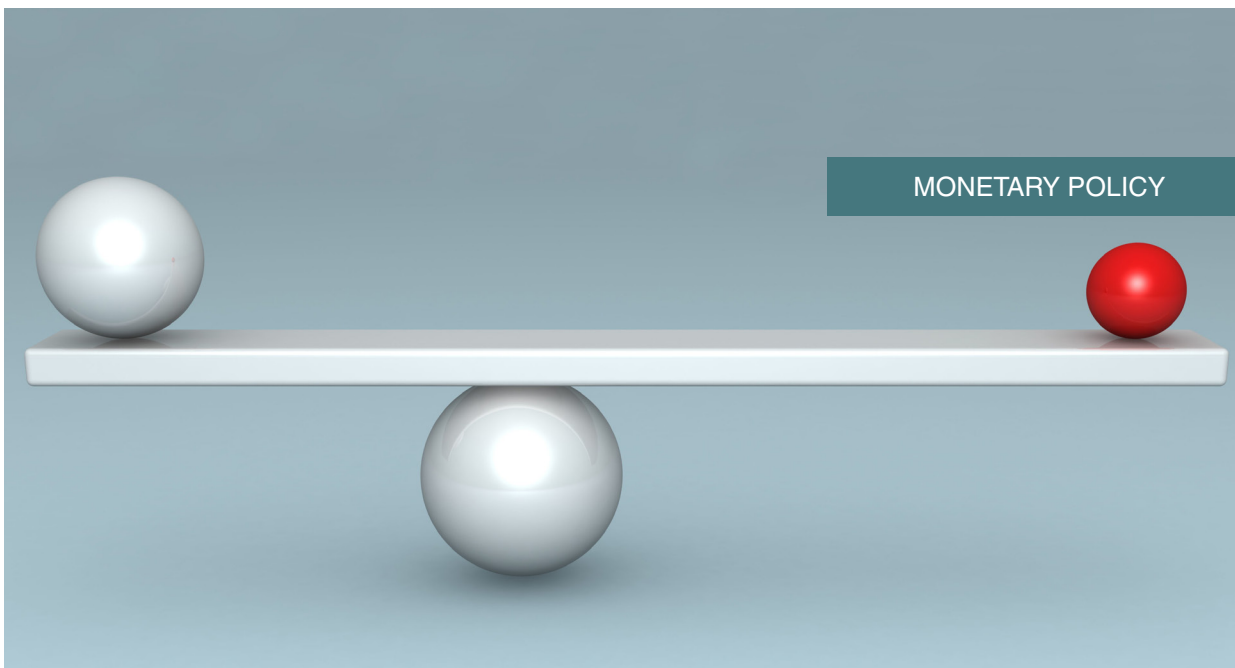
## Notes

- [1] The author would like to thank Fernanda Martínez and Alejandro Domínguez (GEN) for their assistance and Carlos Cuerpo and Javier Pérez for their input.
- [2] In keeping with the targets made public in July 2017.
- [3] The Commission's recent assessment of the budgetary plan for 2019 endorses this expectation (European Commission, 2018b). Having noted the certain deviation from target, the Commission states: "however, at 2.7% of GDP, the headline deficit is forecast to be below the Treaty reference value of 3.0% in 2018, in line with the deadline set by the Council".
- [4] The European Commission (European Commission, 2018a: 103) itself reaches a similar conclusion: "The somewhat slower pace of deficit reduction is due to measures included in the 2018 budget law, namely the higher revaluation of pensions, the pay hike for public employees and, to a lesser extent, the tax cut for low-income earners."

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## Forward guidance and price stability: The European Central Bank seeks to chart a clearer path

The European Central Bank's unconventional monetary policy stance has bred some confusion among euro area member states, especially over its definition of price stability. While the bank may not be able to eliminate all ambiguity, by advocating monetary integration, the ECB is working to improve the functioning of Europe's economic and monetary union and strengthen its forward guidance on monetary policy.

Erik Jones

**Abstract:** By advocating monetary integration and through efforts to strengthen forward guidance, the ECB seeks to improve how Europe's economic and monetary union functions. However, the politics and economics of the ECB's unconventional monetary posture has bred confusion, much of which likely stems from the ambiguity surrounding the definition

of price stability. Europe's unique economic and monetary union —and the diversity of the member states that have adopted the euro as a common currency— have spawned divergent policies and perspectives on price stability, some of which have been aired publicly by members of the Governing Council. As a rules-based institution, market

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participants need to know well in advance what the ECB is planning and which direction its monetary policy is heading. To provide more clarity, the Governing Council could promote financial market integration within the euro area, encourage market-structure convergence and construct a narrative that explains how prices can be stable for the euro area as a whole despite obvious differences in national inflation rates. While the ECB may not be able to eliminate all the ambiguity surrounding price stability, its efforts to construct a more cohesive monetary union can produce more effective monetary policymaking, both in perception and reality.

## Introduction

The European Central Bank (ECB) has worked hard to strengthen its ‘forward guidance’ as the Governing Council makes key decisions to wind-up the bank’s unconventional monetary posture. The goal of the policy is to ensure that market participants know well in advance both what the ECB is planning and how the Governing Council will make its decisions. However, judging from a press conference held in December 2018, this forward guidance is not working very efficiently. In an exchange following ECB President Mario Draghi’s opening statement, a journalist asked how quickly the bank would slow the reinvestment of maturing assets on its balance sheet once it started raising interest rates. Draghi seemed intent on leaving the possibility open for the bank to engage in another round of long-term refinancing operations (LTROs). [1] Any slowdown in the pace of reinvestment would shrink the balance sheet of the ECB, while additional LTROs would help keep that balance sheet closer to its current size as existing loans mature. If the ECB’s forward guidance was working efficiently, the ECB and the markets would not be facing in opposite directions.

The gap between these two perspectives is significant. The ECB set the direction for progressive monetary tightening when it began cutting back on its net purchases of marketable securities within the large-scale asset purchasing programme in October 2017. [2] Now, market participants are asking, “Are we there yet?” while Draghi continues to repeat that the policy is both date and state contingent. At one point he even said, “We may well never get there.” Draghi has good reason to be cautious. Both the politics and the economics of unravelling the ECB’s unconventional monetary posture are more confusing than they first appear (Jones, 2017). When market participants ask how quickly the ECB will normalize interest rates, for example, they shine a light on the policy disagreements that different members of the Governing Council have already made public. And when Draghi urges caution, he reveals the complex interactions between the unconventional settings of standard monetary policy instruments.

However, policy disagreements and technical complexity aside, the two sides at the press conference were still facing in opposite directions. Moreover, there is good reason to believe that much of the confusion derives from the ambiguity surrounding the ECB’s definition of price stability, both conceptually and in terms of market perceptions.

That ambiguity comes from two different sources: Europe’s unique economic and monetary union and the diversity of the member states that have adopted the euro as a common currency. Since the ECB is a rule-based institution, both the ambiguity and the confusion it generates are significant. The ECB cannot have efficient forward guidance if it is not clear to market participants which direction its monetary policy is going. Given that the ECB’s notion of price stability is inherently

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ambiguous, both the Governing Council and market participants are going to have to accept the limits of its forward guidance.

### **Europe’s unique economic and monetary union**

Europe’s economic and monetary union is unprecedented in many ways, but three features are uniquely relevant to the conduct of monetary policy. First, the ECB’s mandate focuses narrowly on price stability. [3] The ECB has other considerations related to the support it provides for the European Union’s broader policy objectives and to the management of exchange rates relative to other global currencies. However, those interests are subordinate to price stability and the ECB has broad discretion in deciding when those other objectives should influence the decisions of the Governing Council. In practice, successive ECB presidents have made it clear that achieving price stability is a contribution the bank can make to other EU objectives and to the relationship between the euro and other currencies.

The second aspect is that the ECB’s Governing Council has the power to define price stability and hence to specify its own policy objective. This authority reflects the fact that monetary integration is a work in progress. The creation of a multinational currency implied the creation of new statistical aggregates to measure the movements in relative prices

across countries and to capture the growth and distribution of different kinds of liquidity (or monetary instruments). It also implied the creation of a new monetary transmission mechanism through which policy decisions made in Frankfurt could impact financial conditions in participating countries. Hence, the assumption was always that the ECB’s Governing Council would learn how to control Europe’s monetary economy on the job. The discretion the Governing Council has over the specification of price stability was necessary to allow the ECB to adapt with experience.

Third, the Governing Council of the ECB recognized explicitly that the way it shaped market perceptions of price stability was critical both to the creation of the single currency and to the functioning of monetary policy. By highlighting the new price indexes and monetary aggregates, the Governing Council underscored that the euro area had one mass of liquidity, one monetary policy and one monetary transmission mechanism, even before the euro existed as a common currency. The Governing Council also worked hard to create one strategy for communication with financial market participants and other European institutions. This communication was not always disciplined, however; national central bank governors retained privileged access to their domestic political and market constituents and often discussed national economic conditions in ways that complicated

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the messaging of the Governing Council and the ECB. Nevertheless, the ECB Executive Board, and the ECB President, quickly emerged as the most authoritative voices for the euro area.

### **Defining price stability**

Successive Governing Councils have supported a notion of price stability with constructively ambiguous targets — constructive in the sense that they have helped foster a sense of common enterprise across the euro area, and ambiguous because they have created space for competing interpretations. However, this ambiguity was not immediately apparent. When the Governing Council first announced its definition of price stability in October 1998, for example, the 2% ceiling captured the most attention, followed by the absence of a lower bound. “Price stability,” the announcement read, “shall be defined as a year-on-year increase in the Harmonized Index of Consumer Prices (HICP) for the euro area of below 2%”. [4] The qualifications that followed this statement proved to be more important to how the Governing Council conducted monetary policy in practice. Although the statement referred to year-on-year price movements, the rest of the announcement made it clear that the policy goal was to influence medium-term expectations, that the relevant measure was the aggregate across the euro area and that the Governing Council would rely on developments in monetary aggregates and macroeconomic performance to shape its decisions using a reaction function that would evolve over time.

Moreover, each time the Governing Council changed its specification of price stability, these qualifications became more important to the conduct of monetary policy. The Governing Council progressively widened the gap in its scheduled policy deliberations to allow more time for relevant changes in macroeconomic and monetary conditions. It

also abandoned the practice of announcing the reference point for measuring the growth of monetary aggregates; strengthened the lower bound for price movements by adding that annual aggregate inflation should be less than but close to 2%; established the medium-term as a five-to-ten year time horizon; and began to talk about the dispersion of national inflation rates (and the importance of some kind of conditional convergence across participating countries). [5] Finally, the Governing Council made it clear that the relevant expectations should operate without the influence of monetary accommodation; in other words, price stability only exists if prices remain stable without the support of the ECB. As Draghi explained in December 2017, “The issue here is more how strong is the convergence path towards a self-sustained and sustainable inflation rate which is close to but below 2% in the medium term”. [6]

These qualifications often make it difficult for market participants to anticipate where the Governing Council stands on its policy objective, even when the ECB’s estimates for current and expected aggregate inflation are known. This is why the ECB’s communication strategy is so important—it helps to cut through ambiguity both in terms of how the Governing Council sees current conditions and how it expects to react to underlying and expected developments. The ‘chained guidance’ on how the Governing Council expects to unwind its unconventional monetary stance is a case in point. [7] ECB President Mario Draghi has explained repeatedly how and when different policy decisions will be taken and under what conditions they will be implemented. The message received in the markets nevertheless remains vague in important respects.

### **One currency, different perspectives**

The diversity of the countries that have adopted the euro as a common currency adds to the ambiguity surrounding price stability.

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This is not so much a standard critique of a one-size-fits-all monetary policy, but rather an acknowledgement that the way market participants perceive the ECB and interpret its actions on monetary policy tends to differ from one national context to the next. Some of these differences emerge from competing policy traditions or paradigms. While the German economic community accepts the existence of downward wage and price stickiness, for example, it has little confidence in the existence of an exploitable Phillips Curve that would allow policymakers to trade inflation for unemployment. Instead, German economists pay more attention to the way wage bargaining institutions tend to institutionalise expectations. Hence, the Bundesbank has a long tradition of monetary targeting with the goal of establishing credibility among wage negotiators. The traditions of monetary thought and policymaking are very different in France, where Keynesian-style aggregate demand management has been more prominent. [8] The two policy rules used by the ECB encompass both interpretations.

Differences in national institutional arrangements also create differences through a form of 'bounded rationality'. Labour markets provide an obvious illustration. The German pattern of monetary policymaking works well when labour market institutions promote coordinated wage bargaining, but is less effective in encouraging price stability when wage negotiations are less coordinated and more conflicting (Hall, 1994). A similar point applies to financial markets. Where firms rely on patient capital from longer-term investors or stable bank-firm relations, it is easier for policymakers to focus on the evolution of large monetary aggregates; where firms rely on alternative sources of financing and where firm-bank relations are more flexible or arm's length, the influence of monetary policy is not

the same (see, for example, the introduction to Hall and Soskice, 2001).

A third difference is behavioural and reflects what central bankers refer to as 'Goodhart's Law', after the British economist and central banker Charles Goodhart. What Goodhart observed is that macroeconomic relationships cease to have predictive value once their use as policy instruments is known to market participants, who immediately build their reactions to movements in key variables into how they formulate their expectations. [9] In practice, Goodhart argued that by targeting price stability using a monetary rule, the ECB effectively reduced the usefulness of that monetary rule in predicting the rate of inflation. The assumption underpinning Goodhart's Law is that market participants all focus on the same thing. However, given different policy traditions or ideas and different institutional contexts, it is more likely that market participants across the euro area will be looking at different facets of what the Governing Council is doing. As a result, the expectations in different parts of the euro area do not rest on the same calculations, and perceptions of the direction of monetary policy should be expected to diverge. [10]

These differences in perspective are less significant when European financial markets are tightly integrated, and large market participants can influence financial conditions across the monetary union. In such a context, the standard critique that the ECB conducted a one-size-fits-all monetary policy that was not appropriate anywhere did not really apply (see Jones, 2009a). It was true of course that local conditions varied and that even a well-functioning monetary transmission mechanism worked differently from one country to the next (and depending on the finance structure). Nevertheless, the Governing Council succeeded in bringing

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the monetary economy of the euro area closer together and creating a sense of unity with diversity for euro member states (which is what made the ambiguity in the definition of price stability ‘constructive’).

When European financial markets disintegrated during the crisis and the monetary transmission mechanism was impaired, these differences in perception became more important. The Governing Council lost influence over monetary conditions in different parts of the euro area and perceptions of the role of the ECB diverged (see Jones, 2009b). Moreover, despite the efforts of the Governing Council to repair the monetary transmission mechanism and encourage the (re-)integration of European financial markets, this divergence remains significant. The same policy stance relative to the same macroeconomic aggregates is interpreted differently across participating countries.

## Conclusions

The ECB may not be able to completely eliminate the ambiguity around price stability. Given that the concept has too many necessary qualifications and perceptions of what the Governing Council is and should be doing, it will always vary depending on the local institutional context. The ECB’s forward guidance should also therefore be subject to challenge and interpretation.

Nevertheless, it is possible for the Governing Council to reduce this cognitive dissonance by promoting financial market integration within the euro area, encouraging market-structure convergence, and constructing a narrative to explain how prices can be stable for the euro area as a whole despite obvious differences in inflation rates from one country to the next. Unsurprisingly, this is exactly what the members of the ECB Executive Board have been doing in their many speeches, press conferences and other forms of public outreach. By advocating monetary integration, they seek to improve the functioning of Europe’s economic and monetary union and strengthen their forward guidance on monetary policymaking. While they may not be able to eliminate all ambiguity, their efforts

to construct a more cohesive monetary union can improve the effectiveness of the ECB’s monetary policymaking, both in perception and reality.

## Notes

- [1] This press conference took place on December 13<sup>th</sup>, 2018. The transcript can be found here: <https://www.ecb.europa.eu/press/pressconf/2018/html/ecb.is181213.en.html>
- [2] The actual draw down started in January 2018; the announcement was made in October 2017. The transcript of that announcement can be found here: <https://www.ecb.europa.eu/press/pressconf/2017/html/ecb.is171026.en.html>
- [3] See Article 2 of the Statute of the ECB, the full text of which can be found here: [https://www.ecb.europa.eu/ecb/legal/pdf/c\\_32620121026en\\_protocol\\_4.pdf](https://www.ecb.europa.eu/ecb/legal/pdf/c_32620121026en_protocol_4.pdf)
- [4] This announcement was made at the October 13<sup>th</sup>, 1998, press conference, the transcript for which can be found here: <https://www.ecb.europa.eu/press/pressconf/1998/html/is981013.en.html>
- [5] The most important revision took place in May 2003 and is captured in a press seminar on the ECB’s evaluation of its monetary policy that can be found here: [https://www.ecb.europa.eu/press/pressconf/2003/html/is030508\\_1.en.html](https://www.ecb.europa.eu/press/pressconf/2003/html/is030508_1.en.html)
- [6] The question was whether 1.7 percent was ‘close to’ 2 percent. The press conference took place on December 14<sup>th</sup>, 2017, and can be found here: <https://www.ecb.europa.eu/press/pressconf/2017/html/ecb.is171214.en.html>
- [7] The phrase ‘chained guidance’ comes from the minutes of the December 2018 policy meeting and can be found here: <https://www.ecb.europa.eu/press/accounts/2019/html/ecb.mg190110.en.html>
- [8] For an extended treatment of this comparison, see Brunnermeier, James and Landau (2016).
- [9] Goodhart used this critique to challenge the role of monetary aggregates in the ECB’s policy framework. See Goodhart (2006).
- [10] Goodhart argues that in such situations monetary policy becomes more effective (even

if less well anticipated by market participants): It is a corollary of Goodhart's Law that variables that become the cynosure of policy lose their predictive value, whereas variables that are no longer treated as policy measures may regain predictive value.' See Goodhart, 'The ECB and the Conduct of Monetary Policy, p. 771.

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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)

## **Royal Decree-law on payment services and other urgent financial matters (Spanish Royal Decree-Law 19/2018, published in the *Official State Journal* on November 24<sup>th</sup>, 2018)**

Royal Decree-law 19/2018 partially transposes Directive (EU) 2015/2366 (PSD2) and introduces changes to several financial regulations to adapt them for the provisions stipulated in this new piece of legislation and other European regulations. It took effect the day after its publications, with the exception of certain provisions, which will take effect later. This Royal Decree-law has the effect of repealing Spain's payment services act.

The most significant aspects in relation to payment services are:

- The regulation of payment initiation and account information services. Both services imply third-party access to the accounts of payment service users.
- Contracts already entered into will remain valid, without prejudice to the application of provisions that are more favourable for consumers and micro-enterprises.
- Under certain circumstances, such as when the user is neither a consumer nor a micro-enterprise, the parties may agree not to apply certain provisions regarding transparency, information, rights and obligations.
- The establishment of the requirements applicable in the area of transparency and information vis-a-vis payment service users and the regulation of the termination of framework contracts and changes in their conditions.
- Specification of the rights and obligations in relation to the provision and use of payment services, notable among which: (i) the delimitation of payment transaction authorisation; consent to execute and withdrawal of consent and confirmation of the availability of funds; (ii) fine-tuning of the treatment and transfer of data to align with the General Data Protection Regulation (GDPR); and, (iii) the requirement that payment service providers establish a framework with mitigation measures and control mechanisms to manage the operational and security risks as well as a customer attention service for the management of user incidents.

Among the changes implied for other pieces of legislation, the following stand out:

- Spanish law has been adapted for the Regulation on money market funds by amending Spanish Law 35/2003 on Collective Investment Undertakings.
- Spanish Law 10/2014 on the regulation, supervision and solvency of credit institutions has been amended to: (i) clarify the treatment of the Spanish branches of institutions of another Member State; (ii) ensure the adequate exchange of information between the Bank of Spain and the competent authorities; (iii) adapt the penalty regime for payment service activities; and, (iv) set up a channel for reporting infractions to the Bank of Spain.
- Spanish Law 11/2015 on the restructuring and resolution of credit institutions and investment service firms empowers the Fund for Orderly Bank Restructuring (FROB for its acronym in Spanish) to collect ordinary contributions from the Spanish

branches of entities domiciled outside of the EU and clarifies its powers as the competent bank resolution authority.

- Spain's Corporate Enterprises Act has been amended to exonerate banks from having to apply the right of separation of a shareholder in the event of not paying a dividend. The idea is to guarantee the ability to protect these entities' solvency.
- The measures contemplated in the regulations on indices used as benchmark, market abuse, packaged retail and insurance-based investment products (PRIIPs) and securities financing transactions have been added to the Securities Market Act. Among other things, the penalty regime has been adapted and the CNMV, Spain's securities market regulator, has been designated as the competent authority. Lastly, changes have been made to the client suitability assessment to factor in the requirement to be knowledgeable about their investment experience.

### **Organic Law on Data Protection and Digital Rights (Spanish Organic Law 3/2018, published in the *Official State Journal* on December 6<sup>th</sup>, 2018)**

Organic Law 3/2018, of December 5<sup>th</sup>, 2018, on the protection of personal data and guarantee of digital rights adapts Spanish legislation for the provisions of Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27<sup>th</sup>, 2016, (GDPR) and ensures its citizens' digital rights. It took effect the day after its publication. The following aspects of the new regulation are worth highlighting:

- It implements the data subject right of access and rights to rectification, erasure, restriction of processing, portability and object.
- The tacit consent concept has been eliminated; data subjects must provide explicit, affirmative consent. To give consent, data subjects must be aged 14 or over.

- As for the handling of data of deceased persons, their heirs can request access to or the rectification or erasure of their data, unless expressly prohibited from doing so by the deceased person; executors can also follow the deceased person's instructions in this respect.
- The regulation continues to ban the storage of special categories of data, such as data related to data subjects' ideology, union affiliations, religion, sexual orientation, *etc.*
- The principle of transparent data processing has been added such that subjects are entitled to be informed as to how their data is to be handled.
- Data controllers are newly required to inform the data subject of the channels they may use to exercise their rights. In addition, data controllers and processors are bound by a confidentiality duty that will complement their professional secrecy obligation, and they must assess the risk of personal data processing upfront. The figure of the data protection officer has been reinforced.
- As for the specific processing of data, the processing of personal data in connection with the breach of money, financial or credit obligations by common credit reporting systems shall be deemed licit, barring evidence to the contrary, when certain requirements are met.
- The regulation establishes the instances requiring prior authorisation (transfer of personal data to international countries or organisations) and those requiring prior notification. The Spanish Data Protection Agency and the regional authorities may adopt standard contractual clauses and binding corporate rules for the international transfer of data.
- It stipulates the procedures to be followed in the event of violation of data protection regulations and the applicable penalty regime, as prescribed in the GDPR.
- Lastly, it regulates citizens' digital rights and freedoms, such as the neutrality of the Internet, universal access to the

Internet, the rights to security and digital education, the right to be forgotten, to data portability, to leave a digital will and to disconnect outside working hours and the protection of minors online.

**Royal Decree-law on macroprudential tools (Spanish Royal Decree-law 22/2018, published in the *Official State Journal* on December 18<sup>th</sup>, 2018)**

Royal Decree-law 22/2018 embodies the recommendations and requirements formulated by various international authorities and organisations, including the IMF, the ESRB and the FSB, regarding the establishment of macroprudential tools. It took effect the day after its publication. This Royal Decree-law has the effect of amending the following pieces of legislation:

- Spanish Law 35/2003 on Collective Investment Undertakings (CIUs or UCITs) and Spanish Law 22/2014 regulating private equity firms, other closed-end collective investment undertakings and the management companies of closed-end collective investment undertakings, in turn amending the above Law 35/2003, have been amended to empower Spain's securities market supervisor, the CNMV, to take measures designed to reinforce the liquidity of CIU portfolios and the entities under their management and, specifically, to increase the percentage of assets that must be invested in particularly liquid assets.
- Spanish Law 10/2014 on the regulation, supervision and solvency of credit institutions has been amended to expand the macroprudential tools available to the Bank of Spain, empowering the latter to:
  - Require the endowment of a countercyclical capital buffer in respect of all the exposures of the entity or group or their exposures in a given sector.
  - Limit the credit institutions' exposure to specific sectors of the economy when they reach levels considered a source of systemic risk.

- Establish limits and conditions for the granting of loans and the acquisition of fixed-income securities and derivatives by credit institutions in operations with the private sector in Spain.

- Spanish Law 20/2015 on the regulation, supervision and solvency of insurance and reinsurance entities has been amended to empower the insurance sector supervisor, the DGSFP, to impose limits on the aggregate exposures of insurance and reinsurance entities to a specific sector or class of assets. It also empowers the regulator to set conditions for the transfer of insurance risks and portfolios by these entities.
- Lastly, the consolidated text of the Spanish Securities Market Act has been amended to empower the CNMV to impose limits on certain activities carried out by the entities under its supervision in order to prevent the build-up of leverage in the private sector that could jeopardise financial stability.

**CNMV Circular amending several circulars regulating the public and regular information reported by CIUs, accounting standards and the annual financial statements and the confidential statements of private equity firms, CIUs and private equity managers and the Spanish branches of European managers (Circular 5/2018, published in the *Official State Journal* on December 26<sup>th</sup>, 2018)**

The aim of this Circular, set to take effect on June 30<sup>th</sup>, 2019, is to enhance the CNMV's oversight practices. The following Circulars have been amended to this end:

- CNMV Circular 7/2008 on the accounting rules, annual financial statements and confidential financial statements of investment service firms, CIU management companies and private equity management companies: the companies that manage closed-end collective investment undertakings must now submit their separate annual financial statements before June 30<sup>th</sup> of the following year. Several

parts of the income statement have also been modified.

- CNMV Circular 11/2008 on the accounting rules, annual financial statements and confidential financial statements of private equity firms: the documentation to be submitted to the CNMV must be sent using electronic channels and the appendix covering the statistical and operational information to be reported by private equity firms has been modified.
- CNMV Circular 4/2008 on the contents of the quarterly, six-monthly and annual reports published by CIUs and the position statement: two notes have been added for clarification purposes regarding remuneration policies and securities financing transactions, the reuse of collateral and total return swaps in relation to the information reported by real estate investment funds. The reporting template for investment funds has also been replaced.
- CNMV Circular 1/2010 on the confidential financial statements of investment service firms: an additional rule has been added with a view to gathering confidential information about the activities performed and the company and contact data for European Community managers operating in Spain through branches.

**Royal Decree implementing the consolidated text of the Securities Market Act, amending other securities market decrees (Spanish Royal Decree 1464/2018, published in the *Official State Journal* on December 28<sup>th</sup>, 2018)**

Royal Decree 1464/2018 finalises the transposition of Directive 2014/65/EU (MiFID II) into Spanish law and rounds out the regulatory implementation of Royal Decree-law 21/2017 and the consolidated text of the Spanish Securities Act, enacted via Royal Decree-law 14/2018. It became effective 20 days after its publication.

This Royal Decree implements several aspects of the investor protection features of the Directive on markets in financial instruments

(MiFID II) with respect to financial products, the organisational requirements of regulated markets, the organisation and corporate governance of investment service firms and securities market security and efficiency.

As for the legal regime governing regulated markets, the Royal Decree details, among other things, the authorisation regime, the governing bodies, the management of member conflicts of interest and the admission to trading of financial instruments.

As for commodity derivatives, it outlines the maximum size of net positions in these derivatives and the corresponding oversight regime. In addition, it regulates the notification of positions, emission allowances and derivatives on emission allowances.

It regulates the figure of data reporting service provider, outlining the terms and conditions applicable to the Approved Publication Arrangements (APAs), the Consolidated Tape Providers (CTPs) and the Approved Reporting Mechanisms (ARMs).

It has the effect of amending the following regulations:

- Spanish Royal Decree 948/2001, on investor indemnification systems. The consolidated text of the Securities Market Act has been amended as a result of the modifications introduced via Royal Decree-law 14/2018.
- The Regulation implementing Law 35/2003, on collective investment undertakings, approved by Royal Decree 1082/2012: amended to reflect the MiFID II provisions regarding the fees that can be charged for financial research services.
- The scope of application of Royal Decree 1310/2005 (which partially implemented the Securities Market Act) on the admission to trading of securities on official secondary exchanges and the prospectuses required to this end has been amended to eliminate the references to public offerings or the subscription of financial agreements for the shares of the former cajas or savings banks and of the Spanish Confederation of Savings Banks (CECA).



- The changes made to Royal Decree 217/2008, on the legal regime governing investment service firms and other entities that provide investment services notably include the following:
  - Implementation of the legal regime governing investment service firms (authorisation, activity, organisational and corporate governance requirements, customer asset protection, cross-border operations, product oversight and control, incentives and information obligations vis-a-vis existing and prospective clients, *etc.*).
  - Implementation of aspects relating to the inducement and retrocession regime in the provision of non-independent advice, independent advice and research by a third party.
  - Establishment of the information that must be provided to existing and prospective clients in relation to the entity that is to provide the investment services, client categorisation, investment products and related costs and charges.
  - Investment service providers that designate agents are banned from establishing tiered remuneration schemes tied to multi-level sales targets to reduce the risk of mis-selling.
  - To safeguard client assets, investment service providers must enter into agreements with third parties providing for the arrangement of the transfer of custodied financial instruments in the event that they encounter financial difficulties.
  - Establishment of new control measures and procedures for authorising the use of clients' financial instruments (*e.g.*, express, signed consent from the client).
  - Introduction of product supervision and control obligations for investment service firms that produce financial instruments and the corresponding obligations

for investment product and service distributors.

- Investment service firms must designate a single person responsible for the firms' compliance with their obligations in respect of the safe-guarding of their clients' financial instruments and funds.
- Lastly, Royal Decree 878/2015 on the clearance, settlement and record-keeping of marketable securities represented via book entries has been adapted to reflect the novelties introduced by MiFID II with respect to trading venues.

**Bank of Spain Circular amending the Accounting Circular and the Risk Information Register Circular (Circular 2/2018, published in the Official State Journal on December 28<sup>th</sup>, 2018)**

The purpose of this Circular is to adapt the accounting regime applicable to Spanish banks to accommodate the changes deriving from the adoption of IFRS 16 – Leases. It took effect on January 1<sup>st</sup>, 2019, except for certain provisions that took effect on December 31<sup>st</sup>, 2018.

The changes in the Accounting Circular relate mainly to the following aspects:

- The lease accounting treatment has been adapted to reflect the criteria set down in IFRS 16. As a result, lessees will no longer distinguish between operating and finance leases but will rather recognise all leases on their balance sheets, specifically recognising a lease liability and the corresponding right-of-use asset. However, lease agreements with an initial term of 12 months or less and leases of low value may continue to be treated in the same manner as operating leases had been accounted for (lease expense recognised in the income statement on a straight-line basis over the term of the lease or using whatever accrual criterion is most representative of the use of the economic benefits of the leased asset). Lessors, meanwhile, will continue to distinguish between operating and finance leases.

The accounting treatment of sale-and-leaseback arrangements has been adapted for the new lease accounting framework.

- The public balance sheet templates (separate and consolidated), the rules for the preparation of public balance sheets and income statements and the associated required notes disclosures have been modified accordingly. Certain adjustments have also been made to the confidential separate and consolidated statement templates.
- Annex 9 has been modified to stipulate that the transactions included in a special debt sustainability agreement that do not yet have to be reclassified as non-performing be identified as refinancing, refinanced or restructured transactions. These new criteria will not apply to transactions performed before effectiveness of the Circular, applying only to those agreed by the banks from January 1<sup>st</sup>, 2019.
- As for the first-time application of the new lease accounting criteria, entities have the choice of applying the new standard via full retrospective restatement or availing of a modified retrospective approach with transition relief. Lessees will not have to make any restatements as at January 1<sup>st</sup>, 2019.

The modifications made to the Risk Information Register Circular are designed to remedy errors and introduce clarifications and improvements identified during its application, paving the way for a better fit with the information required under the AnaCredit Regulation.

**Law amending the Spanish Code of Commerce, the consolidated text of the Corporate Enterprises Act enacted via Royal-Legislative Decree 1/2010 and the Audit Act (Law 22/2015) in respect of non-financial and diversity disclosures (Spanish Law 11/2018, published in the *Official State Journal* on December 29<sup>th</sup>, 2018)**

This law, which took effect the day after its publication, transposes Directive 2014/95/

EU of the European Parliament and of the Council, of October 22<sup>nd</sup>, 2014, amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups. To this end, a number of regulations have been modified, notable among which:

- The Code of Commerce: adding the obligation on the part of companies required to issue consolidated financial statements to include in their management reports a consolidated non-financial statement when the following circumstances are met: (i) the average number of people employed by the group companies during the year was over 500; and, (ii) they are either considered public interest entities; or during two consecutive years met, at each year-end, at least two of the following circumstances:
  - Total consolidated assets of over 20 million euros.
  - Consolidated annual revenue of over 40 million euros.
  - An average headcount during the year of more than 250 employees.

This new non-financial statement must include the information necessary for an understanding of the group's development, performance, position and of the impact of its activity relating to, environmental and social matters, among others. The statement may also be included in a separate report.

- Consolidated text of Spain's Corporate Enterprises Act, enacted via Royal-Legislative Decree 1/2010: the changes made introduce the obligation that the enterprises so required include a non-financial report in their management reports or draw up a separate report, insofar as the requirements stipulated in the Code of Commerce are met.

Elsewhere, the required contents of the annual corporate governance report have been modified to include a description of the 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.

A number of changes have also been made that affect the timing and form of dividend payments, the right of shareholder separation in the event of no dividend payments and the manner in which monetary equity contribution are certified.

- Spain's Auditing Act (Law 22/2015): the amendments made to this act specify the role of the auditor in relation to the non-financial statement and the diversity-related disclosures included by listed companies in their annual corporate governance reports.
- Spanish Law 35/2003 on Collective Investment Undertakings: changes have been made regarding the information that must be made available to unitholders and shareholders via the corporate website of the investment company or the management company, itemising with respect to the penalty regime, the amounts of the fines, how they will be publicly disclosed and how they will be enforced. Other changes include the addition of the possibility of having a broker intervene between the management company and the marketing entity in sales and marketing activities and the introduction of the requirement that management companies set up internal whistle-blowing channels for their employees.

Three years after effectiveness of this new law, all enterprises with over 250 employees (i) considered Public Interest Entities (except for those qualifying as small- and medium-sized enterprises), or (ii) those that, for two years in a row, as at each year-end, report total assets of over 20 million euros and/or total annual revenue of over 40 million euros, will be obliged to present the consolidated non-financial statement.

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# Spanish economic forecasts panel: January 2019\*

Funcas Economic Trends and Statistics Department

## **The Spanish economy grew by 2.5% in 2018**

The consensus forecast is for GDP growth of 2.5% in 2018, down 0.1pp from the November survey, even though the forecast for fourth-quarter growth is unchanged at 0.6%. The lower forecast is the result of the downward revision of the first-quarter growth figure (Table 2). Domestic demand is expected to contribute 2.9 percentage points and foreign demand to detract from growth by 0.4%, which is 0.1pp less than was estimated in November. The consensus estimate for growth in exports has been cut to 2% and for growth in imports, increased to 3.6%.

## **Growth forecast for 2019: unchanged at 2.2%**

There have been no changes in the average estimate for GDP growth in 2019, even though nine analysts have lowered their forecasts since November. Also unchanged are the estimated contributions by domestic demand (+2.3pp) and foreign trade (-0.1pp). The quarterly forecasts point to stable growth of around 0.5% throughout the year (Table 2).

## **The 2019 inflation forecast has been cut**

In 2018, the annual rate of inflation averaged 1.7%, compared to 2% the previous year. The reduction was shaped primarily by a slowdown in growth in energy prices, despite the fact that the price of a barrel of Brent oil went up by 30% (25% in euros) compared to 2017.

The drop in oil prices in December drove the year-on-year rate of inflation to 1.2%, which was lower than forecast, prompting analysts to trim their forecast for average inflation in 2019 by 0.1pp to 1.5%. The forecast for core inflation is unchanged at 1.2%. The forecasts imply a year-on-year inflation rate in December 2019 of 1.5% (Table 3).

## **The unemployment rate continues to trend lower**

In terms of full-time equivalent jobs, the growth in 2018 is estimated at 2.5% (up 0.1pp from the

forecast gleaned from the November Panel) and is expected to slow to 1.9% in 2019 (down 0.1pp from the last set of forecasts).

Using the forecasts for growth in GDP, job creation and wage compensation yields implied forecasts for growth in productivity and unit labour costs (ULC): the former registered growth of 0% in 2018 and is expected to increase by 0.3% in 2019, while ULCs increased by 1% in 2018 and are expected to increase a further 1.4% in 2019.

The unemployment rate is expected to fall to 15.3% in 2018 and to 13.8% in 2019 (no change from the last Panel).

## **Narrowing external surplus**

The current account surplus stood at 3.7 billion euros to October, compared to 12.9 billion euros in the same period of 2017. That significant decline is attributable to the increase in the deficit in the balance of trade in goods, in turn shaped by the increase in oil prices in 2018. The surplus in the balance of trade in services narrowed slightly, due mainly to non-tourism services, while the deficit in rents has registered a small decline.

The consensus forecast is for a surplus equivalent to 1% of GDP in 2018 and of 0.9% in 2019, both of which have been revised downwards since the November survey.

## **Spain expected to deliver its public deficit target in 2018 but not in 2019**

In the first 10 months of the year, the deficit at all levels of government except for the local corporations stood at 12.9 billion euros, down from 20.2 billion euros at the same juncture of 2017, thanks to faster growth in revenue (+6.8%) relative to spending (+4.3%). The improvement came at the state and regional government levels (with the regional governments recording a fiscal surplus on the whole). The Social Security funds managed to reduce their deficit slightly thanks to transfers from the state government and momentum in contributions (increase in bases and growth in

contributor numbers). The growth in contributions offset the growth in benefits paid and drove a small overall decrease in the system's deficit of 500 million euros.

A majority of analysts believe Spain will meet its target deficit in 2018. However, the consensus forecast is for a deficit of 2.2% of GDP in 2019, which is 0.9pp above the target laid down in the draft general state budget (note that the state budget was presented after the forecasts presented here were compiled). That marks a 0.1pp deterioration with respect to the November forecasts.

### **Sharp deterioration in the international environment**

Recent indicators point to a sharper downturn in global growth than was anticipated in November. Protectionist measures are taking a toll on international trade and hurting the economies more dependent on exports, such as China, in particular. In its *World Economic Outlook Update* of January, the IMF forecasts global growth of 3.5%, which is down 0.2pp from its previous update in October (which had in turn been trimmed by 0.2pp compared to April).

The slowdown is expected to be even more pronounced in the European economy, in part due to its exposure to international trade. The IMF is forecasting growth in the eurozone of 1.6%, which is down 0.3pp from its October forecast. The German manufacturing industry appears to be being hit particularly hard by the global turbulence, contributing to a slump in that economy's growth in the latter part of the year. The European economy is also exposed to specific factors besides the impact of the deterioration in international trade. The French economy is feeling the pinch from the *gilets jaunes* movement, while the Italian economy is on the verge of recession as a result of the increase in public and private sector borrowing costs. Lastly the British Parliament's rejection of the agreement the government negotiated with the EU has done nothing to dissipate uncertainty about how Brexit will materialise.

The downturn in the international context is evident in the survey responses. The number of analysts who see the international context –in the EU and beyond– as unfavourable has increased. Just one analyst sees the environment in the EU

as favourable (*versus* three in the last survey) and three view the situation outside of Europe as favourable (down from four). In addition, a wide majority believes that the current trend will persist or even deteriorate in the coming months.

### **Monetary policy remains expansionary**

The ECB has signalled its intention to roll back its monetary stimuli more gradually than initially anticipated. Europe's central bank stopped buying back sovereign bonds at the start of the year. Now it is only reinvesting principal from bonds that mature. However, the fresh drop in inflation, in tandem with a weakening economy, is warding off the likelihood of benchmark rate hikes. Indeed, the market is pricing in persistently low interest rates. 12-month Euribor remains in negative territory (-0.129% in December *vs.* -0.147% at the time of the last report). In addition, if the circumstances warrant, the ECB could inject liquidity by means of a new round of long-term refinancing operations (TLTRO) or another non-conventional instrument.

The analysts' forecasts similarly reflect this gradual normalisation of monetary policy. The consensus is that the ECB will not raise its benchmark rate before the third quarter (unchanged). Euribor is expected to trend in line with benchmark rates. Euribor is now expected to be trading at 0.14% by the end of the year, 0.05pp down from the last survey. The yield on 10-year sovereign bonds is forecast at 1.86% (unchanged).

### **Slight euro appreciation forecast**

The euro has stabilised against the dollar at around 1.14, which is below the average of recent years. The continued spread between interest rates in the US and Europe, which in turn reflects the two economies' fortunes, may be responsible for this trend. A majority of analysts believe that the euro may make up some of the ground lost in recent quarters over the course of 2019; this prognosis is unchanged from November.

### **No changes in analysts' take on macroeconomic policy**

Most analysts continue to view monetary policy as expansionary and believe that that is the correct stance in the current environment. The analysts

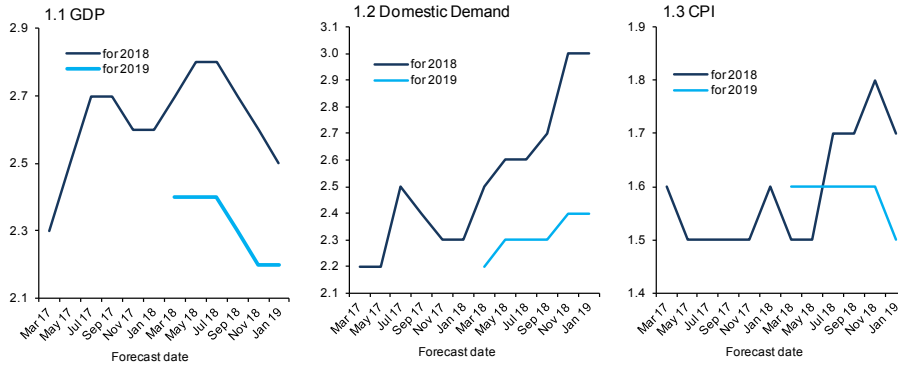
are more divided on fiscal policy. Most view it as expansionary. However, while 11 analysts believe it should be neutral, seven would like to

see counter-cyclical tightening. Those opinions have not changed substantially since the last set of forecasts.

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 18 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 18 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 2019\*

Funcas Economic Trends and Statistics Department

Table 1

## Economic Forecasts for Spain – January 2019

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

	GDP		Household consumption		Public consumption		Gross fixed capital formation		GFCF machinery and capital goods		GFCF construction		Domestic demand	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
Analistas Financieros Internacionales (AFI)	2.6	2.3	2.3	1.9	2.3	2.3	5.8	3.8	6.5	3.2	6.0	4.6	3.0	2.3
Axesor	2.5	2.2	2.4	2.4	2.2	3.1	5.5	4.0	6.7	4.4	4.3	1.8	3.1	3.0
Banco Bilbao Vizcaya Argentaria (BBVA)	2.6	2.4	2.4	1.8	2.3	2.3	6.0	5.0	7.9	5.5	6.1	5.0	3.1	2.5
Bankia	2.5	2.2	2.4	2.0	2.0	2.1	5.4	4.3	6.4	5.0	5.6	4.0	3.1	2.6
CaixaBank	2.5	2.1	2.4	1.9	2.0	1.2	5.5	3.7	6.7	4.3	5.7	3.7	3.0	2.2
Cámara de Comercio de España	2.5	2.2	2.4	2.0	2.1	2.1	5.5	4.0	6.9	6.1	5.4	4.2	2.9	2.3
Cemex	2.5	2.3	2.4	2.1	1.8	1.7	5.6	4.8	7.1	5.3	5.7	5.0	2.9	2.5
Centro de Estudios Economía de Madrid (CEEM-URJC)	2.6	2.1	2.3	1.8	2.0	1.8	5.8	3.9	6.7	3.5	6.0	4.5	2.9	2.2
Centro de Predicción Económica (CEPREDE-UAM)	2.6	2.2	2.4	2.2	2.2	2.1	5.4	3.6	6.5	4.5	5.7	3.3	3.2	2.3
CEOE	2.5	2.2	2.4	1.8	2.0	1.9	5.6	4.4	6.8	5.3	5.7	4.1	2.9	2.3
Equipo Económico (Ee)	2.6	2.2	2.3	2.0	1.8	1.7	5.5	4.1	6.0	4.0	5.6	4.4	2.8	2.2
Funcas	2.5	2.1	2.5	2.2	2.1	1.3	5.6	4.0	6.8	3.8	6.0	4.1	3.1	2.4
Instituto Complutense de Análisis Económico (ICAE-UCM)	2.5	2.2	2.4	2.0	2.0	2.0	5.6	4.0	7.4	5.0	5.8	4.0	2.9	2.3
Instituto de Estudios Económicos (IEE)	2.6	2.1	2.4	1.9	2.1	2.1	6.0	5.1	7.8	5.8	6.0	6.3	3.1	2.7
Intermoney	2.5	2.1	2.3	1.8	2.0	1.9	5.5	3.8	6.2	3.4	5.9	4.6	2.9	2.3
Repsol	2.5	2.1	2.4	1.8	2.1	2.1	5.7	4.6	6.7	4.8	6.0	5.1	3.0	2.2
Santander	2.5	2.1	2.4	2.1	2.1	2.1	5.6	3.9	6.7	4.1	5.8	4.0	3.1	2.5
Solchaga Recio & asociados	2.5	2.0	2.4	1.8	2.1	2.0	5.5	4.4	6.5	5.0	6.0	4.8	3.0	2.4
<b>CONSENSUS (AVERAGE)</b>	<b>2.5</b>	<b>2.2</b>	<b>2.4</b>	<b>2.0</b>	<b>2.1</b>	<b>2.0</b>	<b>5.6</b>	<b>4.2</b>	<b>6.8</b>	<b>4.6</b>	<b>5.7</b>	<b>4.3</b>	<b>3.0</b>	<b>2.4</b>
Maximum	2.6	2.4	2.5	2.4	2.3	3.1	6.0	5.1	7.9	6.1	6.1	6.3	3.2	3.0
Minimum	2.5	2.0	2.3	1.8	1.8	1.2	5.4	3.6	6.0	3.2	4.3	1.8	2.8	2.2
Change on 2 months earlier <sup>1</sup>	-0.1	0.0	0.1	0.1	0.1	0.1	0.0	-0.2	0.0	-0.3	0.0	-0.2	0.0	0.0
- Rise <sup>2</sup>	0	0	4	7	6	7	6	2	6	4	5	6	5	4
- Drop <sup>2</sup>	5	9	0	2	5	1	8	9	7	8	9	5	6	4
Change on 6 months earlier <sup>1</sup>	-0.3	-0.2	0.0	0.0	0.5	0.5	1.3	0.1	3.0	0.6	0.8	-0.2	0.4	0.1
Memorandum items:														
Government (January 2019)	2.6	2.2	2.3	1.7	1.9	1.4	5.7	4.4	6.3	5.0	6.0	4.5	--	--
Bank of Spain (December 2018)	2.5	2.2	2.4	1.9	2.1	1.6	6.2	4.7	7.8	5.9	6.1	4.5	--	--
EC (November 2018)	2.6	2.2	2.3	1.8	1.9	1.7	5.4	3.9	6.0	4.1	5.8	4.2	2.8	2.2
IMF (January 2019)	2.5	2.2	--	--	--	--	--	--	--	--	--	--	--	--
OECD (November 2018)	2.6	2.2	2.4	1.8	2.1	1.6	6.1	3.8	--	--	--	--	3.2	2.3

<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 2019**

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

	Exports of goods & services		Imports of goods & services		CPI (annual av.)		Core CPI (annual av.)		Labour costs <sup>3</sup>		Jobs <sup>4</sup>		Unempl. (% labour force)		C/A bal. of payments (% of GDP) <sup>5</sup>		Gen. gov. bal. (% of GDP) <sup>6</sup>	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
Analistas Financieros Internacionales (AFI)	2.2	2.8	3.6	3.2	1.7	1.2	0.9	1.2	1.4	1.6	2.6	2.0	15.3	14.1	1.2	1.0	-2.7	-2.2
Axesor	1.7	0.3	3.5	2.6	1.7	1.1	1.0	1.0	1.2	1.7	2.4	2.0	15.2	13.0	0.9	0.3	-2.6	-2.4
Banco Bilbao Vizcaya Argentaria (BBVA)	2.8	5.7	4.7	6.2	1.8	1.6	--	--	0.9	2.1	2.4	2.1	15.3	13.7	1.4	1.3	-2.8	-2.1
Bankia	2.1	1.8	3.5	2.9	1.7	1.3	0.9	1.1	0.9	1.7	2.5	1.9	15.4	13.9	1.1	0.9	--	--
CaixaBank	2.0	3.3	3.6	3.5	1.7	1.8	1.0	1.2	0.9	2.2	2.5	2.1	15.3	13.6	0.8	0.6	-2.7	-2.0
Cámara de Comercio de España	2.4	3.8	3.4	3.5	1.8	1.8	1.0	1.4	--	--	2.4	1.8	15.4	14.1	1.0	0.9	-2.7	-1.8
Cemex	1.9	1.9	3.4	2.9	1.7	1.5	0.9	1.2	--	--	2.5	1.8	15.2	13.9	1.0	1.0	-2.7	-2.5
Centro de Estudios Economía de Madrid (CEEM-URJC)	2.1	3.1	3.2	3.6	1.8	1.5	0.9	1.0	--	--	2.3	1.9	15.2	13.7	1.1	1.0	-2.7	-2.4
Centro de Predicción Económica (CEPREDE-UAM)	2.0	3.3	3.6	3.6	1.6	1.4	--	--	0.9	1.3	2.5	1.8	15.3	13.7	0.6	0.8	-2.7	-2.1
CEOE	2.0	1.6	3.6	2.3	1.7	1.1	0.9	1.0	0.9	1.5	2.5	2.1	15.3	13.6	0.6	0.8	-2.8	-2.5
Equipo Económico (Ee)	2.5	3.1	3.4	3.5	1.7	1.6	1.2	1.3	1.2	1.4	2.5	2.1	15.2	13.8	1.3	1.1	-2.8	-2.6
Funcas	1.9	2.0	3.7	3.1	1.7	1.1	0.9	1.1	1.0	2.1	2.5	1.7	15.3	13.9	0.7	0.6	-2.7	-2.1
Instituto Complutense de Análisis Económico (ICAE-UCM)	1.7	4.0	3.6	4.7	1.8	1.5	1.1	1.4	--	--	2.5	2.1	15.3	13.8	1.5	1.4	-2.8	-2.1
Instituto de Estudios Económicos (IEE)	1.7	1.8	3.6	3.7	1.7	1.6	1.0	0.9	1.0	1.6	2.4	1.9	15.3	14.2	1.5	1.2	-2.7	-2.2
Intermoney	2.0	2.5	3.6	3.0	1.7	1.5	1.0	1.1	--	--	2.4	1.8	15.3	14.0	0.8	0.7	-2.7	-2.2
Repsol	1.9	1.9	3.6	2.7	1.7	1.6	0.9	1.2	1.0	1.6	2.5	2.0	14.9	13.2	0.9	0.9	-2.6	-2.0
Santander	1.8	1.3	3.6	2.4	1.7	1.7	1.0	1.3	1.0	1.3	2.5	1.8	15.4	14.1	1.1	0.8	-2.7	-1.8
Solchaga Recio & asociados	2.0	3.3	3.6	4.2	1.7	1.7	1.0	1.5	--	--	2.5	1.7	15.4	14.2	1.3	1.0	-2.7	-2.3
<b>CONSENSUS (AVERAGE)</b>	<b>2.0</b>	<b>2.6</b>	<b>3.6</b>	<b>3.4</b>	<b>1.7</b>	<b>1.5</b>	<b>1.0</b>	<b>1.2</b>	<b>1.0</b>	<b>1.7</b>	<b>2.5</b>	<b>1.9</b>	<b>15.3</b>	<b>13.8</b>	<b>1.0</b>	<b>0.9</b>	<b>-2.7</b>	<b>-2.2</b>
Maximum	2.8	5.7	4.7	6.2	1.8	1.8	1.2	1.5	1.4	2.2	2.6	2.1	15.4	14.2	1.5	1.4	-2.6	-1.8
Minimum	1.7	0.3	3.2	2.3	1.6	1.1	0.9	0.9	0.9	1.3	2.3	1.7	14.9	13.0	0.6	0.3	-2.8	-2.6
Change on 2 months earlier <sup>1</sup>	-0.2	-0.4	0.2	0.0	-0.1	-0.1	0.0	0.0	0.0	0.1	0.1	-0.1	0.0	0.0	-0.2	-0.1	0.0	-0.1
- Rise <sup>2</sup>	7	3	8	6	0	0	0	2	4	6	4	2	2	4	1	2	1	2
- Drop <sup>2</sup>	5	9	4	6	6	9	3	5	1	1	0	5	2	3	8	6	1	6
Change on 6 months earlier <sup>1</sup>	-2.1	-1.5	-0.3	-0.8	0.0	-0.1	-0.2	-0.2	-0.1	0.2	0.1	-0.1	0.0	0.2	-0.5	-0.5	-0.2	-0.2
Memorandum items:																		
Government (January 2019)	2.4	2.8	3.5	3.1	--	--	--	--	1.0	2.1	2.5	1.8	15.5	14.0	1.1	1.0	-2.7	-1.3
Bank of Spain (December 2018)	1.8	3.4	3.8	4.1	1.8 <sup>(7)</sup>	1.6 <sup>(7)</sup>	1.1 <sup>(8)</sup>	1.5 <sup>(8)</sup>	--	--	2.5	1.6	15.3	14.3	1.0 <sup>(9)</sup>	0.8 <sup>(9)</sup>	-2.7	-2.4
EC (November 2018)	2.6	3.3	3.5	3.5	1.8	1.7	--	--	1.0	2.4	2.4	1.7	15.6	14.4	1.2	1.0	-2.7	-2.1
IMF (January 2019)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OECD (November 2018)	1.6	2.8	3.5	2.9	1.9	1.9	1.2	1.6	1.4	2.0	2.6	2.0	15.3	13.8	1.0	1.0	-2.7	-1.8

<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.<sup>3</sup> Average earnings per full-time equivalent job.<sup>4</sup> In National Accounts terms: full-time equivalent jobs.<sup>5</sup> Current account balance, according to Bank of Spain estimates.<sup>6</sup> Excluding financial entities bail-out expenditures.<sup>7</sup> Harmonized Index of Consumer Prices (HIPC).<sup>8</sup> HIPC excluding energy and food.<sup>9</sup> Net lending position vis-à-vis rest of world.

Table 2

### Quarterly Forecasts – January 2019

	Quarter-on-quarter change (percentage)							
	18-IQ	18-IIQ	18-IIIQ	18-IVQ	19-IQ	19-IIQ	19-IIIQ	19-IVQ
GDP <sup>1</sup>	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
Euribor 1 yr <sup>2</sup>	-0.19	-0.18	-0.17	-0.13	-0.09	-0.04	0.05	0.14
Government bond yield 10 yr <sup>2</sup>	1.34	1.37	1.46	1.43	1.57	1.68	1.76	1.86
ECB main refinancing operations interest rate <sup>2</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.16
Dollar / Euro exchange rate <sup>2</sup>	1.23	1.17	1.17	1.14	1.18	1.17	1.18	1.19

Forecasts in blue.

<sup>1</sup> Qr-on-qr growth rates.

<sup>2</sup> End of period.

Table 3

### CPI Forecasts – January 2019

Monthly change (%)				Year-on-year change (%)	
Dec-18	Jan-19	Feb-19	Mar-19	Dec-18	Dec-19
-0.4	-0.8	0.0	0.3	1.2	1.5

Table 4

### Opinions – January 2019

Number of responses

	Currently			Trend for next six months		
	Favourable	Neutral	Unfavourable	Improving	Unchanged	Worsening
International context: EU	1	11	6	1	11	6
International context: Non-EU	3	8	7	2	10	6
	Is being			Should be		
	Restrictive	Neutral	Expansionary	Restrictive	Neutral	Expansionary
Fiscal policy assessment <sup>1</sup>	0	4	14	7	11	0
Monetary policy assessment <sup>1</sup>	0	1	14	0	8	10

<sup>1</sup> In relation to the current state of the Spanish economy.

# Key Facts

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# Economic Indicators

Table 1

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

Forecasts in yellow

	GDP	Private consumption	Public consumption	Gross fixed capital formation				Equipment & others products	Exports	Imports	Domestic demand (a)	Net exports (a)	
				Total	Construction								
					Total	Housing	Other constructions						
Chain-linked volumes, annual percentage changes													
2011	-1.0	-2.4	-0.3	-6.9	-11.7	-11.7	-13.3	0.9	7.4	-0.8	-3.1	2.1	
2012	-2.9	-3.5	-4.7	-8.6	-12.3	-12.3	-10.3	-3.5	1.1	-6.4	-5.1	2.2	
2013	-1.7	-3.1	-2.1	-3.4	-8.6	-8.6	-10.2	2.8	4.3	-0.5	-3.2	1.5	
2014	1.4	1.5	-0.3	4.7	4.2	4.2	11.3	5.2	4.3	6.6	1.9	-0.5	
2015	3.6	3.0	2.0	6.7	3.6	3.6	-0.9	9.9	4.2	5.4	3.9	-0.3	
2016	3.2	2.9	1.0	2.9	1.1	1.1	7.0	4.7	5.2	2.9	2.4	0.8	
2017	3.0	2.5	1.9	4.8	4.6	4.6	9.0	5.0	5.2	5.6	2.9	0.1	
2018	2.5	2.5	2.1	5.6	6.0	7.3	4.7	5.2	1.9	3.7	3.0	-0.5	
2019	2.1	2.2	1.3	4.0	4.1	5.0	3.1	3.8	2.0	3.1	2.4	-0.3	
2017	I	2.9	2.3	1.2	4.7	3.9	3.9	7.8	5.5	6.1	5.5	2.5	0.4
	II	3.1	2.5	1.7	3.6	4.1	4.1	9.2	3.1	5.4	4.4	2.6	0.5
	III	2.9	2.6	2.0	5.8	5.7	5.7	9.7	5.8	5.4	7.0	3.2	-0.3
	IV	3.1	2.7	2.6	5.2	4.8	4.8	9.2	5.6	4.2	5.4	3.3	-0.2
2018	I	2.8	3.1	2.2	3.8	5.6	5.6	9.3	2.0	3.3	4.4	3.1	-0.2
	II	2.5	2.2	1.9	7.0	6.3	6.3	6.7	7.7	2.3	4.6	3.1	-0.6
	III	2.4	2.1	2.1	5.5	5.5	5.5	6.4	5.4	1.3	2.5	2.8	-0.4
2019	IV	2.4	2.5	2.1	6.2	6.8	6.8	6.9	5.6	0.6	3.1	3.1	-0.7
	I	2.4	2.2	1.7	5.9	5.8	5.8	5.7	6.0	0.8	2.5	2.9	-0.5
	II	2.2	2.6	1.5	3.5	4.4	4.4	5.7	2.7	1.3	2.7	2.6	-0.4
	III	2.1	2.3	1.0	3.4	3.9	3.9	5.0	2.8	2.9	3.6	2.2	-0.2
IV	1.7	1.8	0.9	3.1	2.5	2.5	3.9	3.6	3.0	3.5	1.8	-0.1	
Chain-linked volumes, quarter-on-quarter percentage changes, at annual rate													
2017	I	3.3	2.1	4.3	10.1	4.9	4.9	10.4	15.3	5.5	9.8	4.3	-1.0
	II	3.5	3.4	2.3	-0.6	4.2	4.2	12.1	-5.1	5.2	1.9	2.4	1.2
	III	2.6	3.6	2.6	9.5	7.1	7.1	8.1	12.0	0.5	7.8	4.7	-2.1
	IV	2.9	1.7	1.4	2.3	3.0	3.0	6.5	1.6	5.6	2.3	1.8	1.2
2018	I	2.2	3.6	2.6	4.1	8.0	8.0	10.5	0.4	2.1	5.8	3.3	-1.1
	II	2.3	0.0	1.0	12.3	7.0	7.0	2.1	18.0	1.2	2.7	2.7	-0.4
	III	2.2	3.1	3.4	3.4	4.0	4.0	6.8	2.7	-3.5	-0.6	3.2	-1.0
	IV	2.9	3.2	1.6	5.1	8.2	8.2	8.2	2.0	2.8	4.6	3.2	-0.4
2019	I	2.2	2.4	0.8	3.0	3.9	3.9	5.7	2.0	3.0	3.2	2.2	0.0
	II	1.5	1.9	0.0	2.7	1.4	1.4	2.0	4.1	2.8	3.4	1.6	-0.1
	III	1.7	1.6	1.6	2.7	2.1	2.1	4.1	3.2	2.8	3.2	1.8	-0.1
	IV	1.5	1.2	1.2	3.9	2.5	2.5	3.6	5.3	3.2	4.1	1.7	-0.2
	Current prices (EUR billions)	Percentage of GDP at current 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	3.3	
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	1,081.2	57.9	19.3	19.9	10.0	4.4	5.5	9.9	32.9	30.6	97.7	2.3	
2016	1,118.7	57.5	18.9	19.9	9.9	4.8	5.1	10.1	33.1	30.0	96.8	3.2	
2017	1,166.3	57.5	18.5	20.5	10.3	5.2	5.0	10.2	34.3	31.4	97.1	2.9	
2018	1,207.0	57.9	18.4	21.3	10.8	5.6	5.1	10.5	34.2	32.3	98.1	1.9	
2019	1,252.4	57.7	18.3	21.7	11.0	5.9	5.2	10.7	33.9	32.2	98.2	1.8	

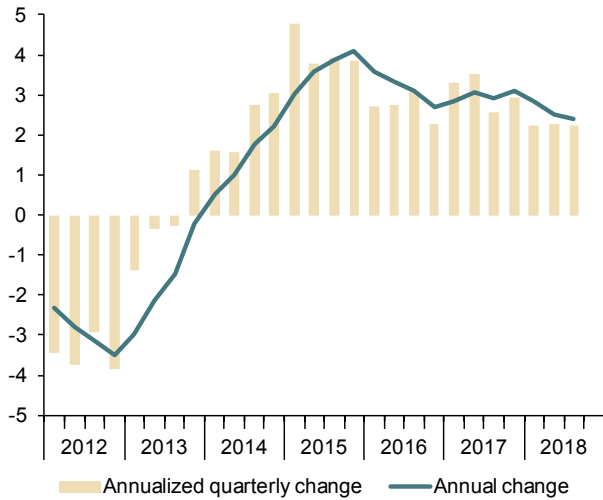
\* Seasonally and Working Day Adjusted.

(a) Contribution to GDP growth.

Source: INE and Funcas (Forecasts).

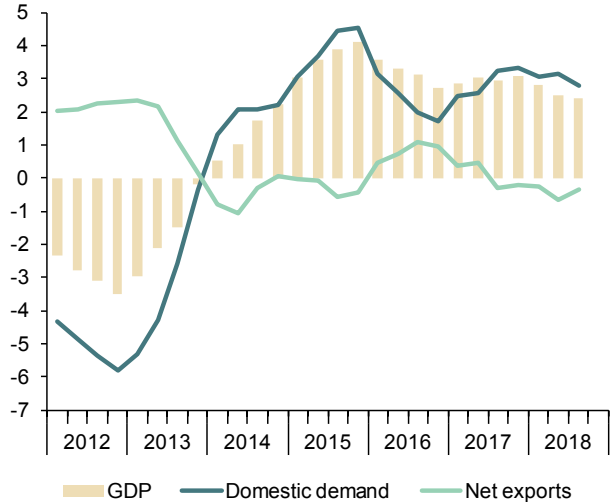
**Chart 1.1 - GDP**

Percentage change



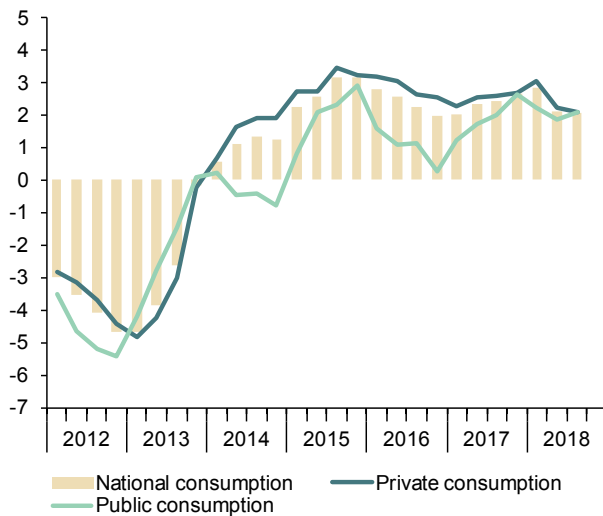
**Chart 1.2 - Contribution to GDP annual growth**

Percentage points



**Chart 1.3 - Final consumption**

Annual percentage change



**Chart 1.4 - Gross fixed capital formation**

Annual percentage change

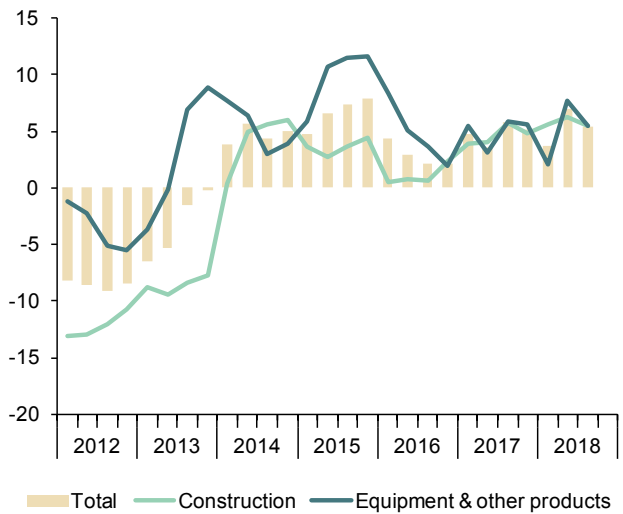


Table 2

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

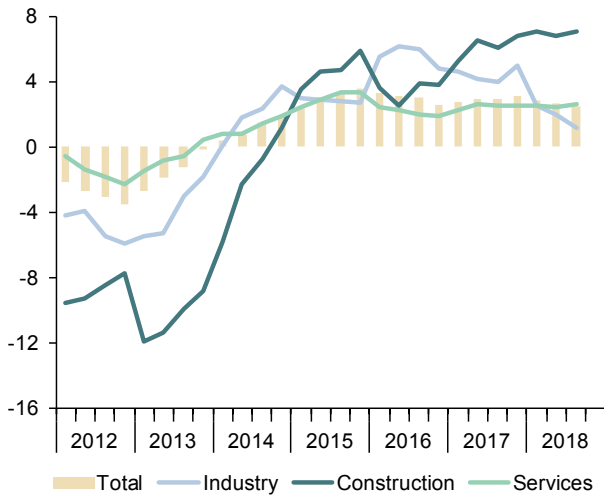
		Gross value added at basic prices								
		Industry				Services				
		Total	Agriculture, forestry and fishing	Total	Manufacturing	Construction	Total	Public administration, health, education	Other services	Taxes less subsidies on products
Chain-linked volumes, annual percentage changes										
2011		-0.6	4.4	-0.2	-1.3	-12.8	0.7	0.9	0.6	-5.5
2012		-2.8	-9.7	-4.9	-5.2	-8.8	-1.5	-1.8	-1.4	-4.0
2013		-1.5	13.6	-3.9	-0.2	-10.5	-0.6	0.1	-0.8	-4.3
2014		1.1	-1.2	2.0	3.0	-2.0	1.3	-0.8	2.0	4.0
2015		3.1	3.6	2.9	4.2	4.7	3.0	1.0	3.7	9.2
2016		3.0	8.2	5.6	4.7	3.5	2.1	1.3	2.4	4.8
2017		2.9	-0.9	4.4	4.4	6.2	2.5	1.7	2.7	3.3
2016	IV	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.8
2017	I	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.4
	II	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	4.2
	III	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.1
	IV	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	2.7
2018	I	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.9
	II	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1.1
	III	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.3
Chain-linked volumes, quarter-on-quarter percentage changes, at annual rate										
2016	IV	2.2	-3.2	2.1	2.0	4.9	2.2	0.2	2.9	3.3
2017	I	3.5	-3.2	8.2	9.1	5.7	2.5	2.1	2.6	1.3
	II	3.2	-2.7	3.4	3.1	8.1	3.0	2.6	3.1	6.8
	III	2.7	6.1	2.5	4.5	5.4	2.4	1.5	2.7	1.1
	IV	3.1	1.8	5.7	4.9	7.9	2.1	2.5	2.0	1.7
2018	I	2.2	3.7	-1.4	-1.5	7.1	2.7	2.1	2.9	2.2
	II	2.6	2.2	1.4	2.2	6.8	2.5	2.0	2.7	-0.6
	III	2.2	-12.8	-0.7	-1.5	6.6	3.2	2.9	3.3	2.0
		Current prices EUR billions)	Percentage of value added at basic prices							
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		981.0	2.9	17.6	13.7	5.7	73.9	18.6	55.3	10.2
2016		1,014.8	3.0	17.6	13.8	5.9	73.6	18.4	55.1	10.2
2017		1,057.5	3.0	18.0	14.2	6.1	72.9	18.0	54.9	10.3

\* Seasonally and Working Day Adjusted.

Source: INE.

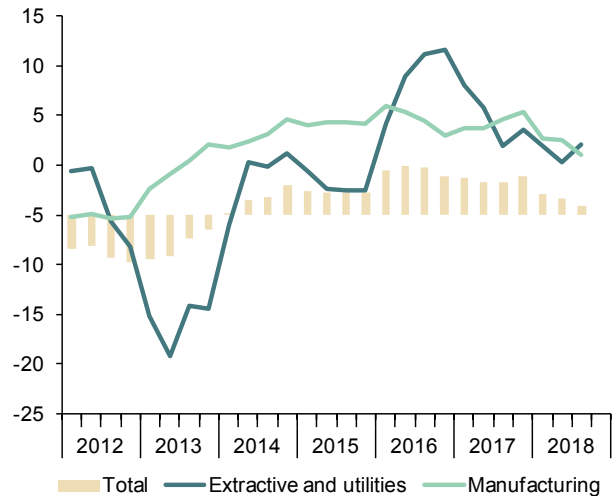
**Chart 2.1 - GVA by sectors**

Annual percentage change



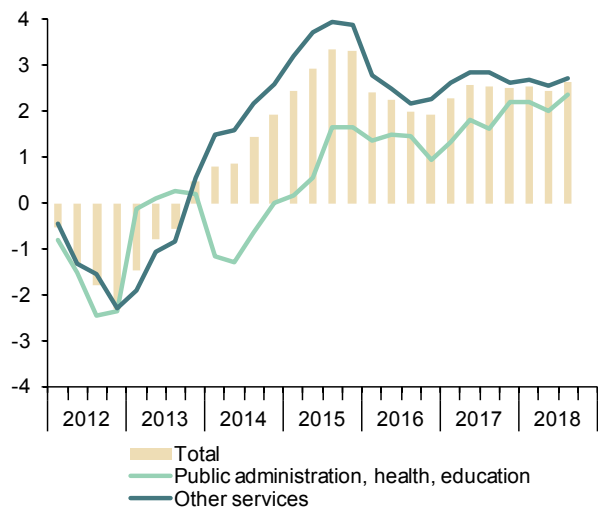
**Chart 2.2 - GVA, Industry**

Annual percentage change



**Chart 2.3 - GVA, services**

Annual percentage change



**Chart 2.4 - GVA, structure by sectors**

Percentage of value added at basic prices

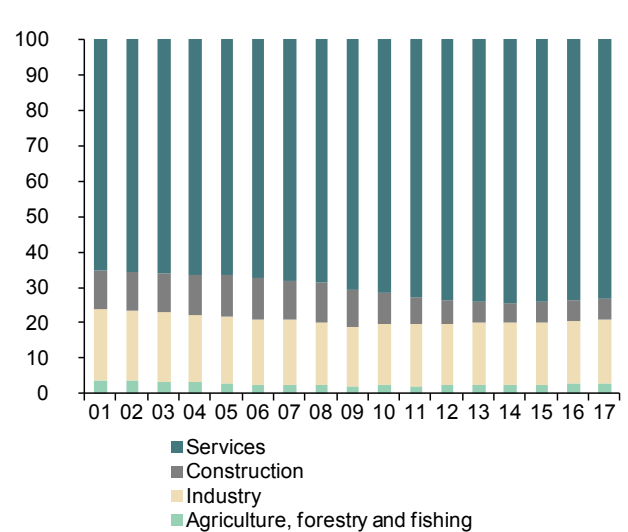




Table 3

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

Forecasts in yellow

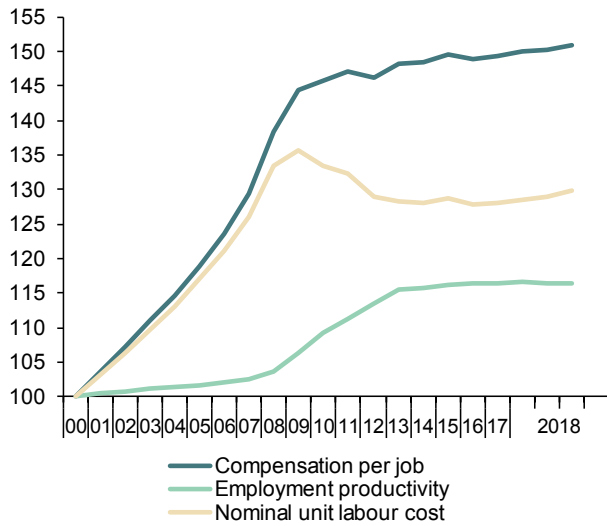
	Total economy						Manufacturing Industry						
	GDP, constant prices	Employment (jobs, full time equivalent)	Employment productivity	Compensation per job	Nominal unit labour cost	Real unit labour cost (a)	Gross value added, constant prices	Employment (jobs, full time equivalent)	Employment productivity	Compensation per job	Nominal unit labour cost	Real unit labour cost (a)	
	1	2	3=1/2	4	5=4/3	6	7	8	9=7/8	10	11=10/9	12	
Indexes, 2010 = 100, SVDA													
2011	99.0	97.2	101.8	100.9	99.1	99.0	98.7	96.2	102.6	102.2	99.6	97.6	
2012	96.1	92.6	103.8	100.3	96.6	96.5	93.6	89.1	105.0	103.9	99.0	96.6	
2013	94.5	89.4	105.7	101.6	96.2	95.7	93.4	84.9	110.0	105.6	96.0	93.7	
2014	95.8	90.3	106.0	101.7	95.9	95.7	96.1	83.8	114.7	106.2	92.6	90.2	
2015	99.3	93.3	106.4	102.6	96.5	95.7	100.2	86.4	116.0	105.9	91.3	89.4	
2016	102.4	96.2	106.5	102.1	95.8	94.8	104.8	90.0	116.5	106.4	91.4	89.8	
2017	105.5	98.9	106.6	102.4	96.0	93.9	109.4	93.5	117.1	107.3	91.7	88.0	
2018	108.1	101.4	106.7	103.4	96.9	93.9	--	--	--	--	--	--	
2019	110.3	103.2	107.0	105.6	98.7	94.0	--	--	--	--	--	--	
2016	IV	103.4	97.1	106.5	102.1	95.8	94.6	105.7	91.4	115.6	106.5	92.2	89.6
2017	I	104.2	97.8	106.6	102.4	96.1	94.6	108.0	92.2	117.1	107.1	91.5	88.9
	II	105.2	98.7	106.6	102.2	95.9	93.8	108.8	93.1	116.9	107.2	91.7	88.1
	III	105.8	99.3	106.5	102.3	96.1	93.8	110.0	93.9	117.2	107.3	91.5	87.6
	IV	106.6	99.8	106.8	102.6	96.1	93.2	111.3	94.7	117.6	107.6	91.5	87.4
2018	I	107.2	100.3	106.8	102.9	96.3	93.8	110.9	95.0	116.7	107.5	92.1	88.2
	II	107.8	101.1	106.6	103.0	96.6	93.7	111.5	95.3	117.0	107.8	92.1	88.0
	III	108.4	101.8	106.5	103.5	97.2	94.1	111.1	94.4	117.7	108.8	92.4	88.0
Annual percentage changes													
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		3.6	3.3	0.3	0.8	0.5	0.0	4.2	3.1	1.1	-0.2	-1.3	-0.9
2016		3.2	3.0	0.1	-0.5	-0.6	-0.9	4.7	4.2	0.4	0.5	0.1	0.5
2017		3.0	2.9	0.1	0.3	0.2	-1.0	4.4	3.8	0.5	0.8	0.3	-2.0
2018		2.5	2.5	0.0	1.0	1.0	0.0	--	--	--	--	--	--
2019		2.1	1.7	0.3	2.1	1.8	0.1	--	--	--	--	--	--
2016	IV	2.7	2.8	-0.1	-0.6	-0.6	-1.3	3.0	4.6	-1.6	0.4	2.0	0.3
2017	I	2.9	2.7	0.2	0.4	0.2	-0.5	3.7	3.9	-0.2	0.8	1.0	-0.7
	II	3.1	2.9	0.1	0.0	-0.1	-1.4	3.7	4.0	-0.3	0.8	1.1	-2.3
	III	2.9	2.9	0.0	0.4	0.4	-0.8	4.6	3.7	0.8	0.6	-0.2	-2.4
	IV	3.1	2.9	0.2	0.5	0.3	-1.5	5.4	3.6	1.7	1.0	-0.7	-2.5
2018	I	2.8	2.6	0.3	0.5	0.3	-0.8	2.7	3.1	-0.3	0.3	0.7	-0.7
	II	2.5	2.5	0.0	0.8	0.8	0.0	2.5	2.3	0.1	0.6	0.4	-0.2
	III	2.4	2.5	-0.1	1.1	1.2	0.3	1.0	0.6	0.4	1.4	1.0	0.4

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

Source: INE and Funcas (Forecasts).

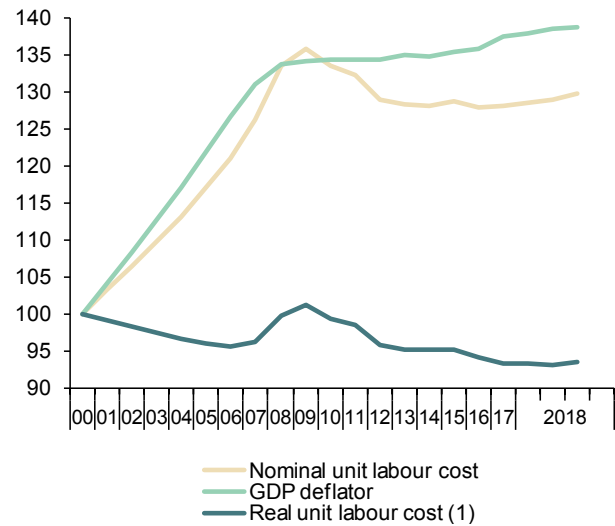
**Chart 3.1 - Nominal ULC, total economy**

Index, 2000=100



**Chart 3.2 - Real ULC, total economy**

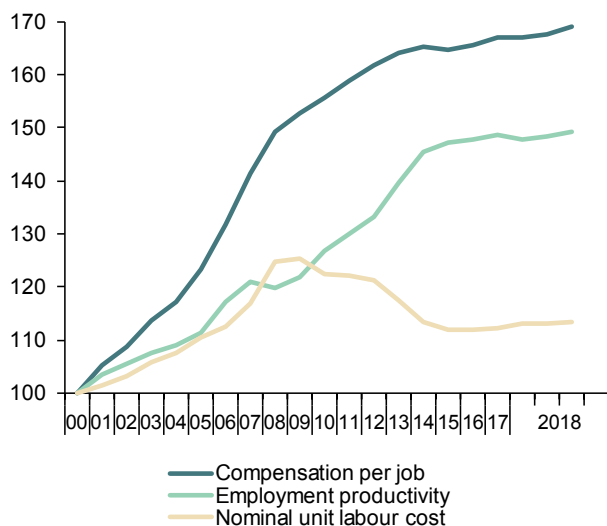
Index, 2000=100



(1) Nominal ULC deflated by GDP deflator.

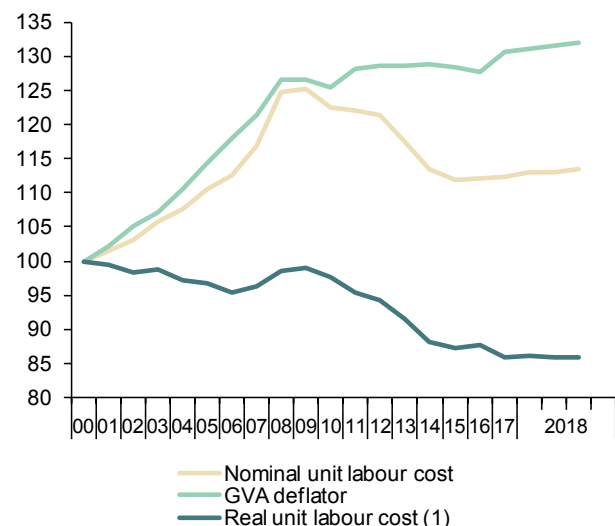
**Chart 3.3 - Nominal ULC, manufacturing industry**

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

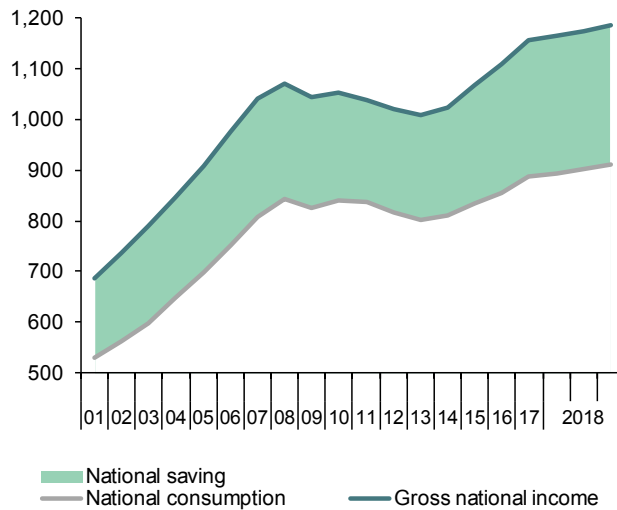
	Gross domestic product	Compensation of employees	Gross operating surplus	Gross national disposable income	Final national consumption	Gross national saving (a)	Gross capital formation	Compensation of employees	Gross operating surplus	Saving rate	Investment rate	Current account balance	Net lending or borrowing
	EUR Billions, 4-quarter cumulated transactions							Percentage of GDP					
2010	1,080.9	541.5	445.8	1,053.1	840.5	212.6	254.5	50.1	41.2	19.7	23.5	-3.9	-3.3
2011	1,070.4	531.0	449.3	1,037.7	838.6	199.2	234.5	49.6	42.0	18.6	21.9	-3.3	-2.9
2012	1,039.8	498.8	446.7	1,019.9	816.6	203.3	207.9	48.0	43.0	19.5	20.0	-0.4	0.1
2013	1,025.7	485.3	440.4	1,007.3	800.4	206.9	191.9	47.3	42.9	20.2	18.7	1.5	2.1
2014	1,037.8	491.6	441.8	1,023.0	810.7	212.2	201.9	47.4	42.6	20.4	19.5	1.0	1.5
2015	1,081.2	514.6	453.5	1,067.4	834.9	232.4	221.0	47.6	41.9	21.5	20.4	1.1	1.7
2016	1,118.7	528.6	475.2	1,107.6	854.8	252.7	228.6	47.2	42.5	22.6	20.4	2.2	2.4
2017	1,166.3	547.3	499.0	1,154.7	886.2	268.6	246.1	46.9	42.8	23.0	21.1	1.9	2.2
2018	1,207.0	567.9	512.6	1,193.0	920.8	272.2	263.9	47.0	42.5	22.6	21.9	0.7	1.0
2019	1,252.4	592.4	526.3	1,237.6	951.5	286.2	278.9	47.3	42.0	22.8	22.3	0.6	0.8
2016 IV	1,118.7	528.6	475.2	1,107.6	854.8	252.7	228.6	47.2	42.5	22.6	20.4	2.2	2.4
2017 I	1,129.7	532.5	480.2	1,119.7	863.8	255.9	232.3	47.1	42.5	22.7	20.6	2.1	2.3
II	1,141.5	536.8	486.1	1,129.7	871.0	258.8	235.7	47.0	42.6	22.7	20.6	2.0	2.2
III	1,152.1	541.7	490.6	1,140.3	878.0	262.3	240.8	47.0	42.6	22.8	20.9	1.9	2.1
IV	1,166.3	547.3	499.0	1,154.7	886.2	268.6	246.1	46.9	42.8	23.0	21.1	1.9	2.2
2018 I	1,176.5	551.9	502.7	1,164.4	893.8	270.6	249.0	46.9	42.7	23.0	21.2	1.8	2.1
II	1,186.3	557.2	504.8	1,174.7	901.3	273.4	255.0	47.0	42.6	23.0	21.5	1.5	1.8
III	1,196.3	563.6	507.3	1,184.8	910.7	274.1	259.9	47.1	42.4	22.9	21.7	1.2	1.5
	Annual percentage changes							Difference from one year ago					
2010	0.2	-1.4	-2.0	0.8	1.7	-2.8	0.0	-0.8	-0.9	-0.6	0.0	-0.6	-0.6
2011	-1.0	-1.9	0.8	-1.5	-0.2	-6.3	-7.9	-0.5	0.7	-1.1	-1.6	0.6	0.5
2012	-2.9	-6.1	-0.6	-1.7	-2.6	2.1	-11.3	-1.6	1.0	0.9	-1.9	2.9	3.0
2013	-1.4	-2.7	-1.4	-1.2	-2.0	1.8	-7.7	-0.7	0.0	0.6	-1.3	1.9	2.0
2014	1.2	1.3	0.3	1.6	1.3	2.6	5.2	0.1	-0.4	0.3	0.7	-0.5	-0.6
2015	4.2	4.7	2.6	4.3	3.0	9.5	9.5	0.2	-0.6	1.0	1.0	0.1	0.2
2016	3.5	2.7	4.8	3.8	2.4	8.7	3.5	-0.3	0.5	1.1	0.0	1.1	0.7
2017	4.3	3.5	5.0	4.3	3.7	6.3	7.7	-0.3	0.3	0.4	0.7	-0.2	-0.2
2018	3.5	3.8	2.7	3.3	3.9	1.4	7.2	0.1	-0.3	-0.5	0.8	-1.2	-1.1
2019	3.8	4.3	2.7	3.7	3.3	5.1	5.7	0.3	-0.4	0.3	0.4	-0.1	-0.2
2016 IV	3.5	2.7	4.8	3.8	2.4	8.7	3.5	-0.3	0.5	1.1	0.0	1.1	0.7
2017 I	3.7	2.8	4.4	3.9	2.9	7.6	3.7	-0.4	0.3	0.8	0.0	0.8	0.4
II	3.7	2.9	4.4	3.8	3.1	6.0	4.0	-0.4	0.3	0.5	0.1	0.4	0.1
III	3.8	3.1	4.2	3.8	3.4	5.4	5.8	-0.3	0.2	0.4	0.4	0.0	-0.3
IV	4.3	3.5	5.0	4.3	3.7	6.3	7.7	-0.3	0.3	0.4	0.7	-0.2	-0.2
2018 I	4.1	3.7	4.7	4.0	3.5	5.7	7.2	-0.2	0.2	0.3	0.6	-0.3	-0.2
II	3.9	3.8	3.9	4.0	3.5	5.7	8.2	-0.1	0.0	0.4	0.8	-0.5	-0.4
III	3.8	4.0	3.4	3.9	3.7	4.5	7.9	0.1	-0.2	0.1	0.8	-0.7	-0.6

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

Source: INE and Funcas (Forecasts).

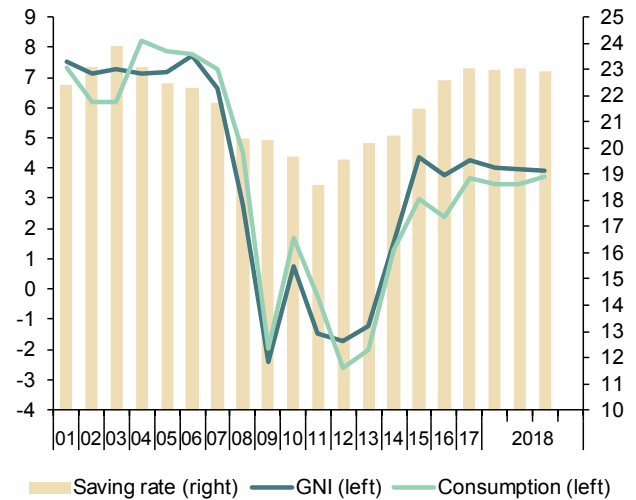
**Chart 4.1 - National income, consumption and saving**

EUR Billions, 4-quarter cumulated



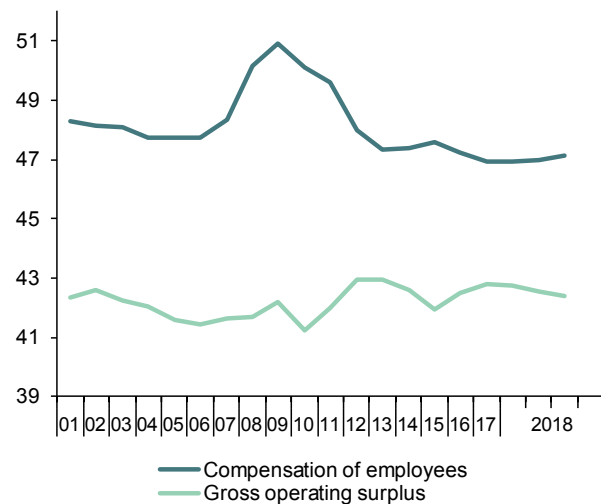
**Chart 4.2 - National income, consumption and saving rate**

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 Current Account Balance**

Percentage of GDP, 4-quarter moving averages

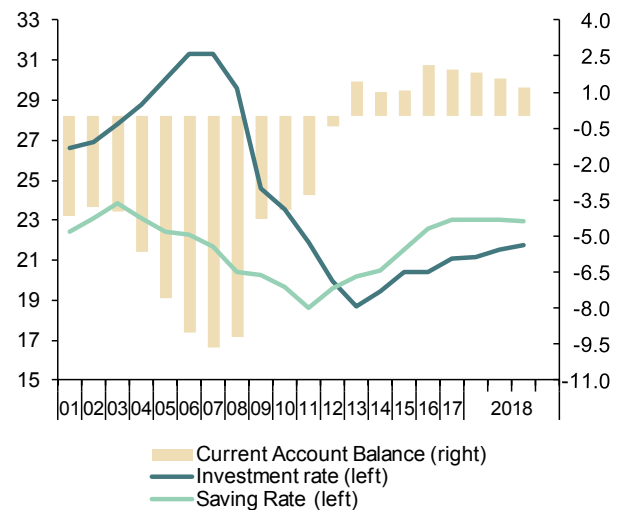


Table 5

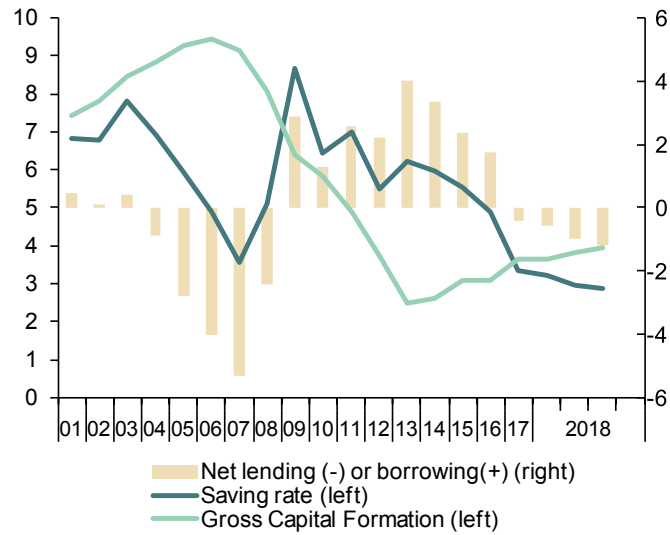
**National accounts: Household and non-financial corporations accounts (ESA 2010, Base 2010)**  
 Forecasts in yellow

	Households							Non-financial corporations					
	Gross disposable income (GDI)	Final consumption expenditure	Gross saving	Gross capital formation	Saving rate	Gross capital formation	Net lending or borrowing	Gross operating surplus	Gross saving	Gross capital formation	Saving rate	Gross capital formation	Net lending or borrowing
	EUR Billions, 4-quarter cumulated operations				Percentage of GDP			EUR Billions, 4-quarter cumulated operations			Percentage of GDP		
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	687.0	626.0	59.6	33.2	8.7	3.1	2.4	246.2	175.9	154.1	16.3	14.3	2.8
2016	699.7	643.6	54.7	34.4	7.8	3.1	1.7	260.6	195.1	167.2	17.4	14.9	3.0
2017	711.2	670.5	39.2	42.4	5.5	3.6	-0.4	278.0	210.4	177.2	18.0	15.2	3.3
2018	730.0	698.6	29.9	47.3	4.1	3.9	-1.4	286.0	216.4	188.6	17.9	15.6	2.8
2019	755.4	722.7	31.2	51.1	4.1	4.1	-1.6	293.8	221.5	198.6	17.7	15.9	2.3
2016 IV	699.7	643.6	54.7	34.4	7.8	3.1	1.7	260.6	195.1	167.2	17.4	14.9	3.0
2017 I	701.2	651.3	48.7	36.8	6.9	3.3	1.0	263.9	200.2	169.4	17.7	15.0	3.3
II	705.4	658.1	46.1	38.0	6.5	3.3	0.6	268.9	201.1	172.7	17.6	15.1	3.0
III	707.3	663.9	42.2	40.1	6.0	3.5	0.0	272.4	202.9	174.3	17.6	15.1	2.9
IV	711.2	670.5	39.2	42.4	5.5	3.6	-0.4	278.0	210.4	177.2	18.0	15.2	3.3
2018 I	716.3	677.1	37.8	43.0	5.3	3.7	-0.6	280.5	211.7	179.2	18.0	15.2	3.2
II	720.1	683.4	35.3	45.2	4.9	3.8	-1.0	281.5	213.4	180.6	18.0	15.2	3.2
III	726.4	690.7	34.4	47.1	4.7	3.9	-1.2	281.6	212.5	185.2	17.8	15.5	2.7
	Annual percentage changes				Difference from one year ago			Annual percentage changes			Difference from one year ago		
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	2.3	2.8	-3.9	23.1	-0.6	0.5	-1.0	3.9	10.8	3.8	1.0	-0.1	1.0
2016	1.8	2.8	-8.3	3.5	-0.9	0.0	-0.6	5.9	10.9	8.5	1.2	0.7	0.2
2017	1.6	4.2	-28.3	23.1	-2.3	0.6	-2.1	6.7	7.8	6.0	0.6	0.2	0.3
2018	2.6	4.2	-23.8	11.6	-1.4	0.3	-1.0	2.9	2.9	6.4	-0.1	0.4	-0.5
2019	3.5	3.4	4.4	8.2	0.0	0.2	-0.2	2.7	2.3	5.3	-0.2	0.2	-0.5
2016 IV	1.8	2.8	-8.3	3.5	-0.9	0.0	-0.6	5.9	10.9	8.5	1.2	0.7	0.2
2017 I	1.6	3.3	-17.5	12.2	-1.6	0.2	-1.4	5.6	10.6	6.9	1.1	0.5	0.5
II	1.6	3.8	-21.5	12.2	-1.9	0.3	-1.6	6.2	7.1	8.1	0.6	0.6	-0.3
III	1.7	4.1	-25.3	18.0	-2.2	0.4	-1.9	5.8	4.6	6.0	0.2	0.3	-0.3
IV	1.6	4.2	-28.3	23.1	-2.3	0.6	-2.1	6.7	7.8	6.0	0.6	0.2	0.3
2018 I	2.1	4.0	-22.4	16.9	-1.7	0.4	-1.6	6.3	5.8	5.8	0.3	0.2	-0.1
II	2.1	3.8	-23.4	18.9	-1.6	0.5	-1.6	4.7	6.1	4.6	0.4	0.1	0.2
III	2.7	4.0	-18.5	17.5	-1.2	0.5	-1.2	3.4	4.7	6.2	0.2	0.4	-0.2

Source: INE and Funcas (Forecasts).

**Chart 5.1 - Households: Net lending or borrowing**

Percentage of GDP, 4-quarter moving averages



**Chart 5.2 - Non-financial corporations: Net lending or borrowing**

Percentage of GDP, 4-quarter moving averages

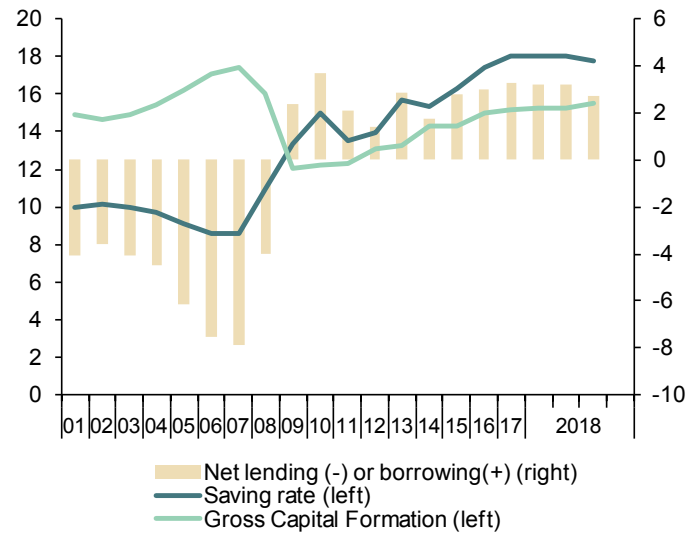


Table 6

**National accounts: Public revenue, expenditure and deficit (ESA 2010, Base 2010)**

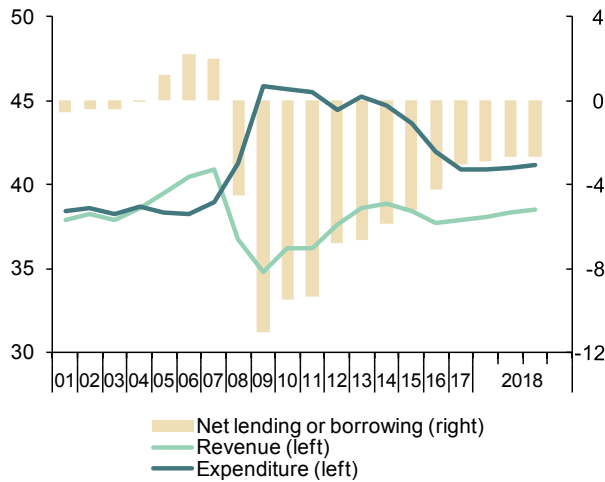
Forecasts in yellow

	Gross value added	Taxes on production and imports receivable	Taxes on income and wealth receivable	Social contributions receivable	Compensation of employees	Interests and other capital incomes payable (net)	Social benefits payable	Subsidies and net current transfers payable	Gross disposable income	Final consumption expenditure	Gross saving	Net capital expenditure	Net lending(+)/ net borrowing(-)	Net lending(+)/ net borrowing (-) excluding financial entities bail-out expenditures
	1	2	3	4	5	6	7	8	9=1+2+3+4-5-6-7-8	10	11=9-10	12	13=11-12	14
EUR Billions, 4-quarter cumulated operations														
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	149.6	129.0	110.9	136.0	121.5	23.1	174.1	20.5	186.4	211.2	-24.8	25.2	-50.0	-47.6
2017	151.7	134.7	118.6	143.1	123.0	22.6	177.7	19.8	204.9	215.7	-10.7	25.2	-35.9	-35.4
2018	155.7	142.0	127.6	150.2	126.7	21.5	186.8	20.7	219.9	222.2	-2.2	30.2	-32.5	-32.2
2019	159.6	149.7	134.5	157.8	130.5	21.4	194.5	21.4	233.8	228.8	5.0	31.8	-26.7	-26.7
2016	IV	149.6	129.0	110.9	136.0	121.5	174.1	20.5	186.4	211.2	-24.8	25.2	-50.0	-47.6
2017	I	150.2	130.9	112.0	137.8	121.9	174.6	19.1	192.3	212.5	-20.2	26.1	-46.3	-43.7
	II	150.0	132.7	115.1	139.5	121.6	175.5	20.0	197.3	212.9	-15.6	25.0	-40.6	-39.7
	III	150.8	134.0	118.7	141.2	122.3	176.3	20.0	203.6	214.1	-10.5	24.9	-35.3	-34.8
	IV	151.7	134.7	118.6	143.1	123.0	177.7	19.8	204.9	215.7	-10.7	25.2	-35.9	-35.4
2018	I	152.3	136.7	120.7	144.5	123.5	178.9	20.6	208.9	216.8	-7.8	26.7	-34.5	-34.2
	II	153.1	138.8	122.5	146.5	124.2	180.1	20.5	214.4	217.9	-3.5	28.2	-31.7	-31.5
	III	154.5	140.0	125.1	148.3	125.5	183.0	20.7	217.1	220.0	-2.9	28.9	-31.8	-31.7
Percentage of GDP, 4-quarter cumulated operations														
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
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
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
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
2015		13.6	11.7	10.1	12.2	11.0	2.3	15.8	2.0	16.7	19.3	-2.6	2.6	-5.3
2016		13.4	11.5	9.9	12.2	10.9	2.1	15.6	1.8	16.7	18.9	-2.2	2.3	-4.5
2017		13.0	11.6	10.2	12.3	10.5	1.9	15.2	1.7	17.6	18.5	-0.9	2.2	-3.1
2018		12.9	11.8	10.6	12.4	10.5	1.8	15.5	1.7	18.2	18.4	-0.2	2.5	-2.7
2019		12.7	12.0	10.7	12.6	10.4	1.7	15.5	1.7	18.7	18.3	0.4	2.5	-2.1
2016	IV	13.4	11.5	9.9	12.2	10.9	2.1	15.6	1.8	16.7	18.9	-2.2	2.3	-4.5
2017	I	13.3	11.6	9.9	12.2	10.8	2.0	15.5	1.7	17.0	18.8	-1.8	2.3	-3.9
	II	13.1	11.6	10.1	12.2	10.7	2.0	15.4	1.8	17.3	18.6	-1.4	2.2	-3.6
	III	13.1	11.6	10.3	12.3	10.6	2.0	15.3	1.7	17.7	18.6	-0.9	2.2	-3.1
	IV	13.0	11.6	10.2	12.3	10.5	1.9	15.2	1.7	17.6	18.5	-0.9	2.2	-3.1
2018	I	12.9	11.6	10.3	12.3	10.5	1.9	15.2	1.7	17.8	18.4	-0.7	2.3	-2.9
	II	12.9	11.7	10.3	12.3	10.5	1.8	15.2	1.7	18.1	18.4	-0.3	2.4	-2.7
	III	12.9	11.7	10.5	12.4	10.5	1.8	15.3	1.7	18.1	18.4	-0.2	2.4	-2.7

Source: INE and Fincas (Forecasts).

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

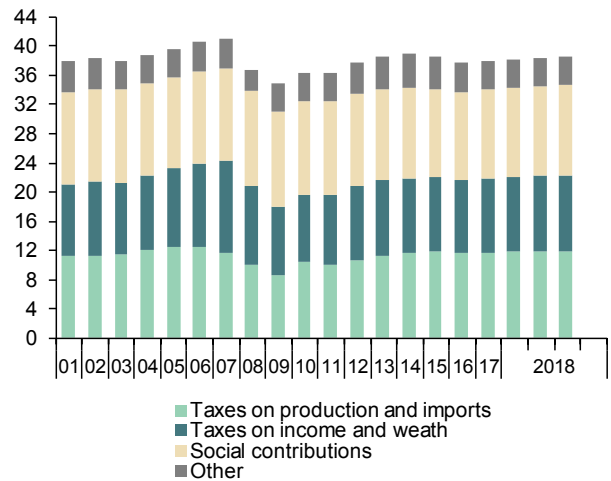
Percentage of GDP, 4-quarter moving averages



(a) Excluding financial entities bail-out expenditures

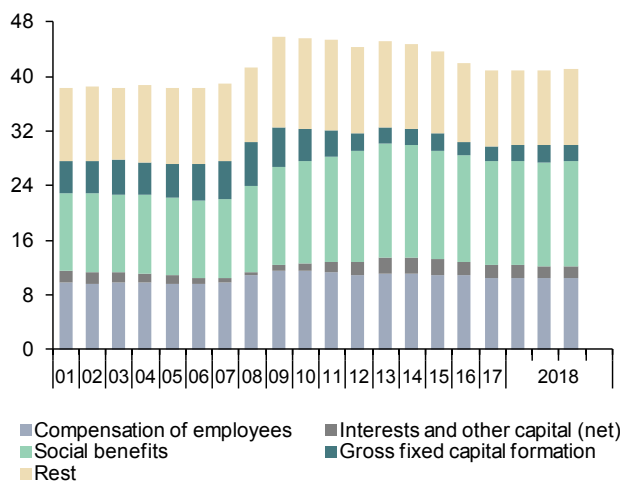
**Chart 6.2 - Public sector: Main revenues**

Percentage of GDP, 4-quarter moving averages



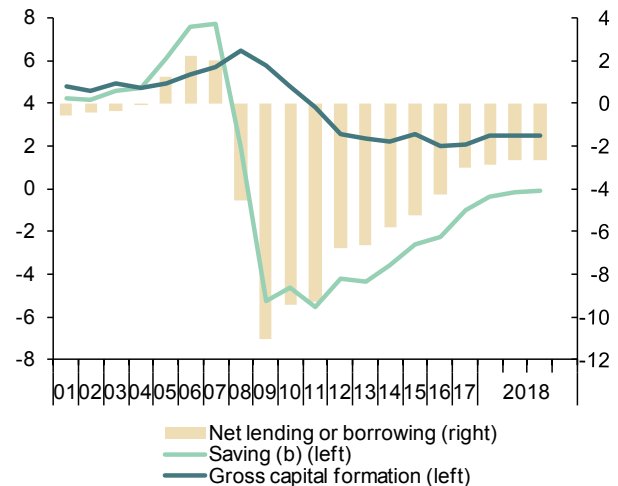
**Chart 6.3.- Public sector: Main expenditures**

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



Table 7

**Public sector balances, by level of Government**

Forecasts in yellow

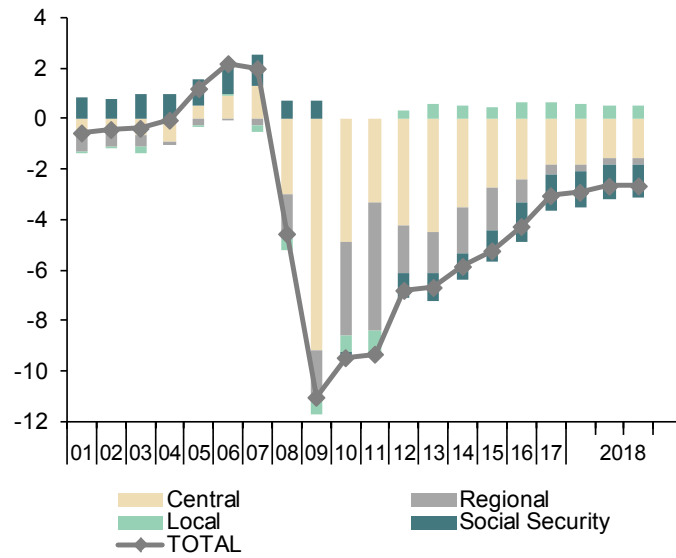
	Net lending (+)/ net borrowing (-) (a)					Debt					
	Central Government	Regional Governments	Local Governments	Social Security	TOTAL Government	Central Government	Regional Governments	Local Governments	Social Security	Total Government (consolidated)	
	EUR Billions, 4-quarter cumulated operations					EUR Billions, end of period					
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	-27.2	-9.6	7.0	-17.7	-47.6	969.6	277.0	32.2	17.2	1,107.2	
2017	-21.5	-4.2	7.1	-16.8	-35.4	1,010.8	288.1	29.1	27.4	1,144.4	
2018	-19.7	-2.3	6.0	-16.2	-32.2	--	--	--	--	1,175.8	
2019	-14.5	-1.0	5.8	-17.0	-26.7	--	--	--	--	1,201.5	
2016	IV	-27.2	-9.6	7.0	-17.7	-47.6	969.6	277.0	32.2	17.2	1,107.2
2017	I	-22.2	-10.7	7.2	-18.1	-43.7	986.6	279.4	31.7	17.2	1,126.3
	II	-19.2	-10.7	7.4	-17.1	-39.7	994.9	285.9	32.4	17.2	1,135.1
	III	-17.0	-6.9	7.3	-18.1	-34.8	998.8	284.4	30.5	23.2	1,133.4
	IV	-21.5	-4.2	7.1	-16.8	-35.4	1,010.8	288.1	29.1	27.4	1,144.4
2018	I	-21.9	-3.1	7.1	-16.3	-34.2	1,027.6	289.7	29.0	27.4	1,160.7
	II	-18.8	-2.5	6.2	-16.4	-31.5	1,032.9	293.3	29.4	34.9	1,164.0
	III	-19.0	-2.7	6.0	-16.0	-31.7	1,046.7	292.4	28.0	34.9	1,175.7
		Percentage of GDP, 4-quarter cumulated operations					Percentage of GDP				
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	87.0	24.4	3.3	1.6	99.3
2016		-2.4	-0.9	0.6	-1.6	-4.3	86.7	24.8	2.9	1.5	99.0
2017		-1.8	-0.4	0.6	-1.4	-3.0	86.7	24.7	2.5	2.3	98.1
2018		-1.6	-0.2	0.5	-1.3	-2.7	--	--	--	--	97.4
2019		-1.2	-0.1	0.5	-1.4	-2.1	--	--	--	--	95.9
2016	IV	-2.4	-0.9	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	87.3	24.7	2.8	1.5	99.7
	II	-1.7	-0.9	0.6	-1.5	-3.5	87.2	25.0	2.8	1.5	99.4
	III	-1.5	-0.6	0.6	-1.6	-3.0	86.7	24.7	2.7	2.0	98.4
	IV	-1.8	-0.4	0.6	-1.4	-3.0	86.7	24.7	2.5	2.3	98.1
2018	I	-1.9	-0.3	0.6	-1.4	-2.9	87.3	24.6	2.5	2.3	98.7
	II	-1.6	-0.2	0.5	-1.4	-2.7	87.1	24.7	2.5	2.9	98.1
	III	-1.6	-0.2	0.5	-1.3	-2.6	87.5	24.4	2.3	2.9	98.3

(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

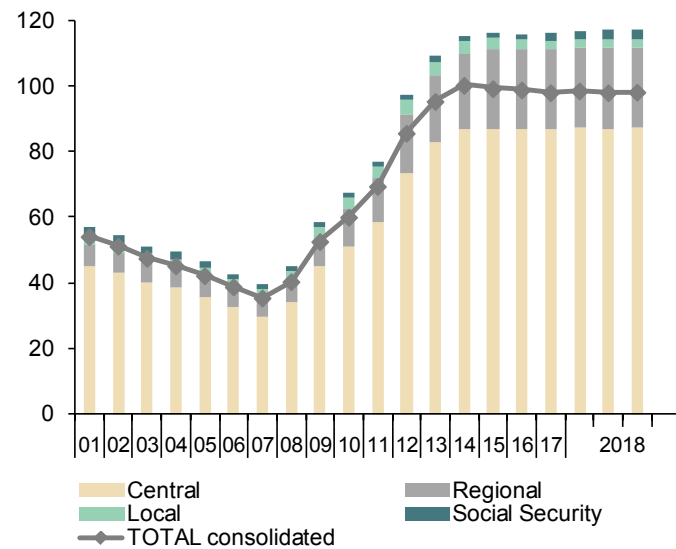


Table 8

**General activity and industrial sector indicators (a)**

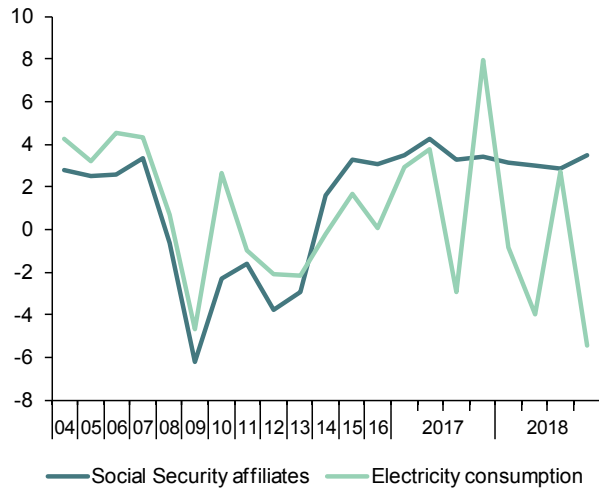
	General activity indicators				Industrial sector indicators					
	Economic Sentiment Index	Composite PMI index	Social Security Affiliates (f)	Electricity consumption (temperature adjusted)	Industrial production index	Social Security Affiliates in industry	Manufacturing PMI index	Industrial confidence index	Manufacturing Turnover index deflated	Industrial orders
	Index	Index	Thousands	1,000 GWH	2010=100	Thousands	Index	Balance of responses	2010=100 (smoothed)	Balance of responses
2011	92.3	46.6	16,970.3	261.1	104.0	2,231.9	47.3	-12.5	101.7	-30.8
2012	87.6	43.1	16,335.3	255.7	97.1	2,113.9	43.8	-17.6	96.7	-37.1
2013	91.7	48.3	15,855.2	250.2	95.5	2,021.6	48.5	-14.0	94.2	-30.7
2014	101.8	55.1	16,111.1	249.7	96.8	2,022.8	53.2	-7.1	96.1	-16.3
2015	108.3	56.7	16,641.8	254.0	100.0	2,067.3	53.6	-0.3	100.0	-5.4
2016	106.0	54.9	17,157.5	254.0	101.8	2,124.7	53.1	-2.3	102.6	-5.4
2017	108.6	56.2	17,789.6	258.6	105.0	2,191.0	54.8	1.0	106.9	2.2
2018 (b)	108.2	54.6	18,364.5	259.3	106.3	2,250.9	53.3	-0.1	108.9	-0.2
2017 I	107.3	56.2	17,541.6	64.1	103.6	2,164.3	54.8	0.3	104.9	-3.1
II	108.1	57.4	17,724.4	64.7	104.5	2,182.8	54.9	-0.5	106.2	6.1
III	108.7	56.1	17,868.1	64.3	105.0	2,200.0	53.5	-0.1	107.5	0.8
IV	110.1	55.2	18,020.4	65.5	107.3	2,217.8	55.9	4.3	108.5	4.8
2018 I	110.0	56.6	18,158.7	65.4	106.3	2,234.8	55.3	2.8	109.0	1.2
II	109.8	55.4	18,293.2	64.7	105.6	2,245.9	53.8	1.2	109.1	2.9
III	106.7	52.7	18,422.5	65.1	105.6	2,256.8	52.4	-2.6	109.1	-2.4
IV (b)	106.2	53.7	18,581.5	64.2	105.7	2,266.6	51.8	-1.9	108.9	-2.4
2018 Oct	107.4	53.7	18,548.5	21.5	106.5	2,263.9	51.8	-1.5	108.9	-7.5
Nov	107.1	53.9	18,569.4	21.5	104.8	2,266.2	52.6	-0.8	108.8	1.5
Dec	104.1	53.4	18,626.6	21.4	--	2,269.7	51.1	-3.4	--	-1.1
Percentage changes (c)										
2011	--	--	-1.6	-1.0	-1.6	-2.7	--	--	-0.7	--
2012	--	--	-3.7	-2.1	-6.7	-5.3	--	--	-4.9	--
2013	--	--	-2.9	-2.2	-1.6	-4.4	--	--	-2.6	--
2014	--	--	1.6	-0.2	1.3	0.1	--	--	2.0	--
2015	--	--	3.3	1.7	3.4	2.2	--	--	4.1	--
2016	--	--	3.1	0.0	1.8	2.8	--	--	2.7	--
2017	--	--	3.7	1.8	3.2	3.1	--	--	4.2	--
2018 (d)	--	--	3.2	0.3	0.9	2.7	--	--	2.0	--
2017 I	--	--	3.5	2.9	4.0	3.0	--	--	4.5	--
II	--	--	4.2	3.7	3.4	3.4	--	--	4.8	--
III	--	--	3.3	-2.9	2.3	3.2	--	--	5.0	--
IV	--	--	3.5	8.0	8.7	3.3	--	--	3.9	--
2018 I	--	--	3.1	-0.8	-3.6	3.1	--	--	1.7	--
II	--	--	3.0	-4.0	-2.4	2.0	--	--	0.6	--
III	--	--	2.9	2.7	-0.1	2.0	--	--	-0.2	--
IV (e)	--	--	3.5	-5.5	0.2	1.7	--	--	-0.8	--
2018 Oct	--	--	0.4	-1.4	1.1	0.1	--	--	-0.1	--
Nov	--	--	0.1	0.3	-1.5	0.1	--	--	-0.1	--
Dec	--	--	0.3	-2.1	--	0.2	--	--	--	--

(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, 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-professional caregivers.

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

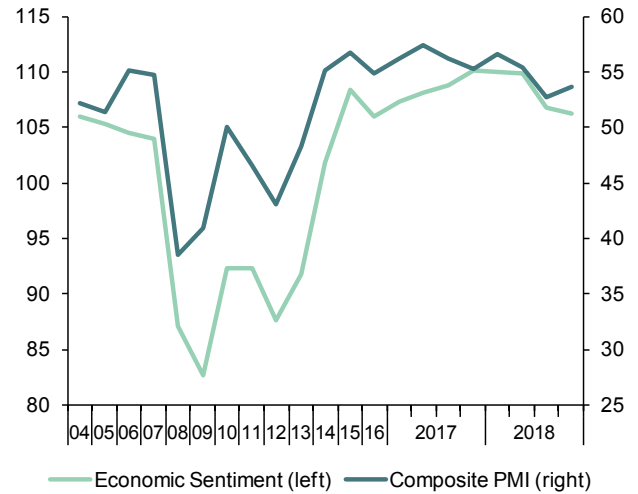
**Chart 8.1 - General activity indicators (I)**

Annualized percent change from previous period



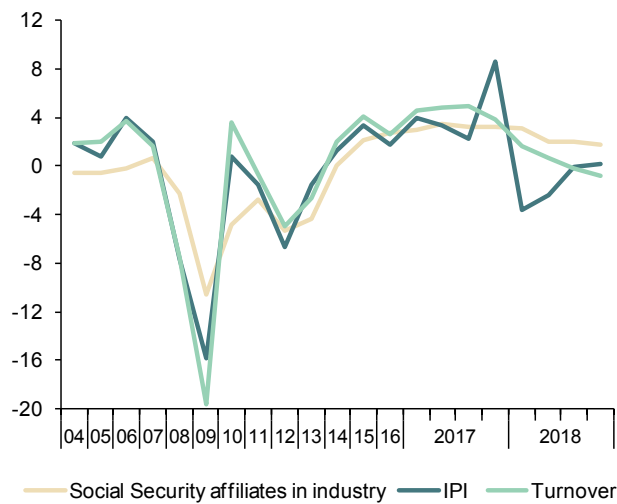
**Chart 8.2.- General activity indicators (II)**

Index



**Chart 8.3 - Industrial sector indicators (I)**

Annualized percent change from previous period



**Chart 8.4 - Industrial sector indicators (II)**

Index



Table 9

**Construction and services sector indicators (a)**

	Construction indicators					Service sector indicators						
	Social Security Affiliates in construction	Industrial production index construction materials	Construction confidence index	Official tenders (f)	Housing permits (f)	Social Security Affiliates in services (g)	Turnover index (nominal)	Services PMI index	Hotel overnight stays	Passenger air transport	Services confidence index	
	Thousands	2010=100 (smoothed)	Balance of responses	EUR Billions (smoothed)	Million m <sup>2</sup>	Thousands	2010=100 (smoothed)	Index	Million (smoothed)	Million (smoothed)	Balance of responses	
2011	1,368.9	141.0	-55.4	13.7	14.1	12,176.1	101.0	46.5	286.8	203.3	-20.8	
2012	1,135.5	101.2	-54.9	7.4	8.5	11,907.2	94.8	43.1	280.7	193.2	-21.5	
2013	996.8	93.6	-55.6	9.2	6.8	11,727.9	92.9	48.3	286.0	186.5	-15.3	
2014	980.3	92.8	-41.4	13.1	6.9	11,995.5	95.3	55.2	295.3	194.9	9.9	
2015	1,026.7	100.0	-25.3	9.4	9.9	12,432.3	100.0	57.3	308.2	206.6	19.4	
2016	1,053.9	102.6	-39.6	9.3	12.7	12,851.6	104.2	55.0	331.2	229.4	17.8	
2017	1,118.8	111.5	-26.9	12.9	15.9	13,338.2	111.1	56.4	340.6	248.4	22.5	
2018 (b)	1,194.1	115.5	-4.6	14.6	16.5	13,781.3	116.8	54.8	323.6	241.0	21.7	
2017	I	1,091.6	109.0	-43.7	2.4	4.0	13,143.7	108.7	56.4	85.2	60.3	19.2
	II	1,110.9	110.7	-24.7	2.9	4.2	13,285.4	110.3	57.8	85.5	61.5	23.3
	III	1,125.1	111.8	-23.5	3.5	3.7	13,401.7	111.8	56.8	85.6	62.6	25.2
	IV	1,147.8	112.9	-15.7	3.9	4.0	13,516.7	113.6	54.6	85.5	63.7	22.3
2018	I	1,166.9	113.3	-4.3	3.9	4.7	13,624.2	115.4	56.8	85.3	64.6	23.5
	II	1,183.0	113.8	-4.1	3.9	5.2	13,726.4	117.2	55.8	85.3	65.3	23.5
	III	1,203.6	115.0	-8.3	4.2	4.9	13,827.2	118.9	52.6	85.7	66.1	21.6
	IV (b)	1,222.8	116.5	-1.6	3.1	1.6	13,944.2	120.3	54.0	57.7	44.7	18.0
2018	Oct	1,217.3	116.1	2.2	1.5	1.6	13,906.3	120.1	54.0	28.8	22.3	20.9
	Nov	1,221.1	116.8	-0.2	1.6	--	13,944.5	120.6	54.0	28.9	22.4	19.6
	Dec	1,229.9	--	-6.9	--	--	13,981.9	--	54.0	--	--	13.6
Percentage changes (c)												
2011	-12.2	-9.8	--	-47.9	-13.2	-0.1	-1.1	--	7.3	6.0	--	
2012	-17.0	-28.2	--	-45.5	-39.9	-2.2	-6.1	--	-2.1	-5.0	--	
2013	-12.2	-7.5	--	23.2	-20.3	-1.5	-2.0	--	1.9	-3.5	--	
2014	-1.7	-0.9	--	42.6	2.2	2.3	2.6	--	3.2	4.6	--	
2015	4.7	7.8	--	-28.2	42.6	3.6	4.9	--	4.4	6.0	--	
2016	2.6	2.6	--	-0.7	29.0	3.4	4.2	--	7.4	11.0	--	
2017	6.2	8.7	--	38.0	24.8	3.8	6.6	--	2.8	8.3	--	
2018 (d)	6.7	2.6	--	33.0	22.9	3.3	6.3	--	-0.2	5.8	--	
2017	I	7.8	11.9	--	11.1	16.9	3.6	7.0	--	3.4	8.7	--
	II	7.3	6.4	--	24.5	29.3	4.4	6.0	--	1.8	8.2	--
	III	5.2	3.8	--	50.6	28.9	3.5	5.6	--	0.1	7.6	--
	IV	8.3	4.0	--	72.2	24.8	3.5	6.4	--	-0.5	7.0	--
2018	I	6.8	1.5	--	62.0	18.9	3.2	6.6	--	-0.6	5.7	--
	II	5.6	1.8	--	33.7	23.5	3.0	6.3	--	0.0	4.5	--
	III	7.2	4.4	--	21.2	32.7	3.0	6.1	--	1.9	5.1	--
	IV (e)	6.5	5.1	--	20.0	8.0	3.4	4.8	--	3.6	5.7	--
	Oct	0.5	0.5	--	3.1	8.0	0.3	0.5	--	0.4	0.6	--
	Nov	0.3	0.5	--	41.8	--	0.3	0.5	--	0.4	0.6	--
	Dec	0.7	--	--	--	--	0.3	--	--	--	--	--

(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-professional caregivers.

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

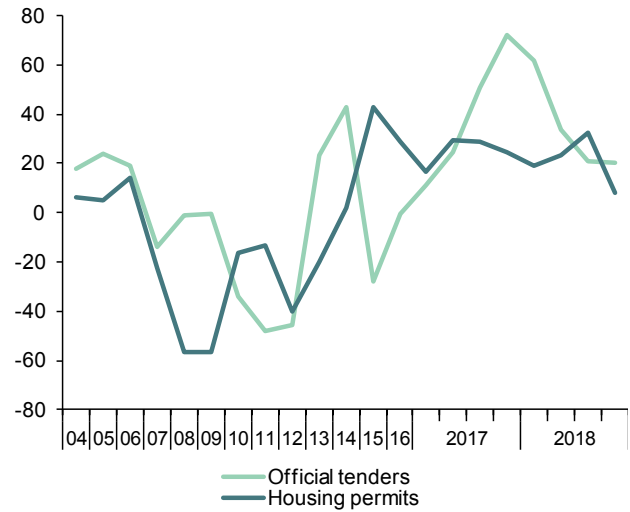
**Chart 9.1 - Construction indicators (I)**

Annualized percentage changes from previous period and index



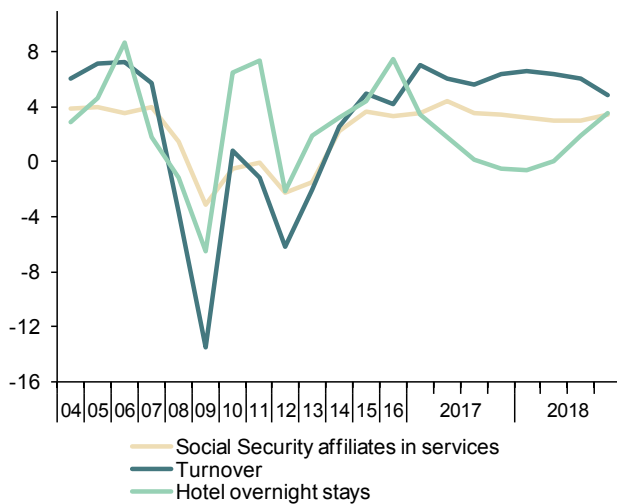
**Chart 9.2 - Construction indicators (II)**

Annualized percentage changes from previous period



**Chart 9.3 - Services indicators (I)**

Annualized percentage change from previous period



**Chart 9.4 - Services indicators (II)**

Index

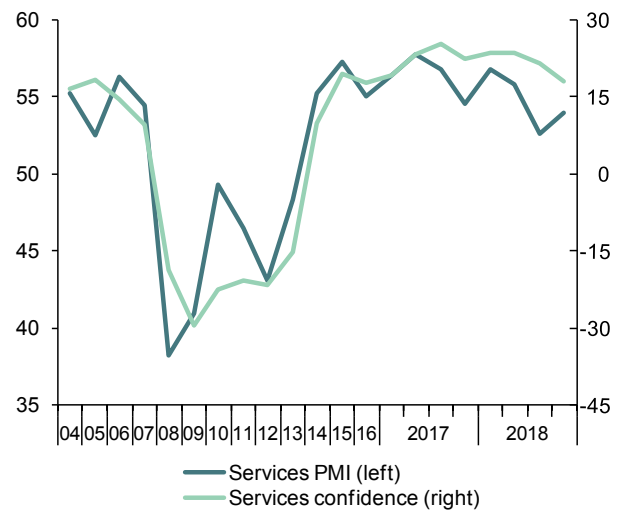


Table 10

**Consumption and investment indicators (a)**

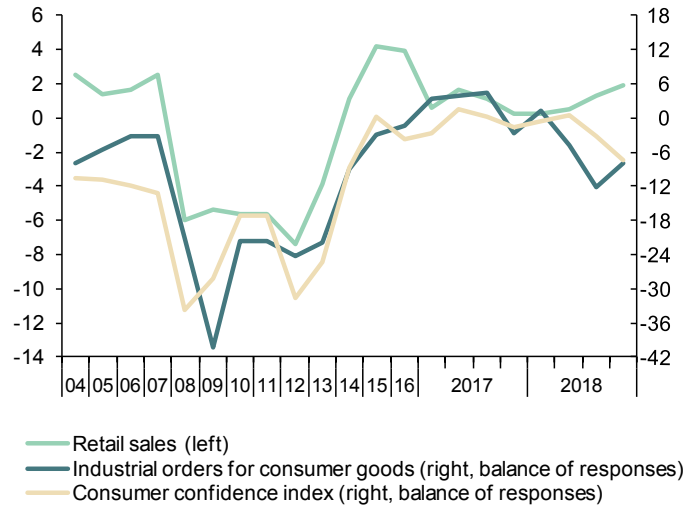
	Consumption indicators					Investment in equipment indicators			
	Retail sales deflated	Car registrations	Consumer confidence index	Hotel overnight stays by residents in Spain	Industrial orders for consumer goods	Cargo vehicles registrations	Industrial orders for investment goods	Imports of capital goods (volume)	
	2010=100 (smoothed)	Thousands (smoothed)	Balance of responses	Million (smoothed)	Balance of responses	Thousands (smoothed)	Balance of responses	2005=100 (smoothed)	
2011	106.7	808.3	-17.1	111.5	-21.7	142.0	-23.0	68.0	
2012	98.8	710.6	-31.7	102.1	-24.2	107.7	-38.6	60.6	
2013	94.9	742.3	-25.3	100.6	-21.8	107.6	-33.5	68.9	
2014	96.0	890.1	-8.9	104.7	-9.1	137.5	-16.5	81.6	
2015	100.0	1,094.0	0.3	110.3	-3.1	180.3	0.2	93.3	
2016	103.9	1,230.1	-3.8	114.2	-1.4	191.3	-0.2	97.2	
2017	104.7	1,341.6	-0.7	115.8	2.2	207.6	4.9	103.3	
2018 (b)	103.8	1,424.0	-2.7	109.6	-5.9	230.0	12.4	--	
2017	I	104.4	321.0	-2.8	28.8	3.3	50.1	1.4	102.9
	II	104.8	328.8	1.5	28.9	3.9	51.1	7.6	104.0
	III	105.1	340.2	0.2	28.9	4.5	53.0	-2.0	103.1
	IV	105.1	352.1	-1.5	29.0	-2.8	55.0	12.4	102.5
2018	I	105.2	359.3	-0.6	29.0	1.3	56.6	13.8	103.8
	II	105.3	363.2	0.5	29.0	-4.7	57.7	15.7	106.5
	III	105.7	358.8	-3.3	29.2	-12.2	57.9	11.3	109.4
	IV (b)	106.2	340.5	-7.5	19.7	-7.9	56.9	8.8	111.0
2018	Oct	106.0	115.7	-7.5	9.8	-15.6	19.1	11.2	111.0
	Nov	106.3	113.5	-6.6	9.9	-5.6	19.0	6.0	--
	Dec	--	111.3	-8.5	--	-2.5	18.8	9.3	--
Percentage changes (c)									
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		4.2	22.9	--	5.3	--	31.1	--	14.4
2016		3.9	12.4	--	3.6	--	6.1	--	4.1
2017		0.8	9.1	--	1.4	--	8.5	--	6.4
2018 (d)		0.7	6.1	--	0.7	--	10.8	--	3.0
2017	I	0.6	7.4	--	1.7	--	5.2	--	11.2
	II	1.6	10.0	--	1.1	--	8.3	--	4.4
	III	1.1	14.7	--	0.8	--	15.5	--	-3.4
	IV	0.2	14.7	--	1.3	--	16.3	--	-2.4
2018	I	0.2	8.4	--	-0.1	--	12.3	--	5.2
	II	0.5	4.5	--	0.0	--	7.8	--	11.2
	III	1.3	-4.8	--	2.8	--	1.2	--	11.0
	IV (e)	1.9	-18.8	--	5.3	--	-6.6	--	6.1
2018	Oct	0.2	-1.9	--	0.6	--	-0.7	--	0.7
	Nov	0.2	-1.9	--	0.6	--	-0.7	--	--
	Dec	--	-1.9	--	--	--	-0.6	--	--

(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 Commission, 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



### Chart 10.2 - Investment indicators

Percent change from previous period and balance of responses

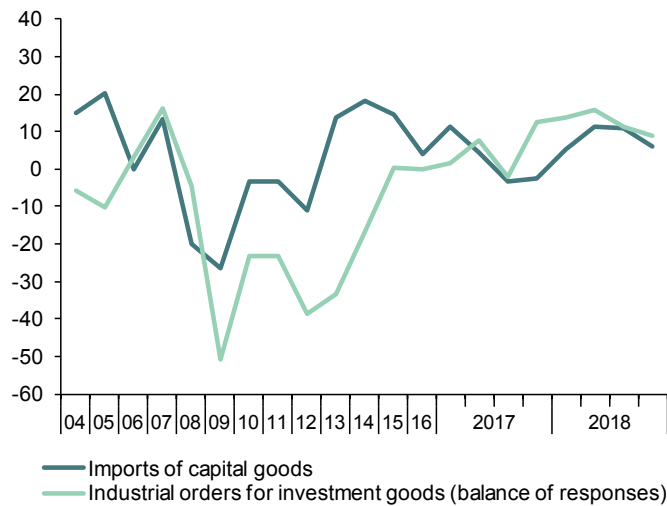




Table 11a

### Labour market (I)

Forecasts in yellow

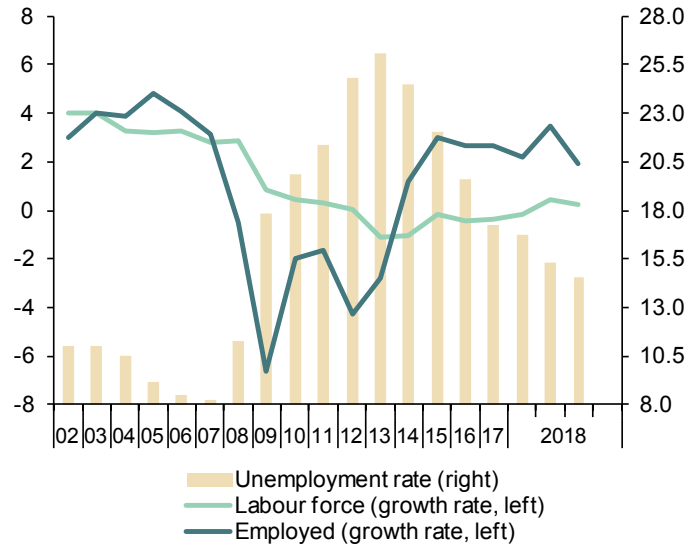
	Population aged 16-64	Labour force		Employment		Unemployment		Participation rate 16-64 (a)	Employment rate 16-64 (b)	Unemployment rate (c)				
		Original	Seasonally adjusted	Original	Seasonally adjusted	Original	Seasonally adjusted			Total	Aged 16-24	Spanish	Foreign	
		I	2=4+6	3=5+7	4	5	6			7	Seasonally adjusted			
										Percentage				
										10=7/3	11	12	13	
										Million				
2011	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	30.1	22.8	--	19.3	--	3.5	--	75.0	63.4	15.3	--	--	--	
2019	30.2	22.8	--	19.6	--	3.2	--	74.9	64.4	13.9	--	--	--	
2016	IV	30.0	22.7	22.7	18.5	18.5	4.2	4.2	75.1	61.1	18.6	42.9	17.8	24.7
2017	I	30.0	22.7	22.8	18.4	18.6	4.3	4.1	75.0	60.8	18.8	41.7	17.8	25.5
	II	30.0	22.7	22.7	18.8	18.8	3.9	3.9	75.1	62.0	17.2	39.5	16.4	23.6
	III	30.0	22.8	22.7	19.0	18.9	3.7	3.8	75.2	62.8	16.4	36.0	15.5	22.7
	IV	30.1	22.8	22.8	19.0	19.0	3.8	3.8	75.1	62.6	16.5	37.5	15.6	23.6
2018	I	30.1	22.7	22.8	18.9	19.1	3.8	3.6	74.7	62.1	16.7	36.3	15.7	24.3
	II	30.2	22.8	22.8	19.3	19.3	3.5	3.5	75.1	63.5	15.3	34.7	14.3	21.9
	III	30.2	22.9	22.8	19.5	19.4	3.3	3.4	75.0	64.0	14.6	33.0	13.7	20.6
Percentage changes (d)								Difference from one year ago						
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	0.2	--	2.5	--	-10.9	--	-0.1	1.3	-1.9	--	--	--	
2019	0.2	0.1	--	1.8	--	-9.3	--	-0.1	1.0	-1.4	--	--	--	
2016	IV	-0.3	-0.6	-1.3	2.3	2.4	-11.3	-15.6	-0.2	1.5	-2.3	-3.3	-2.1	-3.7
2017	I	-0.2	-0.6	0.2	2.3	3.0	-11.2	-11.5	-0.3	1.4	-2.2	-4.8	-2.0	-4.3
	II	-0.1	-0.6	-1.1	2.8	2.5	-14.4	-16.4	-0.5	1.7	-2.8	-7.0	-2.7	-3.7
	III	0.0	-0.3	0.8	2.8	3.0	-13.6	-9.4	-0.3	1.7	-2.5	-6.0	-2.6	-2.1
	IV	0.1	0.1	0.6	2.6	2.3	-11.1	-7.3	-0.1	1.5	-2.1	-5.5	-2.3	-1.1
2018	I	0.2	-0.1	-0.2	2.4	2.2	-10.8	-11.6	-0.3	1.3	-2.0	-5.3	-2.1	-1.2
	II	0.4	0.5	0.5	2.8	3.4	-10.8	-14.1	0.0	1.5	-1.9	-4.8	-2.0	-1.7
	III	0.5	0.3	0.2	2.5	1.9	-10.9	-8.8	-0.2	1.2	-1.8	-3.0	-1.8	-2.1

(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

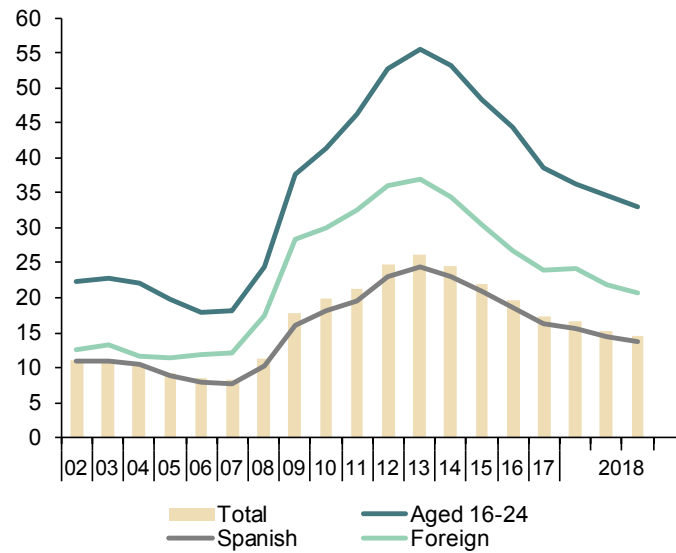


Table 11b

**Labour market (II)**

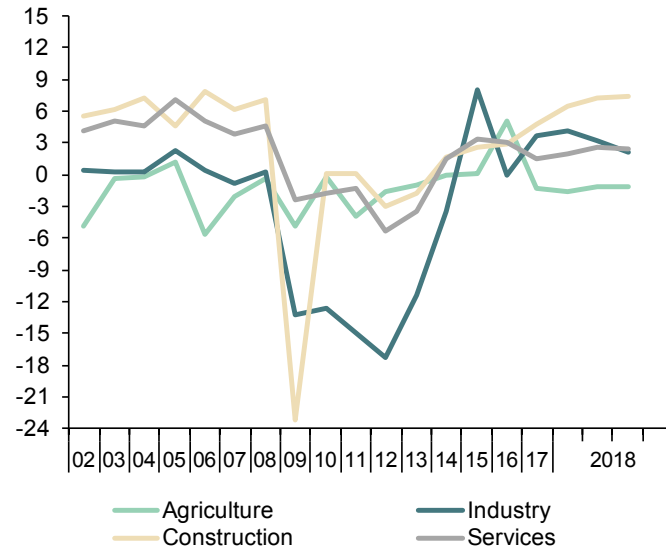
	Employed by sector				Employed by professional situation				Employed by duration of the working-day				
	Agriculture	Industry	Construction	Services	Employees				Self employed	Full-time	Part-time	Part-time employment rate (b)	
					Total	By type of contract							
						Temporary	Indefinite	Temporary employment rate (a)					
1	2	3	4	5=6+7	6	7	8=6/5	9	10	11	12		
Million (original data)													
2009	0.79	2.81	1.89	13.62	15.88	4.00	11.88	25.2	3.23	16.71	2.40	12.54	
2010	0.79	2.65	1.65	13.64	15.59	3.86	11.73	24.7	3.13	16.29	2.44	13.02	
2011	0.76	2.60	1.40	13.66	15.39	3.87	11.52	25.1	3.03	15.92	2.50	13.56	
2012	0.74	2.48	1.16	13.24	14.57	3.41	11.16	23.4	3.06	15.08	2.55	14.49	
2013	0.74	2.36	1.03	13.02	14.07	3.26	10.81	23.1	3.07	14.43	2.71	15.80	
2014	0.74	2.38	0.99	13.23	14.29	3.43	10.86	24.0	3.06	14.59	2.76	15.91	
2015	0.74	2.48	1.07	13.57	14.77	3.71	11.06	25.1	3.09	15.05	2.81	15.74	
2016	0.77	2.52	1.07	13.97	15.23	3.97	11.26	26.1	3.11	15.55	2.79	15.21	
2017	0.82	2.65	1.13	14.23	15.72	4.19	11.52	26.7	3.11	16.01	2.82	14.97	
2018 (c)	0.81	2.71	1.20	14.53	16.16	4.33	11.83	26.8	3.09	16.53	2.72	14.14	
2016 IV	0.82	2.58	1.08	14.03	15.39	4.07	11.31	26.5	3.12	15.68	2.83	15.31	
2017 I	0.85	2.57	1.08	13.94	15.34	3.95	11.39	25.8	3.10	15.56	2.87	15.59	
II	0.83	2.64	1.13	14.21	15.69	4.21	11.48	26.8	3.12	15.94	2.87	15.26	
III	0.78	2.67	1.15	14.45	15.91	4.36	11.55	27.4	3.14	16.32	2.73	14.31	
IV	0.82	2.71	1.14	14.32	15.92	4.25	11.67	26.7	3.08	16.19	2.81	14.77	
2018 I	0.83	2.68	1.15	14.21	15.79	4.12	11.67	26.1	3.08	16.06	2.81	14.91	
II	0.82	2.72	1.22	14.58	16.26	4.36	11.90	26.8	3.09	16.71	2.64	13.63	
III	0.77	2.73	1.24	14.79	16.43	4.51	11.93	27.4	3.09	16.81	2.71	13.90	
Annual percentage changes									Difference from one year ago	Annual percentage changes			Difference from 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	5.8	5.0	5.1	1.9	3.2	5.6	2.3	0.6	-0.1	2.9	1.0	-0.2	
2018 (d)	-1.3	3.1	7.1	2.3	3.3	3.8	3.1	0.1	-1.1	3.7	-3.6	-0.9	
2016 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 I	9.0	3.6	4.8	1.4	2.7	5.6	1.7	0.7	0.1	2.4	1.5	-0.1	
II	9.5	5.6	5.2	1.7	3.3	7.7	1.8	1.1	0.3	2.9	2.5	-0.1	
III	4.5	5.5	4.3	2.1	3.3	4.9	2.7	0.4	0.6	3.1	1.1	-0.2	
IV	0.5	5.1	6.0	2.1	3.5	4.4	3.2	0.2	-1.5	3.3	-1.0	-0.5	
2018 I	-1.6	4.1	6.5	2.0	2.9	4.4	2.4	0.4	-0.5	3.2	-2.1	-0.7	
II	-1.2	3.3	7.2	2.6	3.6	3.6	3.6	0.0	-1.2	4.8	-8.1	-1.6	
III	-1.1	2.1	7.4	2.4	3.3	3.5	3.2	0.1	-1.5	3.0	-0.4	-0.4	

(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

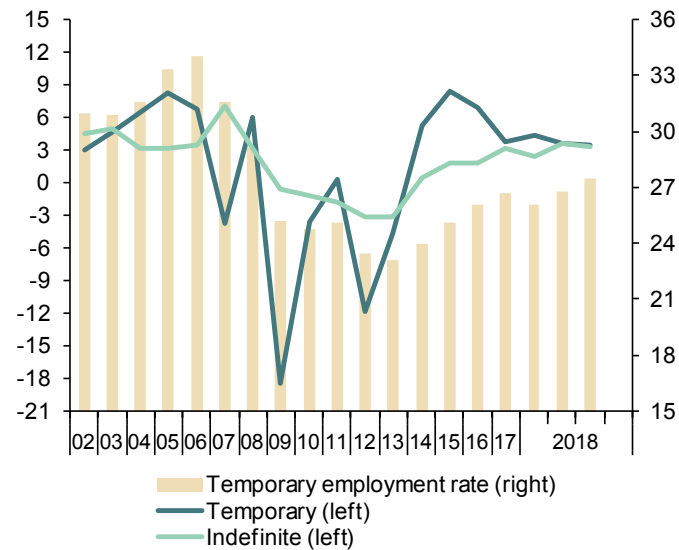


Table 12

### Index of Consumer Prices

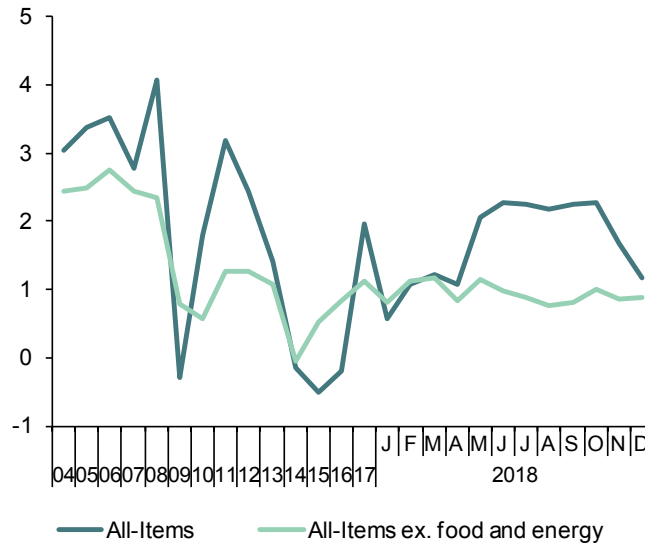
Forecasts in yellow

	Total	Total excluding food and energy	Excluding unprocessed food and energy				Unprocessed food	Energy	Food	
			Total	Non-energy industrial goods	Services	Processed food				
% of total in 2018	100.00	66.15	81.20	24.82	41.33	15.06	7.34	11.46	22.40	
Indexes, 2016 = 100										
2012	99.5	97.6	97.1	99.0	96.8	94.9	93.9	121.2	94.6	
2013	100.9	98.7	98.5	99.6	98.1	97.9	97.3	121.3	97.7	
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	103.7	102.1	102.0	100.2	103.1	101.7	105.8	114.7	103.1	
2019	104.8	103.2	103.1	100.4	104.8	102.6	109.1	114.4	105.9	
Annual percentage changes										
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	1.7	0.9	0.9	0.0	1.5	1.0	3.1	6.1	1.8	
2019	1.1	1.1	1.1	0.3	1.6	0.9	3.2	-0.2	2.7	
2018	Jan	0.6	0.8	0.8	-0.2	1.3	1.1	1.6	-1.7	1.3
	Feb	1.1	1.1	1.1	0.0	1.7	1.4	0.3	1.4	1.0
	Mar	1.2	1.1	1.2	-0.1	1.9	1.3	1.6	1.3	1.4
	Apr	1.1	0.7	0.8	0.0	1.1	1.4	2.0	2.3	1.6
	May	2.1	1.1	1.1	0.0	1.8	1.3	3.5	7.8	2.0
	Jun	2.3	1.0	1.0	-0.1	1.6	1.0	5.4	9.9	2.5
	Jul	2.2	0.9	0.9	0.0	1.5	0.8	4.0	11.2	1.9
	Aug	2.2	0.8	0.8	-0.1	1.3	0.7	4.6	11.1	2.0
	Sep	2.3	0.8	0.8	-0.1	1.3	0.8	3.7	12.0	1.8
	Oct	2.3	1.0	1.0	0.1	1.6	1.0	3.5	10.7	1.8
	Nov	1.7	0.9	0.9	0.1	1.5	0.6	3.5	6.4	1.5
	Dec	1.2	1.0	0.9	0.2	1.5	0.5	3.2	2.1	2.5
2019	Jan	0.9	1.0	0.9	0.1	1.5	0.5	3.8	-0.7	2.8
	Feb	1.0	0.9	0.8	0.1	1.3	0.6	4.5	-0.2	3.0
	Mar	1.4	1.1	1.0	0.2	1.6	0.6	3.8	3.1	2.8
	Apr	1.3	1.1	1.0	0.2	1.6	0.6	3.6	2.0	2.7
	May	0.8	1.1	1.0	0.3	1.6	0.6	2.9	-1.6	2.5
	Jun	0.9	1.1	1.1	0.3	1.6	0.7	2.0	-0.9	2.3
	Jul	1.0	1.2	1.1	0.4	1.7	0.9	2.7	-0.8	2.6
	Aug	0.9	1.3	1.2	0.4	1.8	0.9	2.4	-1.5	2.5
	Sep	0.8	1.2	1.2	0.4	1.7	1.1	2.9	-3.2	2.9
	Oct	0.8	1.2	1.2	0.4	1.7	1.1	3.0	-2.6	2.9
	Nov	1.2	1.2	1.2	0.4	1.6	1.5	3.1	0.1	3.2
	Dec	1.7	1.1	1.2	0.3	1.6	1.6	3.2	4.5	2.2

Source: INE and Funcas (Forecasts).

**Chart 12.1 - Inflation Rate (I)**

Annual percentage changes



**Chart 12.2 - Inflation rate (II)**

Annual percentage changes

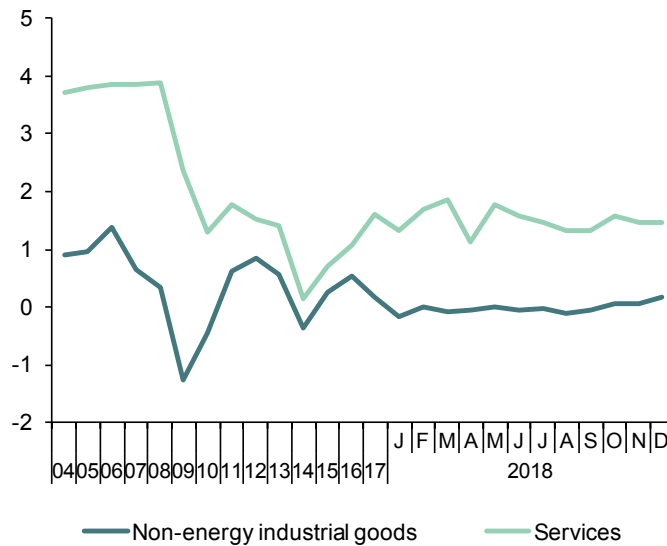


Table 13

**Other prices and costs indicators**

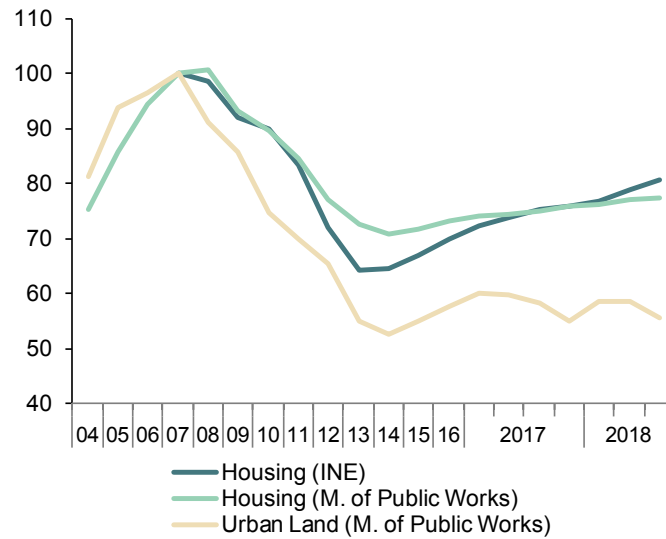
	GDP deflator (a)	Industrial producer prices		Housing prices		Urban land prices (M. Public Works)	Labour Costs Survey				Wage increase agreed in collective bargaining	
		Total	Excluding energy	Housing Price Index (INE)	m <sup>2</sup> average price (M. Public Works)		Total labour costs per worker	Wage costs per worker	Other cost per worker	Total labour costs per hour worked		
		2010=100	2015=100	2007=100			2000=100					
2011	100.0	99.1	98.1	83.4	84.6	69.8	144.5	141.9	152.5	154.9	--	
2012	100.1	102.9	99.8	72.0	77.2	65.4	143.6	141.1	151.3	154.7	--	
2013	100.5	103.5	100.5	64.3	72.7	55.1	143.8	141.1	152.2	155.2	--	
2014	100.3	102.1	99.7	64.5	71.0	52.6	143.3	140.9	150.7	155.5	--	
2015	100.8	100.0	100.0	66.8	71.7	54.9	144.2	142.5	149.6	156.5	--	
2016	101.1	96.9	99.6	70.0	73.1	57.8	143.6	142.1	148.3	156.3	--	
2017	102.3	101.1	101.9	74.3	74.8	58.2	144.0	142.3	149.1	156.3	--	
2018 (b)	103.0	104.1	103.1	78.7	76.9	--	143.2	140.8	150.6	155.8	--	
2017	I	101.5	101.4	101.4	72.4	74.2	60.1	140.2	137.0	150.2	147.3	--
	II	102.3	100.4	101.9	73.8	74.4	59.7	146.1	145.5	148.1	154.2	--
	III	102.4	100.5	102.0	75.2	74.9	58.2	138.7	135.5	148.7	159.0	--
	IV	103.1	102.1	102.2	75.8	75.8	54.9	150.9	151.3	149.5	164.9	--
2018	I	102.6	102.2	102.9	76.9	76.2	58.5	141.2	138.1	150.7	148.7	--
	II	103.1	103.4	103.1	78.8	77.2	58.5	147.0	146.2	149.6	155.6	--
	III	103.3	105.6	103.1	80.5	77.3	55.7	141.3	138.0	151.4	163.3	--
	IV (b)	--	105.8	103.1	--	--	--	--	--	--	--	--
2018	Oct	--	106.3	103.1	--	--	--	--	--	--	--	--
	Nov	--	106.3	103.2	--	--	--	--	--	--	--	--
	Dec	--	105.2	103.1	--	--	--	--	--	--	--	--
Annual percent changes (c)												
2011		0.0	6.9	4.2	-7.4	-5.6	-6.7	1.2	1.0	1.6	2.2	2.0
2012		0.1	3.8	1.7	-13.7	-8.7	-6.4	-0.6	-0.6	-0.8	-0.1	1.0
2013		0.4	0.6	0.7	-10.6	-5.8	-15.7	0.2	0.0	0.6	0.3	0.5
2014		-0.2	-1.3	-0.8	0.3	-2.4	-4.6	-0.3	-0.1	-1.0	0.2	0.5
2015		0.5	-2.1	0.3	3.6	1.1	4.3	0.6	1.1	-0.7	0.6	0.7
2016		0.3	-3.1	-0.4	4.7	1.9	5.3	-0.4	-0.3	-0.8	-0.2	1.0
2017		1.2	4.4	2.3	6.2	2.4	0.8	0.2	0.1	0.5	0.0	1.4
2018 (d)		1.0	3.1	1.2	6.7	3.2	-3.0	1.1	1.0	1.1	1.5	1.8
2017	I	0.7	6.9	2.4	5.3	2.3	6.2	-0.1	-0.2	0.3	-0.2	1.3
	II	1.3	4.8	2.5	5.6	2.0	1.8	-0.1	0.0	-0.3	-0.1	1.3
	III	1.2	3.3	2.1	6.6	1.8	7.4	0.4	0.3	0.7	-0.3	1.4
	IV	1.8	2.6	2.1	7.2	0.9	-10.9	0.7	0.5	1.5	0.7	1.4
2018	I	1.1	0.8	1.4	6.2	1.4	-2.6	0.7	0.8	0.3	1.0	1.5
	II	0.8	3.0	1.1	6.8	2.6	-2.1	0.6	0.5	1.0	0.9	1.6
	III	1.0	5.1	1.1	7.2	2.2	-4.3	1.9	1.9	1.9	2.7	1.7
	IV (e)	--	3.6	0.9	--	--	--	--	--	--	--	1.8
2018	Oct	--	5.3	1.0	--	--	--	--	--	--	--	1.7
	Nov	--	4.6	1.0	--	--	--	--	--	--	--	1.7
	Dec	--	3.0	0.9	--	--	--	--	--	--	--	1.8

(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

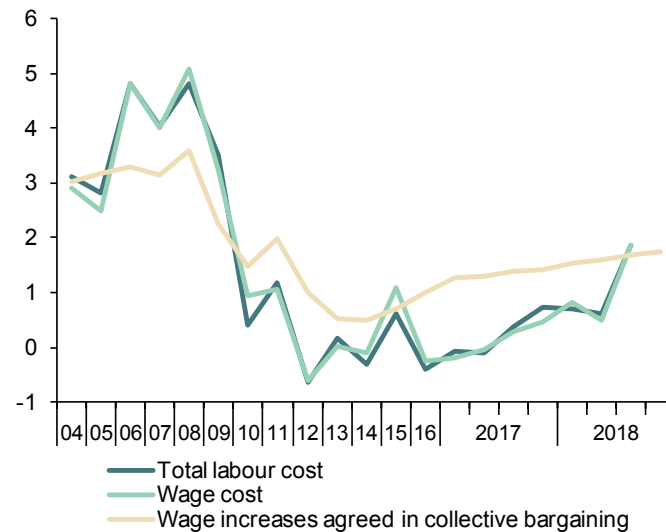




Table 14

**External trade (a)**

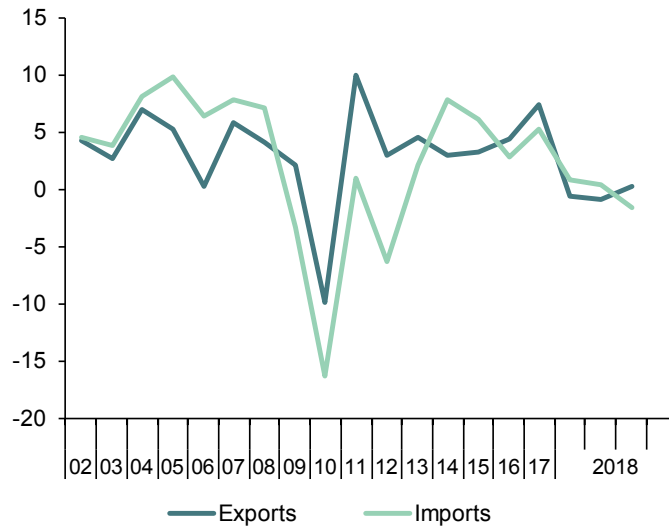
	Exports of goods			Imports of goods			Exports to EU countries (monthly average)	Exports to non-EU countries (monthly average)	Total Balance of goods (monthly average)	Balance of goods excluding energy (monthly average)	Balance of goods with EU countries (monthly average)	
	Nominal	Prices	Real	Nominal	Prices	Real						
	2005=100			2005=100								EUR Billions
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	178.8	108.9	164.2	129.6	106.1	122.1	15.2	7.9	-2.1	0.1	1.4	
2018 (b)	185.9	111.9	166.2	137.7	110.4	124.7	15.7	8.2	-2.8	-0.2	1.4	
2016	III	165.8	108.3	153.1	117.3	101.6	13.9	7.3	-1.4	0.4	0.8	
	IV	171.0	108.8	157.2	122.6	104.0	14.5	7.4	-1.8	0.0	1.3	
2017	I	177.6	108.5	163.8	131.0	107.2	15.2	7.6	-2.6	0.1	1.3	
	II	180.1	107.7	167.1	127.6	104.6	15.2	7.9	-1.6	0.4	1.7	
	III	179.5	108.8	164.9	130.4	105.1	14.8	8.2	-2.2	-0.2	1.1	
	IV	185.0	110.2	167.8	133.0	107.5	15.6	8.1	-2.0	0.1	1.4	
2018	I	184.9	110.9	166.8	135.0	108.2	15.7	8.0	-2.4	0.1	1.5	
	II	183.9	111.3	165.3	136.7	109.1	15.5	8.1	-2.8	-0.4	1.1	
	III	186.7	112.7	165.7	138.7	112.5	15.6	8.4	-2.9	-0.3	1.3	
2018	Aug	191.3	111.2	171.9	139.7	111.8	16.2	8.3	-2.5	0.3	1.9	
	Sep	182.4	114.1	159.9	134.6	113.8	15.1	8.3	-2.6	-0.5	1.2	
	Oct	192.9	114.4	168.6	145.5	114.2	16.1	8.6	-3.4	-0.1	1.5	
		Percentage changes (c)							Percentage of GDP			
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	-2.3	-1.6	0.3	1.2
2017		8.1	0.7	7.4	10.3	4.7	5.3	7.0	10.3	-2.1	0.1	1.4
2018 (d)		3.8	3.1	0.7	6.3	4.3	1.9	3.8	3.8	--	--	--
2016	III	-1.2	2.0	-3.1	1.0	5.2	-3.9	-1.5	2.0	-1.5	0.4	0.9
	IV	13.3	1.9	11.2	19.2	9.6	8.7	4.1	1.4	-1.9	0.0	1.4
2017	I	16.4	-1.1	17.7	30.5	12.9	15.6	4.7	2.3	-2.7	0.1	1.3
	II	5.6	-2.7	8.5	-10.1	-9.1	-1.1	0.4	3.3	-1.6	0.4	1.8
	III	-1.3	4.1	-5.2	9.2	1.7	7.3	-2.6	4.0	-2.3	-0.2	1.1
	IV	12.8	5.3	7.2	8.1	9.4	-1.2	5.3	-0.9	-2.0	0.1	1.4
2018	I	-0.2	2.3	-2.5	6.1	2.6	3.4	0.8	-1.7	-2.4	0.1	1.5
	II	-2.0	1.4	-3.4	5.3	3.5	1.7	-1.7	1.8	-2.8	-0.4	1.1
	III	6.1	5.1	0.9	5.9	13.1	-6.4	0.5	3.4	-2.9	-0.3	1.3
2018	Aug	1.6	0.1	1.5	1.8	1.5	0.3	0.4	4.0	--	--	--
	Sep	-0.4	0.7	-1.1	2.8	1.6	1.2	-1.3	1.2	--	--	--
	Oct	2.7	-1.3	4.0	-1.4	-0.4	-1.0	5.0	-1.7	--	--	--

(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)

Percent change from previous period



### Chart 14.2 - Trade balance

EUR Billions, moving sum of 12 months

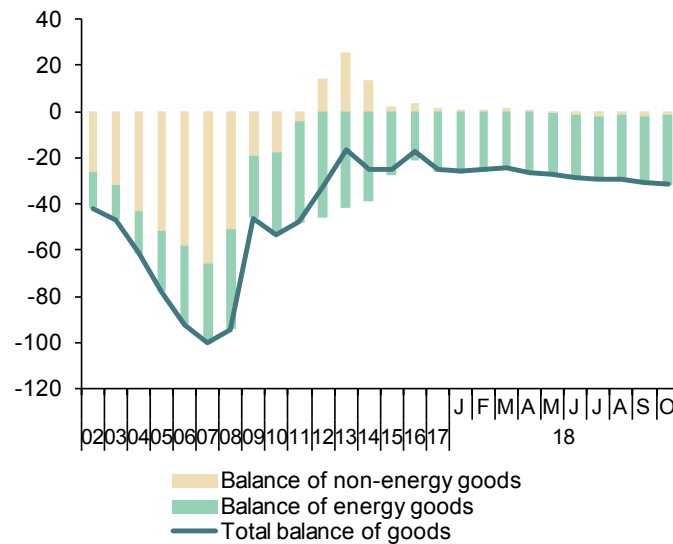


Table 15

**Balance of Payments (according to IMF manual)**  
 (Net transactions)

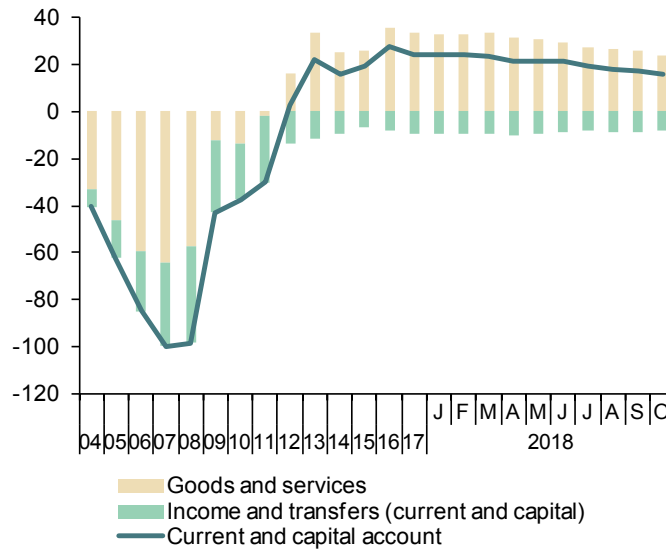
	Current account						Capital account	Current and capital accounts	Financial account						Errors and omissions
	Total	Goods	Services	Primary Income	Secondary Income	Bank of Spain			Financial account, excluding Bank of Spain						
									Total	Direct investment	Portfolio investment	Other investment	Financial derivatives		
1=2+3+4+5	2	3	4	5	6	7=1+6	8=9+10+11+12	9	10	11	12	13	14		
EUR billions															
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		-42.39	-47.80	33.93	-15.13	-13.38	4.89	-37.49	-27.24	-1.46	-28.40	11.23	-8.61	-15.70	-5.44
2011		-34.04	-44.48	42.59	-18.36	-13.79	4.06	-29.98	79.51	9.23	26.25	41.96	2.07	-109.23	0.26
2012		-2.40	-29.25	45.25	-7.01	-11.39	5.18	2.77	170.51	-21.12	55.40	144.57	-8.35	-168.76	-1.02
2013		15.59	-14.01	47.78	-5.29	-12.89	6.58	22.17	-84.89	-18.54	-52.99	-14.40	1.04	118.19	11.13
2014		11.22	-22.22	47.89	-3.37	-11.09	5.05	16.27	-15.39	6.48	-5.44	-17.71	1.28	27.49	-4.17
2015		12.55	-21.59	47.51	-2.90	-10.47	7.07	19.62	62.08	25.57	-5.38	43.09	-1.19	-40.16	2.30
2016		25.25	-15.27	51.24	1.06	-11.78	2.54	27.79	77.46	14.43	39.18	26.80	-2.94	-52.63	-2.96
2017		21.51	-21.84	55.47	-1.21	-10.91	2.68	24.19	53.60	16.90	18.19	20.73	-2.23	-32.06	-2.66
2018 (a)		-5.36	-23.42	33.02	-5.70	-9.27	2.33	-3.04	16.17	-21.75	7.91	28.71	1.30	-10.92	8.29
2016	IV	9.92	-4.95	11.78	5.84	-2.75	0.94	10.86	19.83	7.68	3.21	8.88	0.06	-4.37	4.61
2017	I	-1.37	-6.21	8.83	-0.46	-3.53	0.41	-0.96	37.95	-3.06	28.32	14.37	-1.68	-43.38	-4.47
	II	5.81	-3.42	15.26	-3.56	-2.47	0.57	6.38	-3.68	3.94	-4.04	-3.20	-0.39	5.85	-4.21
	III	6.66	-7.26	19.09	-1.84	-3.33	0.55	7.21	7.83	7.28	4.50	-2.81	-1.14	-0.24	0.39
	IV	10.41	-4.96	12.29	4.66	-1.58	1.16	11.57	11.50	8.73	-10.59	12.38	0.98	5.70	5.63
2018	I	-4.16	-6.39	6.79	-0.73	-3.83	0.75	-3.41	3.69	-1.12	4.13	-0.80	1.48	-3.14	3.96
	II	-1.04	-6.96	11.25	-3.44	-1.88	0.88	-0.16	13.29	-17.39	7.69	23.92	-0.93	-14.53	-1.07
	III	-0.17	-10.07	14.99	-1.52	-3.56	0.70	0.53	-0.82	-3.25	-3.90	5.58	0.75	6.75	5.41
			Goods and Services		Primary and Secondary Income										
2018	Aug	1.50	3.36		-1.86		0.19	1.69	-11.76	-0.23	3.41	-15.06	0.12	14.64	1.20
	Sep	0.70	1.38		-0.68		0.34	1.04	5.52	1.60	-10.34	13.99	0.27	-6.12	-1.64
	Oct	0.29	1.99		-1.70		0.36	0.65	4.15	10.29	6.68	-12.47	-0.36	-0.64	2.86
Percentage of GDP															
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		1.2	-2.0	4.4	-0.3	-1.0	0.7	1.8	5.7	2.4	-0.5	4.0	-0.1	-3.7	0.2
2016		2.3	-1.4	4.6	0.1	-1.1	0.2	2.5	6.9	1.3	3.5	2.4	-0.3	-4.7	-0.3
2017		1.8	-1.9	4.8	-0.1	-0.9	0.2	2.1	4.6	1.4	1.6	1.8	-0.2	-2.7	-0.2
2018 (a)		-0.6	-2.6	3.7	-0.6	-1.0	0.3	-0.3	1.8	-2.4	0.9	3.2	0.1	-1.2	0.9
	IV	3.4	-1.7	4.0	2.0	-0.9	0.3	3.7	6.8	2.6	1.1	3.1	0.0	-1.5	1.6
2017	I	-0.5	-2.2	3.2	-0.2	-1.3	0.1	-0.3	13.7	-1.1	10.2	5.2	-0.6	-15.6	-1.6
	II	2.0	-1.2	5.2	-1.2	-0.8	0.2	2.2	-1.2	1.3	-1.4	-1.1	-0.1	2.0	-1.4
	III	2.3	-2.5	6.6	-0.6	-1.2	0.2	2.5	2.7	2.5	1.6	-1.0	-0.4	-0.1	0.1
	IV	3.4	-1.6	4.0	1.5	-0.5	0.4	3.8	3.8	2.9	-3.5	4.1	0.3	1.9	1.8
2018	I	-1.4	-2.2	2.4	-0.3	-1.3	0.3	-1.2	1.3	-0.4	1.4	-0.3	0.5	-1.1	1.4
	II	-0.3	-2.3	3.7	-1.1	-0.6	0.3	-0.1	4.4	-5.7	2.5	7.8	-0.3	-4.8	-0.4
	III	-0.1	-3.4	5.0	-0.5	-1.2	0.2	0.2	-0.3	-1.1	-1.3	1.9	0.3	2.3	1.8

(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

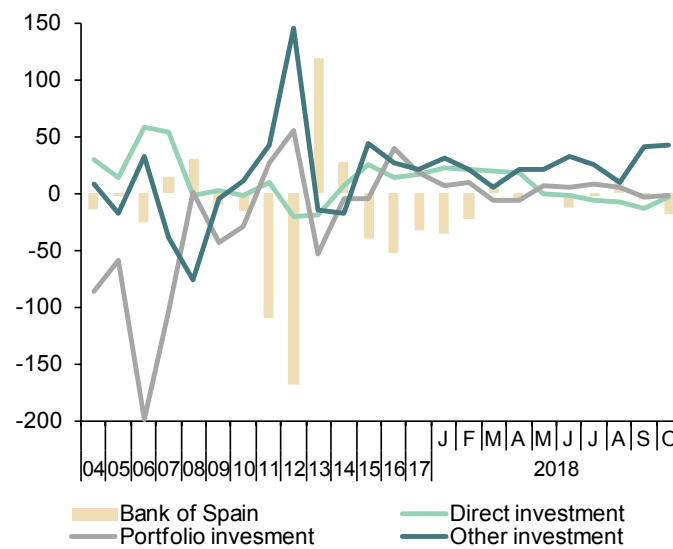


Table 16

**Competitiveness indicators in relation to EMU**

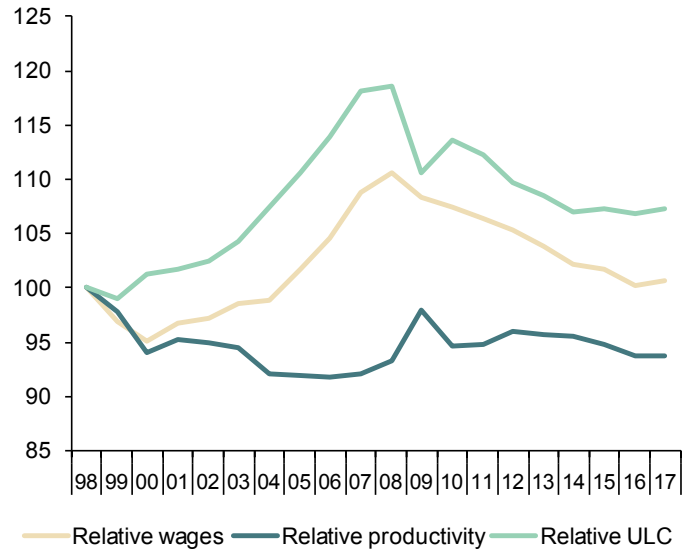
	Relative Unit Labour Costs in industry (Spain/EMU)			Harmonized Consumer Prices			Producer prices			Real Effective Exchange Rate in relation to developed countries	
	Relative hourly wages	Relative hourly productivity	Relative ULC	Spain	EMU	Spain/EMU	Spain	EMU	Spain/EMU		
	1998=100			2015=100			2015=100				1999 I =100
2011	106.3	94.8	112.2	96.9	95.8	101.2	99.1	101.7	97.5	113.1	
2012	105.3	96.0	109.7	99.3	98.2	101.1	102.9	104.6	98.3	111.7	
2013	103.9	95.7	108.6	100.8	99.5	101.3	103.5	104.4	99.1	113.4	
2014	102.2	95.5	107.1	100.6	100.0	100.7	102.1	102.8	99.3	112.4	
2015	101.7	94.7	107.4	100.0	100.0	100.0	100.0	100.0	100.0	109.0	
2016	100.3	93.8	106.9	99.7	100.3	99.4	96.9	97.7	99.2	108.9	
2017	100.6	93.7	107.3	101.7	101.8	99.9	101.2	100.7	100.5	110.3	
2018 (a)	--	--	--	103.5	103.5	99.9	103.3	103.8	99.6	111.0	
2017	I	--	--	100.7	101.0	99.7	101.4	100.7	100.7	109.2	
	II	--	--	102.2	102.0	100.2	100.4	100.2	100.2	110.3	
	III	--	--	101.3	101.8	99.5	100.8	100.4	100.3	110.4	
	IV	--	--	102.6	102.4	100.2	102.2	101.4	100.8	111.4	
2018	I	--	--	101.7	102.3	99.5	102.2	102.2	100.1	110.7	
	II	--	--	104.1	103.7	100.4	102.9	103.2	99.7	111.6	
	III	--	--	103.6	103.9	99.7	104.1	105.0	99.1	110.7	
	IV	--	--	104.4	104.4	100.1	--	--	--	--	
2018	Oct	--	--	104.8	104.5	100.3	104.7	105.6	99.1	111.3	
	Nov	--	--	104.5	104.3	100.2	104.4	104.7	99.7	111.1	
	Dec	--	--	104.0	104.3	99.7	--	--	--	--	
	Annual percentage changes						Differential	Annual percentage changes		Differential	Annual percentage changes
2011	-1.1	0.2	-1.2	3.0	2.7	0.3	6.5	5.2	1.3	0.2	
2012	-1.0	1.3	-2.3	2.4	2.5	-0.1	3.8	2.9	0.9	-1.3	
2013	-1.3	-0.3	-1.0	1.5	1.3	0.2	0.6	-0.2	0.8	1.5	
2014	-1.6	-0.2	-1.4	-0.2	0.4	-0.6	-1.3	-1.5	0.2	-0.9	
2015	-0.5	-0.8	0.3	-0.6	0.0	-0.6	-2.0	-2.8	0.8	-3.0	
2016	-1.4	-1.0	-0.4	-0.3	0.3	-0.6	-3.1	-2.3	-0.8	-0.1	
2017	0.3	-0.1	0.4	2.0	1.5	0.5	4.5	3.1	1.4	1.3	
2018 (b)	--	--	--	1.7	1.7	0.0	2.2	3.2	-1.0	0.8	
2017	I	--	--	2.7	1.8	0.9	6.9	4.2	2.7	1.4	
	II	--	--	2.1	1.5	0.6	4.8	3.4	1.4	1.1	
	III	--	--	1.8	1.4	0.4	3.6	2.5	1.1	1.6	
	IV	--	--	1.6	1.4	0.2	2.7	2.3	0.4	1.3	
2018	I	--	--	1.1	1.3	-0.2	0.9	1.5	-0.6	1.4	
	II	--	--	1.8	1.7	0.1	2.5	3.0	-0.5	1.2	
	III	--	--	2.3	2.1	0.2	3.3	4.5	-1.2	0.3	
	IV	--	--	1.8	1.9	-0.1	--	--	--	--	
2018	Oct	--	--	2.3	2.2	0.1	2.8	4.8	-2.0	0.0	
	Nov	--	--	1.7	1.9	-0.2	2.1	4.9	-2.8	-0.5	
	Dec	--	--	1.2	1.6	-0.4	--	--	--	--	

(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

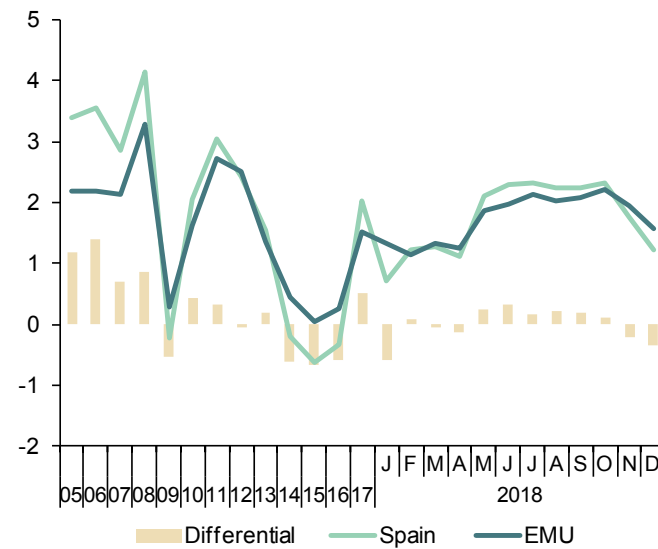


Table 17a

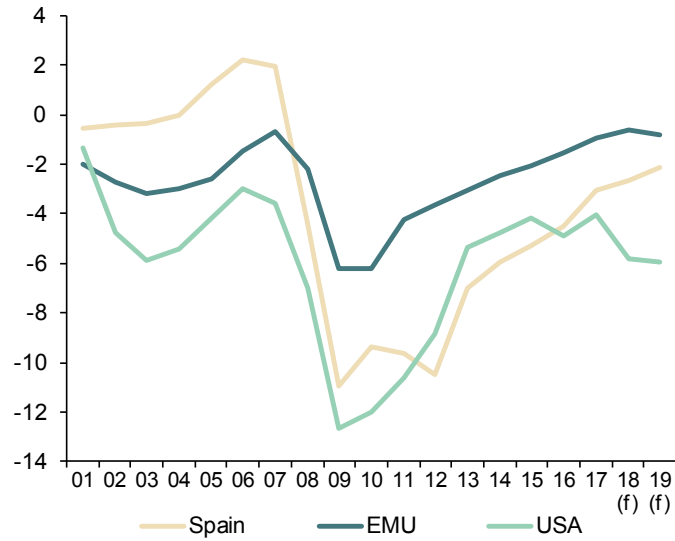
**Imbalances: International comparison (I)**  
(In yellow: European Commission Forecasts)

	Government net lending (+) or borrowing (-)			Government consolidated gross debt			Current Account Balance of Payments (National Accounts)		
	Spain	EMU	USA	Spain	EMU	USA	Spain	EMU	USA
Billions of national currency									
2006	22.2	-133.8	-411.6	392.1	6,003.4	8,879.5	-90.7	27.4	-594.0
2007	20.8	-63.2	-513.6	384.7	6,113.2	9,356.6	-104.1	18.6	-728.5
2008	-49.3	-208.7	-1,033.3	440.6	6,626.5	10,851.1	-102.9	-57.6	-866.1
2009	-118.2	-579.4	-1,827.4	569.5	7,364.4	12,541.3	-46.5	51.3	-564.3
2010	-101.4	-592.5	-1,797.7	650.1	8,099.9	14,316.0	-42.0	57.2	-497.7
2011	-103.2	-416.3	-1,646.6	744.3	8,564.5	15,512.8	-35.3	80.1	-412.4
2012	-108.8	-362.0	-1,430.7	891.5	9,021.7	16,726.4	-4.6	218.2	-206.8
2013	-71.7	-304.5	-894.0	979.0	9,334.8	17,592.7	15.0	273.4	-208.2
2014	-61.9	-252.5	-832.5	1,041.6	9,580.4	18,311.9	10.3	308.2	-76.6
2015	-57.0	-215.5	-765.2	1,073.9	9,698.4	19,080.1	11.4	352.5	-169.2
2016	-50.0	-168.5	-920.0	1,107.2	9,874.2	19,959.1	24.1	376.2	-318.9
2017	-35.9	-108.0	-781.6	1,144.4	9,962.4	20,498.5	22.4	444.4	-329.3
2018	-32.4	-73.2	-1,186.8	1,175.6	10,084.8	21,685.3	14.6	446.1	--
2019	-27.0	-100.2	-1,282.3	1,211.4	10,208.0	23,055.0	12.5	438.5	--
Percentage of GDP									
2006	2.2	-1.5	-3.0	38.9	67.4	64.3	-9.0	0.3	-4.3
2007	1.9	-0.7	-3.6	35.6	65.0	64.7	-9.6	0.2	-5.0
2008	-4.4	-2.2	-7.0	39.5	68.7	73.8	-9.2	-0.6	-5.9
2009	-11.0	-6.2	-12.6	52.8	79.2	86.8	-4.3	0.6	-3.9
2010	-9.4	-6.2	-12.0	60.1	84.8	95.5	-3.9	0.6	-3.3
2011	-9.6	-4.2	-10.6	69.5	87.3	99.8	-3.3	0.8	-2.7
2012	-10.5	-3.7	-8.8	85.7	91.6	103.3	-0.4	2.2	-1.3
2013	-7.0	-3.1	-5.3	95.5	93.9	104.8	1.5	2.7	-1.2
2014	-6.0	-2.5	-4.8	100.4	94.2	104.5	1.0	3.0	-0.4
2015	-5.3	-2.0	-4.2	99.3	92.1	104.7	1.1	3.3	-0.9
2016	-4.5	-1.6	-4.9	99.0	91.2	106.7	2.2	3.5	-1.7
2017	-3.1	-1.0	-4.0	98.1	88.9	105.2	1.9	4.0	-1.7
2018	-2.7	-0.6	-5.8	96.9	86.9	105.8	1.2	3.8	--
2019	-2.1	-0.8	-6.0	96.2	84.9	107.3	1.0	3.6	--

Source: European Commission Forecasts, Autumn 2018.

**Chart 17a.1 - Government deficit**

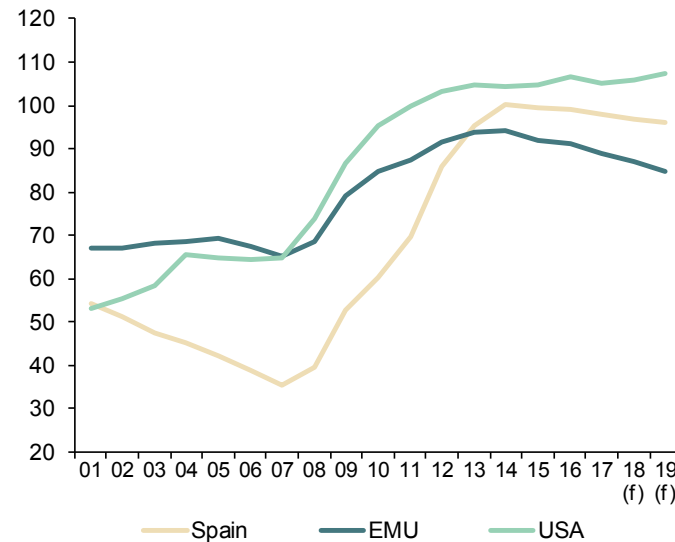
Percentage of GDP



(f) European Commission forecast.

**Chart 17a.2 - Government gross debt**

Percentage of GDP



(f) European Commission forecast.



Table 17b

**Imbalances: International comparison (II)**

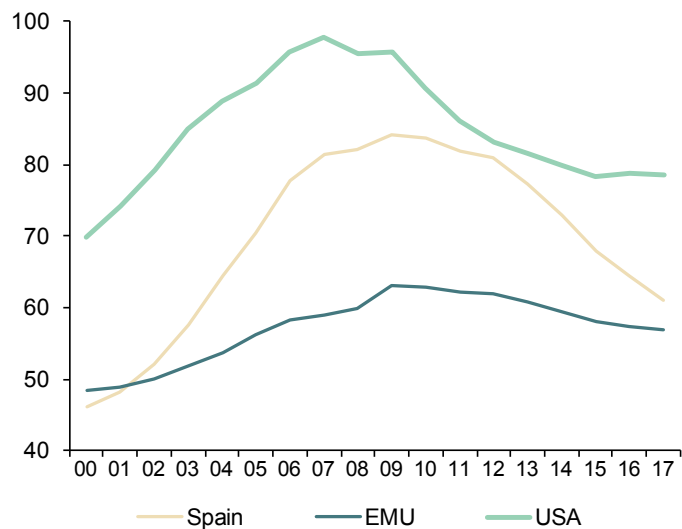
	Household debt (a)			Non-financial corporations debt (a)		
	Spain	EMU	USA	Spain	EMU	USA
Billions of national currency						
2005	656.2	4,764.5	11,975.8	925.0	6,968.1	8,154.4
2006	783.5	5,187.5	13,256.6	1,158.8	7,590.8	8,971.4
2007	879.3	5,555.5	14,174.7	1,344.5	8,353.3	10,097.4
2008	916.7	5,768.6	14,047.3	1,422.6	8,998.2	10,664.2
2009	908.9	5,876.1	13,812.0	1,406.1	9,078.0	10,142.8
2010	905.2	6,019.4	13,574.8	1,429.4	9,272.2	9,994.7
2011	877.9	6,103.4	13,381.0	1,415.7	9,654.5	10,257.2
2012	840.9	6,097.0	13,443.7	1,309.8	9,837.1	10,760.4
2013	793.3	6,052.1	13,596.0	1,230.6	9,837.7	11,244.4
2014	757.2	6,055.4	13,953.1	1,179.2	10,297.5	11,941.2
2015	733.8	6,120.4	14,216.9	1,154.5	10,851.8	12,745.6
2016	721.2	6,223.1	14,671.3	1,140.9	11,181.5	13,449.8
2017	712.7	6,381.7	15,251.4	1,126.1	11,357.3	14,259.3
Percentage of GDP						
2005	70.5	56.3	91.5	99.4	82.3	62.3
2006	77.7	58.2	95.7	115.0	85.2	64.7
2007	81.4	59.1	97.9	124.4	88.8	69.7
2008	82.1	59.8	95.4	127.4	93.4	72.5
2009	84.2	63.2	95.8	130.3	97.6	70.3
2010	83.7	63.0	90.7	132.2	97.1	66.8
2011	82.0	62.2	86.2	132.3	98.5	66.1
2012	80.9	61.9	83.2	126.0	99.9	66.6
2013	77.3	60.9	81.5	120.0	98.9	67.4
2014	73.0	59.5	80.1	113.6	101.2	68.5
2015	67.9	58.1	78.5	106.8	103.1	70.3
2016	64.5	57.5	78.8	102.0	103.2	72.2
2017	61.1	57.0	78.7	96.6	101.4	73.5

(a) Loans and debt securities.

Sources: Eurostat and Federal Reserve.

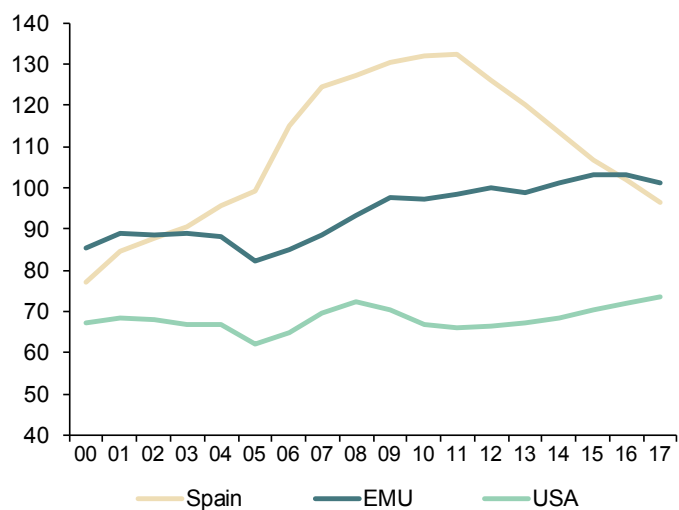
**Chart 17b.1 - Household debt**

Percentage of GDP



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

Percentage of GDP



# 50 Financial System Indicators

Updated: January 15<sup>th</sup>, 2019

Highlights		
Indicator	Last value available	Corresponding to:
Bank lending to other resident sectors (monthly average % var.)	0.07	October 2018
Other resident sectors' deposits in credit institutions (monthly average % var.)	-1.2	October 2018
Doubtful loans (monthly % var.)	-1.4	October 2018
Recourse to the Eurosystem L/T (Eurozone financial institutions, million euros)	725,445	December 2018
Recourse to the Eurosystem L/T (Spanish financial institutions, million euros)	167,421	December 2018
Recourse to the Eurosystem (Spanish financial institutions million euros) - Main refinancing operations	167	December 2018
"Operating expenses/gross operating income" ratio (%)	54.03	December 2017
"Customer deposits/employees" ratio (thousand euros)	6,532.25	December 2017
"Customer deposits/branches" ratio (thousand euros)	47,309.12	December 2017
"Branches/institutions" ratio	122.22	December 2017

## A. Money and Interest Rates

Indicator	Source	Average 2001-2015	2016	2017	2018 December	2019 January 15 <sup>th</sup>	Definition and calculation
1. Monetary Supply (% chg.)	ECB	5.1	5.0	4.7	-	-	M3 aggregate change (non-stationary)
2. Three-month interbank interest rate	Bank of Spain	2.0	-0.26	-0.329	-0.309	-0.308	Daily data average
3. One-year Euribor interest rate (from 1994)	Bank of Spain	2.3	-0.03	-0.186	-0.117	-0.117	End-of-month data
4. Ten-year Treasury bonds interest rate (from 1998)	Bank of Spain	4.2	1.4	1.5	1.4	1.4	Market interest rate (not exclusively between account holders)
5. Corporate bonds average interest rate	Bank of Spain	4.0	2.3	1.4	-	-	End-of-month straight bonds average interest rate (> 2 years) in the AIAF market

*Comment on "Money and Interest Rates": Interbank rates have remained mostly unchanged in the first half of January. The 3-month interbank rate increased from -0.309% in December to -0.308% and the 1-year Euribor stayed at -0.117%. The ECB has reconfirmed its plan to change the stance of monetary policy and it suggested interest rates could go up during the summer of 2019. As for the Spanish 10-year bond yield, it has remained at 1.4%.*

## B. Financial Markets

Indicator	Source	Average 2001-2015	2016	2017	2018 October	2018 November	Definition and calculation
6. Outright spot treasury bills transactions trade ratio	Bank of Spain	44.4	102.6	54.60	172.93	139.44	(Traded amount/outstanding balance) x100 in the market (not exclusively between account holders)
7. Outright spot government bonds transactions trade ratio	Bank of Spain	76.1	55.1	27.60	92.95	78.52	(Traded amount/outstanding balance) x100 in the market (not exclusively between account holders)
8. Outright forward treasury bills transactions trade ratio	Bank of Spain	1.2	0.4	3.46	0.06	-	(Traded amount/outstanding balance) x100 in the market (not exclusively between account holders)
9. Outright forward government bonds transactions trade ratio	Bank of Spain	4.4	1.9	4.76	2.14	1.80	(Traded amount/outstanding balance) in the market (not exclusively between account holders)
10. Three-month maturity treasury bills interest rate	Bank of Spain	1.7	0.0	-0.7	-0.6	-0.5	Outright transactions in the market (not exclusively between account holders)
11. Government bonds yield index (Dec1987=100)	Bank of Spain	726.2	1,104.9	1,127.71	1,143.96	1,144.93	Outright transactions in the market (not exclusively between account holders)
12. Madrid Stock Exchange Capitalization (monthly average % chg.)	Bank of Spain and Madrid Stock Exchange	0.4	0.2	-1.3	-5.5	2.3	Change in the total number of resident companies
13. Stock market trading volume. Stock trading volume (monthly average % var.)	Bank of Spain and Madrid Stock Exchange	3.9	0.7	2.2	54.4	-24.1	Stock market trading volume. Stock trading volume: change in total trading volume
14. Madrid Stock Exchange general index (Dec 1985=100)	Bank of Spain and Madrid Stock Exchange	1,018.0	943.6	1,055.4	899.11	891.99 (a)	Base 1985=100
15. Ibex-35 (Dec 1989=3000)	Bank of Spain and Madrid Stock Exchange	9,880.1	8,790.9	10,451.5	8,993.5	8,818.6 (a)	Base dec1989=3000
16. Madrid Stock Exchange PER ratio (share value/profitability)	Bank of Spain and Madrid Stock Exchange	16.2	23.6	15.8	13.4	12.1 (a)	Madrid Stock Exchange Ratio "share value/ capital profitability"
17. Long-term bonds. Stock trading volume (% chg.)	Bank of Spain and Madrid Stock Exchange	5.3	55.9	-	-	-	Variation for all stocks

## B. Financial Markets (continued)

Indicator	Source	Average 2001-2015	2016	2017	2018 October	2018 November	Definition and calculation
18. Commercial paper. Trading balance (% chg.)	Bank of Spain and AIAF	1.6	0.1	-	-	-	AIAF fixed-income market
19. Commercial paper. Three-month interest rate	Bank of Spain and AIAF	2.2	0.0	-	-	-	AIAF fixed-income market
20. IBEX-35 financial futures concluded transactions (% chg.)	Bank of Spain	1.4	-0.4	0.6	27.9	-	IBEX-35 shares concluded transactions
21. IBEX-35 financial options concluded transactions (%chg.)	Bank of Spain	10.6	5.8	5.8	21.6	-	IBEX-35 shares concluded transactions

(a) Last data published: January 15<sup>th</sup>, 2019.

Comment on "Financial Markets": During last November, there was a decrease in transactions with outright spot T-bills to 139.4% and also of spot government bonds transactions to 78.52%. The stock market has registered a decrease with the IBEX-35 down to 8,819 points, and the General Index of the Madrid Stock Exchange to 892.

## C. Financial Saving and Debt

Indicator	Source	Average 2008-2015	2016	2017	2018 Q1	2018 Q2	Definition and calculation
22. Net Financial Savings/GDP (National Economy)	Bank of Spain	-2.3	2.1	2.0	2.0	1.7	Difference between financial assets and financial liabilities flows over GDP
23. Net Financial Savings/GDP (Households and non-profit institutions)	Bank of Spain	2.1	2.6	0.5	0.5	0.4	Difference between financial assets and financial liabilities flows over GDP
24. Debt in securities (other than shares) and loans/GDP (National Economy)	Bank of Spain	261.5	297.0	287.4	287.3	286.0	Public debt. non-financial companies debt and households and non-profit institutions debt over GDP
25. Debt in securities (other than shares) and loans/GDP (Households and non-profit institutions)	Bank of Spain	64.6	64.4	61.3	60.5	60.8	Households and non-profit institutions debt over GDP
26. Households and non-profit institutions balance: financial assets (quarterly average % chg.)	Bank of Spain	0.5	0.6	3.8	-0.4	2.6	Total assets percentage change (financial balance)
27. Households and non-profit institutions balance: financial liabilities (quarterly average % chg.)	Bank of Spain	-1.5	1.1	-0.1	0.1	1.6	Total liabilities percentage change (financial balance)

Comment on "Financial Savings and Debt": During 2018Q2, the financial savings to GDP in the overall economy fell to 1.7%. There was a decrease in the financial savings rate of households from 0.5% to 0.4%. The debt to GDP ratio increased to 60.8%. Finally, the stock of financial assets on households' balance sheets registered an increase of 2.6%, and there was a 1.6% growth in the stock of financial liabilities.

## D. Credit institutions. Business Development

Indicator	Source	Average 2001-2015	2016	2017	2018 September	2018 October	Definition and calculation
28. Bank lending to other resident sectors (monthly average % var.)	Bank of Spain	7.3	-4.1	-0.4	0.3	0.07	Lending to the private sector percentage change for the sum of banks. savings banks and credit unions
29. Other resident sectors' deposits in credit institutions (monthly average % var.)	Bank of Spain	7.8	-0.1	2.4	0.8	-1.2	Deposits percentage change for the sum of banks. savings banks and credit unions
30. Debt securities (monthly average % var.)	Bank of Spain	9.5	-11.6	-3.7	1.1	0.05	Asset-side debt securities percentage change for the sum of banks. savings banks and credit unions
31. Shares and equity (monthly average % var.)	Bank of Spain	10.7	-1.0	0.7	-2.9	-0.9	Asset-side equity and shares percentage change for the sum of banks. savings banks and credit unions
32. Credit institutions. Net position (difference between assets from credit institutions and liabilities with credit institutions) (% of total assets)	Bank of Spain	-2.2	-4.5	-1.7	-2.7	-5.9	Difference between the asset-side and liability-side "Credit System" item as a proxy of the net position in the interbank market (month-end)
33. Doubtful loans (monthly average % var.)	Bank of Spain	0.2	-3.6	-3.8	-2.2	-1.4	Doubtful loans. Percentage change for the sum of banks. savings banks and credit unions
34. Assets sold under repurchase (monthly average % var.)	Bank of Spain	-1.8	-22.2	-3.5	-2.3	1.7	Liability-side assets sold under repurchase. Percentage change for the sum of banks. savings banks and credit unions
35. Equity capital (monthly average % var.)	Bank of Spain	9.0	-0.3	-1.2	-2.8	-0.04	Equity percentage change for the sum of banks, savings banks and credit unions

*Comment on "Credit institutions. Business Development": The latest available data as of October 2018 show an increase in bank credit to the private sector of 0.07%. Data also show a decrease in financial institutions deposit-taking of 1.2%. Holdings of debt securities grew 0.05%. Doubtful loans decreased 1.4% compared to the previous month.*

## E. Credit institutions. Market Structure and Eurosystem Refinancing

Indicator	Source	Average 2000-2014	2016	2017	2018 June	2018 September	Definition and calculation
36. Number of Spanish credit institutions	Bank of Spain	195	124	122	122	122	Total number of banks, savings banks and credit unions operating in Spanish territory
37. Number of foreign credit institutions operating in Spain	Bank of Spain	74	82	83	82	81	Total number of foreign credit institutions operating in Spanish territory
38. Number of employees	Bank of Spain	243,544	189,280	187,472	187,472(a)	-	Total number of employees in the banking sector
39. Number of branches	Bank of Spain	40,110	28,643	27,320	26,707	26,474	Total number of branches in the banking sector
40. Recourse to the Eurosystem: long term (total Eurozone financial institutions) (Euro millions)	Bank of Spain	-	527,317	726,540	754,505	725,445 (b)	Open market operations and ECB standing facilities. Eurozone total
41. Recourse to the Eurosystem: long term (total Spanish financial institutions) (Euro millions)	Bank of Spain	-	138,455	170,445	169,424	167,421 (b)	Open market operations and ECB standing facilities. Spain total
42. Recourse to the Eurosystem (total Spanish financial institutions): main refinancing operations (Euro millions)	Bank of Spain	22,682	1,408	96	35	167 (b)	Open market operations: main long term refinancing operations. Spain total

(a) Last data published: December 2017.

(b) Last data published: December 2018.

Comment on "Credit institutions. Market Structure and Eurosystem Refinancing": In December 2018, recourse to Eurosystem funding by Spanish credit institutions reached 167,421 billion euro.

MEMO ITEM: From January 2015, the ECB also offers information on the asset purchase programs. In December, the amount borrowed by Spanish and Eurozone banks in these programs reached 338.2 billion euros and 2.6 trillion euros, respectively.

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

Indicator	Source	Average 2000-2013	2014	2015	2016	2017	Definition and calculation
43. "Operating expenses/gross operating income" ratio	Bank of Spain	50.89	47.27	50.98	54.18	54.03	Operational efficiency indicator. Numerator and denominator are obtained directly from credit institutions' P&L accounts
44. "Customer deposits/employees" ratio (Euro thousands)	Bank of Spain	3,519.51	5,892.09	5,595.62	5,600.48	6,532.25	Productivity indicator (business by employee)
45. "Customer deposits/branches" ratio (Euro thousands)	Bank of Spain	21,338.27	40,119.97	36,791.09	39,457.04	47,309.12	Productivity indicator (business by branch)

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

Indicator	Source	Average 2000-2013	2014	2015	2016	2017	Definition and calculation
46. "Branches/institutions" ratio	Bank of Spain	205.80	142.85	229.04	139.84	122.22	Network expansion indicator
47. "Employees/branches" ratio	Bank of Spain	6.1	6.8	6.57	7.05	6.97	Branch size indicator
48. "Equity capital (monthly average % var.)	Bank of Spain	0.11	0.07	0.01	-0.62	0.84	Credit institutions equity capital variation indicator
49. ROA	Bank of Spain	0.45	0.49	0.39	0.26	0.44	Profitability indicator, defined as the "pre-tax profit/average total assets"
50. ROE	Bank of Spain	6.27	6.46	5.04	3.12	3.66	Profitability indicator, defined as the "pre-tax profit/equity capital"

*Comment on "Credit institutions. Efficiency and Productivity, Risk and Profitability": During 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

Population										
	Total population	Average age	65 and older (%)	Life expectancy at birth (men)	Life expectancy at birth (women)	Dependency rate	Dependency rate (older than 64)	Foreign-born population (%)	New entries (all nationalities)	New entries (EU-27 born) (%)
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	42.1	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	80.3	85.8	52.9	28.4	13.2	534,574	33.4
2017	46,572,132	42.9	18.8	80.4	85.7	53.2	28.8	13.3	637,375	39.3
2018	46,698,569	43.1	19.1			53.6	29.3	13.6		
Sources	EPC	EPC	EPC	ID INE	ID INE	EPC	EPC	EPC	EVR	EVR

ID INE: Indicadores Demográficos INE.

EPC: Estadística del Padrón 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.

Table 2

## Households and families

	Households				Nuptiality					
	Households (thousands)	Average household size	Households with one person younger than 65 (%)	Households with one person older than 65 (%)	Marriage rate (Spanish)	Marriage rate (foreign population)	Divorce rate	Mean age at first marriage, men	Mean age at first marriage, women	Same sex marriages (%)
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	18,512	2.52	14.2	11.4	7.3	6.9	2.10	35.3	33.2	2.67
2018	18,554	2.52								
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, women	Total fertility rate (Spanish women)	Total fertility rate (Foreign women)	Births to single mothers (%)	Abortion rate	Abortion by Spanish-born 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
2017	30.9	1.24	1.70	46.8	10.5	66.1
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.

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.

Divorce rate: Number of divorces per thousand population.

Abortion rate: Number of abortions per thousand women (15-44 years).

■ Data refer to January-September.

Table 3

**Education**

	Educational attainment				Students involved in non-compulsory education					Education expenditure	
	Population 16 years and older with primary education (%)	Population 30-34 with primary education (%)	Population 16 years and older with tertiary education (%)	Population 30-34 with tertiary education (%)	Pre-primary education	Secondary education	Vocational training	Under-graduate students	Post-graduate studies (except doctorate)	Public expenditure (thousands of €)	Public expenditure (%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	4.22
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	4.47
2014	24.4	6.1	27.2	42.3	1,840,008	690,738	652,846	1,364,023	142,156	44,846,415	4.32
2015	23.3	6.6	27.5	40.9	1,808,322	695,557	641,741	1,321,698	171,043	46,597,784	4.31
2016	22.4	6.6	28.1	40.7	1,780,377	687,595	652,471	1,303,252	190,143	47,578,997	4.25
2017	21.4	6.6	28.5	41.2	1,758,271•	675,990•	657,143•				
2018■	20.7	6.6	29.1	42.0							
Sources	LFS	LFS	LFS	LFS	MECD	MECD	MECD	MECD	MECD	MECD	Contabilidad Nacional del INE

LFS: Labor Force Survey.

MECD: Ministerio de Educación, Cultura y Deporte.

INE: Instituto Nacional de Estadística.

• Provisional data.

■ Data refer to January-September.

Table 4

**Social protection: Benefits**

	Contributory benefits *							Non-contributory benefits			
	Unemployment total	Retirement		Permanent disability		Widowhood		Social Security			
		Total	Average amount (€)	Total	Average amount (€)	Total	Average amount (€)	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	726,575	5,826,123	1,063	947,130	936	2,360,395	646	902,193	256,187	199,120	19,019
2018	746,101♦	5,929,471	1,091	951,838	946	2,359,931	664	851,332♦	256,791■	196,682■	16,620■
Sources	BEL	BEL	BEL	BEL	BEL	BEL	BEL	BEL	IMSERO	IMSERO	IMSERO

BEL: Boletín de Estadísticas Laborales.

IMSERO: Instituto de Mayores y Servicios Sociales.

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

■ Data refer to January-October.

♦ Data refer to January-November.

Table 5

**Social protection: Health care**

	Expenditure				Resources				Satisfaction		Patients on waiting list	
	Total (% GDP)	Public (% GDP)	Total expenditure (\$ per inhabitant)	Public expenditure (per inhabitant)	Medical specialists per 1,000 inhabitants	Primary care doctors per 1,000 people assigned	Specialist nurses per 1,000 inhabitants	Primary care nurses per 1,000 people assigned	With the working of the health system	With medical history and tracing by family doctor or pediatrician	Non-urgent surgical procedures	First specialist consultations
2006	7.76	5.62	2,391	1,732	1.6	0.7	2.8	0.6	5.6	7.0	70	54
2008	8.29	6.10	2,774	2,042	1.8	0.8	3.0	0.6	6.4	7.0	71	59
2010	9.01	6.74	2,886	2,157	1.8	0.8	3.2	0.6	6.6	7.3	65	53
2012	9.09	6.55	2,902	2,095	1.8	0.8	3.1	0.6	6.6	7.5	76	53
2014	9.08	6.36	3,057	2,140	1.8	0.8	3.1	0.7	6.3	7.5	87	65
2015	9.16	6.51	3,180	2,258	1.9	0.8	3.2	0.7	6.4	7.5	89	58
2016	8.98	6.34	3,248	2,293	1.9	0.8	3.3	0.6	6.6	7.6	115	72
2017	8.84	6.25	3,370	2,385		0.8		0.6	6.7	7.5	106	66
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.

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# Notes

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