Spanish Economic and Financial Outlook

Improving SME access to finance in Spain

context

Isabel Giménez Zuriaga

03

05

21

31

41

Letter from the Editors

The economic recovery:

Raymond Torres and María Jesús Fernández

Short-term outlook and principal challenges

Santiago Carbó Valverde and Francisco Rodríguez Fernández

Beyond the 2016 stress tests for European banks

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Iratxe Galdeano and Pablo Aumente, A.F.I.
Recent Spanish regulation aimed to improve SMEs' access to finance

The impact of low interest rates on the insurance sector

Snapshot of the Spanish banking sector in a European

Isabel Payo Alcázar and Pedro Pérez Cimarra

59 The role of the Bank of Spain's SME Circular in facilitating access to finance

Irene Peña and Pablo Guijarro, A.F.I.

71 An assessment of fiscal slippage at the regional government level in Spain

Santiago Lago Peñas

81 Spanish electricity market reform: Positive effects but more competition needed

Aitor Ciarreta, María Paz Espinosa and Aitor Zurimendi

93 Recent key developments in the area of Spanish financial regulation

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

95 Spanish economic forecasts panel: September 2016 Funcas Economic Trends and Statistics Department

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FEATURES

05 The economic recovery: Short-term outlook and principal challenges

Raymond Torres and María Jesús Fernández

Spain's economic recovery is a reality. However, in and of itself, the recovery will not be sufficient to address the main challenges facing the Spanish economy in the medium-term, such as creating quality jobs and reducing public debt.

21 Snapshot of the Spanish banking sector in a European context

Santiago Carbó Valverde and Francisco Rodríguez Fernández

The results of the latest round of EU-wide stress tests have reinforced the perception of improvement in the Spanish banking system, as well as of increased solvency. However, due to persistent doubts about some segments of the European financial system, these tests have failed to reduce investor uncertainty over the state of European banking to the extent desired.

31 Beyond the 2016 stress tests for European banks

Isabel Giménez Zuriaga

The 2016 EU-wide stress tests represent a positive, initial step towards further restoring confidence in the European banking sector. However, the implementation of swifter, more forceful disciplinary tools is needed if the sector's reputation is to be preserved and progress is to be made on banking union.

41 **The impact of low interest rates** on the insurance sector

Iratxe Galdeano and Pablo Aumente, A.F.I.

The protracted period of low-interest rates is undermining interest income in the insurance sector in Spain and in Europe. As part of the adaptation to this new paradigm, the search for profitability has forced entities to reallocate their portfolios towards higher-risk/higheryield assets, as well as recalibrate their product ranges, alongside other efforts to diversify risk and boost underwriting results.

47 Recent Spanish regulation aimed to improve SMEs' access to finance

Isabel Payo Alcázar and Pedro Pérez Cimarra

Recent regulations approved in Spain seek to improve SMEs' access to both bank and alternative financial sources through reducing information asymmetries across borrowers. Although too early to assess the efficacy of the measures, they no doubt represent an important step forward towards increasing transparency of the SME credit risk assessment process.

59 The role of the Bank of Spain's SME Circular in facilitating access to finance

Irene Peña and Pablo Guijarro, A.F.I.

The high degree of dependence on bank credit represents a key challenges for access to finance for Spain's SMEs. Recent regulations adopted by the Bank of Spain are a necessary and welcome step towards addressing this and other issues related to facilitating SME financing.

71

An assessment of fiscal slippage at the regional government level in Spain

Santiago Lago Peñas

A closer look at the diversity of fiscal performance at the regional level provides insights into the possible causes behind recent slippage. However, even in the face of an improved regional fiscal outlook for 2016, it will be necessary to incorporate these insights into new fiscal strategies to ensure budgetary stability over time.

81 Spanish electricity market reform: Positive effects but more competition needed

Aitor Ciarreta, María Paz Espinosa and Aitor Zurimendi

Recently adopted reforms have helped to address some of the operating problems of the electricity sector in Spain. While these much-needed reforms represent a step forward, there is still room for improvement to increase competition necessary to bring down retail prices.

93 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)

95 Spanish economic forecasts panel: September 2016

Funcas Economic Trends and Statistics Department

101 KEY FACTS

Economic indicators Financial system indicators This month's *Spanish Economic and Financial Outlook (SEFO)* confirms Spain's economic recovery as a reality; yet, recent indicators point to the beginning of a slowdown to be felt over the course of the coming year, mostly driven by the slowdown in domestic demand, as well as external factors.

In Europe, banks remain immersed in a complicated scenario marked by macroeconomic and financial market uncertainty and an exceptionally expansionary monetary policy that has pushed interest rates into negative territory. The results of the stress tests have highlighted the difficulties of two of the most important European financial systems (German and Italian), casting doubts over the current governance of the banking union and the sector as a whole.

In the case of Spain's financial sector, profitability continues to decline as a consequence of lower interest margins, leaving the door open for additional restructuring. On the positive side, our analysis shows that non-performing loans continued to fall to stand at 9.48% and solvency increased, reaching a CET1 ratio of 11.8% as of June 2016.The European Banking Authority (EBA) stress tests have consolidated the longer-term vision of the improvement in the Spanish banking sector's solvency, although they have not been able to ascertain, to the extent that would have been desired, which banking sectors present the main problems and to what degree.

Against this backdrop, the September *SEFO* reflects on the limitations of the stress test exercise, which, even given its positive outcome, has not succeeded in reassuring financial markets. Despite shortfalls, the publication of the stress test results is a good start towards boosting transparency. However, making progress towards banking union and restoring confidence in the European banking sector will require implementation of more powerful disciplinary tools and greater, swifter adjustments in those financial entities and sectors where they are needed.

As regards the insurance sector, we highlight the uncertainty generated from the prolonged episode of low interest rates - one of the main issues affecting the insurance sectors in Spain and in the rest of Europe, particularly for insurers with guaranteed long-term commitments. Despite an overall increase in the volume of premiums, the contraction in investment income is exerting upward pressure on expectations for underwriting results. Insurance companies are taking action to adapt to this new environment through attempts to boost income and streamline pay-outs, including: portfolio reallocation towards higher risk, higher yield and longer duration assets; shifts in product offerings; cost cutting measures; and, geographic diversification.

In the medium term, in and of itself, the recovery will not be sufficient to address the main challenges facing the Spanish economy. Beyond 2017, specific policies aimed at job creation and public debt reduction will be needed if Spain is to tackle its key medium-term challenges. Moreover, although at present, political instability is not reflected in current growth, a prolonged period of political uncertainty is likely to affect future growth prospects. Political gridlock is already causing delays in the adoption of decisions and policies crucial to improving Spain's medium term outlook, such as the approval of a new budget and compliance with EU fiscal targets.

Related to the first medium-term challenge, given the importance of SMEs to job creation and their predominance and weight in Spain's business landscape, we explore recent regulatory developments in Spain aimed at overcoming some of the existing SME finance challenges (i.e. high degree of dependence on bank credit, lack of access to alternative financing sources and lack of transparency over banks' credit evaluation process). The new measures attempt to make bank finance more accessible and flexible, while at the same time increasing access to alternative financing sources, through the publication by finance providers of an SME- Financial Information report - designed to reduce SME information asymmetries. The report contemplates various aspects of the borrower's credit profile, with one of the most significant novelties being a borrower risk rating, comprised on the basis of both financial and gualitative variables. Additionally, the report provides information over the borrower's relative position in the sector. Although the measures will not come into effect until October, these regulatory developments already undeniably mark a milestone in terms of the transparency of financial institutions' decision-making process.

Related to the second challenge of public debt reduction, this SEFO takes a look at an important component of this process - fiscal performance at Spain's regional government level. In general terms, the fiscal performance of local corporations has served to offset the deterioration of Spanish public finances at other levels of government, recording surpluses and reducing borrowing in nominal terms. But, the rapid increase of regional financial liabilities has become a source of concern, although some regions have done better than others at reining in spending with the objective of meeting targets. In any event, understanding and correcting the causes of regional fiscal slippage is a pre-requisite for designing on-target fiscal strategies to address this problem in the longer -term.

Finally, we close this number with a snapshot of recently adopted reforms in Spain's electricity sector, designed to address some of its traditional shortcomings. The new measures have solved some of the operating problems related to the consumer price setting system in the retail segment. In addition, the regulation introduced to amend the renewable energy incentive regime has proven effective in controlling the tariff deficit. However, additional measures should be considered to increase competition and bring down retail prices. Looking ahead, the introduction of measures aimed at achieving the Energy Union will be the key determinant factor to form a clear perspective on the future of the energy market.

The economic recovery: Short-term outlook and principal challenges

Raymond Torres and María Jesús Fernández¹

Spain's economic recovery is a reality. However, in and of itself, the recovery will not be sufficient to address the main challenges facing the Spanish economy in the medium-term, such as creating quality jobs and reducing public debt.

The outlook for the global economy continues to be characterized by uncertainty deriving from the direction of US monetary policy, the weakening of global trade and Brexit. Recent indicators in Spain point to the beginning of a slowdown in economic recovery, which will continue to be felt over the course of the coming year, mostly driven by a slowdown in domestic demand, as well as external factors. Beyond 2017, specific policies aimed at job creation and public debt reduction will be needed if Spain is to address its key medium-term challenges.

International context

According to the latest IMF forecasts presented at the G20 summit recently held in China, the world economy will grow by 3.1% in 2016, one tenth of a percentage point less than estimated in the forecasts presented by the IMF in April. For the eurozone, both the IMF and the ECB expect modest growth of around 1.6%.

These forecasts reflect an international environment characterized by further turbulence as a result of the uncertainty regarding the conditions of the UK's exit from the European Union, the direction of US monetary policy and the weakening of world trade.

The UK public's decision to leave the EU has indeed initiated a period of uncertainty for the

global economy and especially the European economy. To date, the new UK government has not formally notified this decision to the European institutions, nor has it defined the model of the relationship it seeks to establish with the EU. After the strong market reaction, the strength of the British currency against the Euro has started to normalise and risk premiums have stabilised. However, greater volatility is expected in capital flows and international direct investments.

The European institutions, meanwhile, have not been able to develop a strategy either, beyond what the UK's exit directly involves. The EU appears to lack the cohesion required to make progress in the negotiations on the trade agreement with the US (TTIP). And the construction of a social pillar –which could contribute to reducing the

¹ Economic Trends and Statistics Department, Funcas.

disaffection of much of public opinion with respect to globalization– has not translated into concrete initiatives. In this context, the announcement by the President of the European Commission of a significant increase in the volume of investments set out in the "Junker plan" has been welcomed as a step in the right direction.

Major changes are anticipated in US monetary policy. The Federal Reserve has begun a rollback of the stimulus measures that were adopted in response to the financial crisis and a further increase in interest rates is expected as well as a reduction in the asset purchase programme. However, the monetary authorities appear divided on the timetable and pace of the adjustment, which could lead to tensions in currency markets and a strategic repositioning by certain investors.

The ECB has confirmed that it will keep in place the exceptional monetary policy measures introduced in recent months (TLTRO II). Interest rates remain at negative levels and the ECB has proceeded to purchase public and corporate debt up to a monthly ceiling of 80 billion euros. This policy has helped to reduce eurozone risk premiums. However, inflation remains at levels well below the annual target of 2%. Moreover, new uncertainties are arising in relation to the solidity of Italy's banking system, which raise questions about the credibility of stress tests.

Despite a reduced volume of trade in goods, international investment and trade in services are progressing at higher rates than before the crisis.

In general, emerging economies are evolving somewhat better than expected. The growth of the Chinese economy, which had fallen at the beginning of the year, is showing signs of stabilising at around 6-6.5%. Russia could resume growth this year and Brazil next year, putting an end to two years of recession. However, the IMF estimates that world trade is growing at an anaemic rate of 2.6%. The weakening of world trade is partly due to the transition of the Chinese economy towards meeting domestic demand, moving away from an export-led development model. Meanwhile, the World Trade Organization (WTO) has warned of the rise of protectionist barriers in the majority of the G20 countries. Lastly, the growing incidence of services in the global economy is bringing with it a reduced volume of trade in goods. However, international investment and trade in services are progressing at higher rates than before the crisis.

Recent performance of the Spanish economy

GDP grew 0.8% in the second quarter of 2016, the same figure as in the three preceding quarters. In annualized terms, this growth is equivalent to 3.3% – hereinafter, the quarter-on quarter growth rates will be expressed in these terms. Year-on-year growth was 3.2%.

Growth in domestic demand slowed sharply to 1%, resulting in a 0.9 percentage point contribution to quarterly GDP growth. The slower growth of this variable was counteracted by a greater contribution from the foreign sector, which amounted to 2.4 percentage points. Since the second quarter of 2015, domestic demand has shown a tendency –with strong quarterly oscillations– towards a slowdown in the growth rate, offset by an upward trend in the contribution from the foreign sector.

The intense slowdown in domestic demand in the second quarter of 2016 is mainly explained by the 6.1% fall in public consumption. The growth rate of private consumption slowed to 2.7%. At the start of the third quarter, retail sales were growing at a rate similar to that seen in the previous quarter, although car registrations and sales of large consumer goods companies slowed, and confidence indices showed a worsening of the downward trend seen since the start of the year (Exhibits 1.1 and 1.2).

Exhibit 1 Consumption and capital goods investment indicators

1.1 - Consumption indicators (I)

Annualised moving quarterly change in %, smoothed series



Sources: Ministry of Economy, INE, DGT and Funcas.

1.3 - Capital goods GFCF indicators (I) Annualised moving guarterly change in %, smoothed series



Sources. Ministry of Economy, DGT and Funcas.

Investment in capital goods and other products accelerated in the second quarter to 6.4%, extending the upturn of this variable since the start of the recovery. Indicators for the beginning of the third quarter point to a possible slowdown in this variable in that period; capital goods orders rose

1.2 - Consumption indicators (II)

Annualised moving quarterly change in % and index (CCI), smoothed series



Sources: European Commission, INE, AEAT and Funcas.

1.4 - Capital goods GFCF indicators (II) Annualised moving guarterly change in %, smoothed series





at the same time as sales of large capital goods companies and commercial vehicle registrations stagnated (Exhibits 1.3 and 1.4).

Investment in housing construction suffered a slight setback after eight consecutive quarters of

Exhibit 2

Industrial activity, services and construction indicators

2.1 - Industrial sector indicators (I)





Sources: INE, Markit Economics and Funcas.

2.3 - Services indicators (I)

Annualised moving quarterly change in % and index, smoothed series



Sources: European Commission, Ministry of Labour, INE and Funcas.



2.2 - Industrial sector indicators (II)



Sources: European Commission, Ministry of Labour and Funcas.

2.4 - Services indicators (II) Annualised moving quarterly change in %, smoothed series 15 60 12 58 9 56 54 6 3 52 0 50 -3 48 -6 46 -9 44 -12 42 -15 40 -18 38 -21 36 -24 34 2009 2010 2011 2012 2013 2014 2015 2016 Overnight hotel stavs Air passenger transport Services PMI (index, right scale)

Sources: INE, AENA, Markit Economics Ltd. and Funcas.



2.6 - Construction sector indicators (II) Annualised moving quarterly change in %, and index, smoothed series

growth. However, the increase in the number of permits for new builds indicates that this is a temporary interruption of the path to recovery. Real estate market indicators continue to offer positive signs: house sales saw an accelerated rate of growth since the start of the year, and at the same time prices continued to rise. Nonresidential construction experienced a recovery in the second quarter, although it is to be expected that the public works component continues to

Exhibit 3

External sector

3.1 - Exports/Imports at constant prices (Customs)

Annualised moving quarterly change in %, smoothed series



Source: Ministry of Economy.

3.3 - Balance of payments EUR billion, cumulative last 12 months



decline, in line with the significant fall shown in official calls for tender since the middle of last year (Exhibit 2.6).

Total exports increased 18.5% in real terms, driven by the strong rise in sales of goods and nontourism services. Tourism services rose, albeit at a moderate rate when compared with the dynamism shown by indicators such as tourist arrivals or



3.4 - Balance of payments EUR billions, moving sum 4 quarters

3.2 - Tourist sector



overnight stays by non-residents. Total imports increased at a lower rate than exports, resulting in a positive contribution by the foreign sector to growth in the second quarter.

On the supply side, the sector showing most progress was that of predominantly market services -i.e. excluding public administration,

Exhibit 4

Labour market indicators

4.1 - Labour supply

Annualised change q-o-q in % and percentage of population aged 16-64



Source: INE (LFS).

4.3 - Social Security affiliates

Annualised moving quarterly change in % and thousands, seasonally-adjusted data



health and education– followed by industry, while construction recorded a drop in activity. With regard to the third quarter, available indicators of the industrial sector such as the sector PMI, the industrial climate index or sales of large industrial goods companies are on a clearly decelerating path, although job creation, according to the social security system registration figures, remains at





4.4 - Registered unemployment



Annualised moving quarterly change in % and thousands, seasonally-adjusted data

5, N.º 5 (September 2016)

a solid and stable rate (Exhibits 2.1 and 2.2). In relation to services, available sector PMI indices have moved at levels only slightly lower than those of previous months, as is the case of job creation (Exhibits 2.3 and 2.4). In construction, noteworthy is the negative trend of indicators such as cement consumption, construction materials industrial production index or the confidence index. Nevertheless, employment in the sector increased in the second quarter, a trend that also remained in the third (Exhibit 2.5).

Employment in terms of full-time equivalent jobs saw a slowing of growth in the second quarter. Except for the primary sector, employment grew in all other sectors. The seasonally adjusted unemployment rate fell by 0.3 percentage points compared to the previous quarter to 20%. As has been happening since the start of the recovery, the fall in the unemployment rate was favoured by the reduction in the workforce, as a result not of a lower rate of activity but of the decrease in the working-age population (Exhibits 4.1 and 4.2). With respect to the third quarter, according to the seasonally adjusted figures for affiliates to the

Exhibit 5

Price indicators



5.1 - Consumer Prices Index Change y-o-y in % social security system, the growth in employment weakened somewhat in August, albeit on the back of a very positive result the previous month, such that the average quarterly rate hardly changed in relation to the previous quarter (Exhibits 4.3 and 4.4).

Indicators point to a slowdown in economic activity in the third quarter of the year, coming from a slowdown in domestic demand, which may be affecting the labour market.

In summary, the available indicators point to a slowdown in economic activity in the third quarter of the year, although with a limited reflection in the rate of employment growth. This slowdown would come from the reduced growth in domestic demand, although there are as yet no data on the foreign sector for that period. From the supply perspective, the slowdown would mainly affect the industrial sector.



Source: INE.

Vol. 5, N.º 5 (September 2016)

11

Remuneration per employee recorded year-onyear growth of 0.8% in the second quarter. This rise can be largely explained by the repayment of part of the 2012 extra salary payment to civil servants. In the non-agricultural market segments, the year-on-year growth in wages was more contained, 0.1%. Unit labour costs for the whole of the economy rose slightly in that period in year-on-year terms, although this was due to the significant rise in unit labour costs in the public administration. In the non-agricultural market segments, the downward trend of recent years continued.

Inflation recorded negative rates in the first eight months of the year, with a minimum of -1.1% in April, after which it rose to reach -0.1% in August. These negative rates can be explained by falling energy prices, whilst core inflation has been around 0.7% in the most recent months (Exhibits 5.1 and 5.2).

Up to the month of June, the current account balance showed a surplus of 6.3 billion euros, compared to one billion recorded in the year-ago

Exhibit 6 Financial indicators



6.1 - Government 10 years bonds rate Percentage and basis points period. The improvement was a result of both the rise in the trade surplus and the fall in the income deficit (Exhibit 3.3). The growth in the trade surplus was due, according to national accounting figures, on the one hand, to the increase in the services surplus (derived above all from the strong growth in non-tourism services exports), and on the other hand, to the fall in the prices of imports, both of energy products and other intermediate products.

With regard to the financial account of the balance of payments excluding the Bank of Spain, the deficit recorded up to June was greater than that obtained in the same period last year, which can be explained by the sharp drop in portfolio investments from abroad in Spain. Direct investments from abroad, however, remained at a level similar to 2015 (Exhibit 3.4).

The savings rate for the economy as a whole increased in the first quarter to 22.3% of GDP– the four quarter moving average. This increase came from the business sector. The savings rate in the public sector remained stable, whilst that of households decreased slightly (Exhibits 7.1 and 7.2).

6.2 - New business loans

Annualised moving quarterly change in %, smoothed and s.a. series



Exhibit 7 Financial imbalances

7.1 - Domestic saving, investment and current account balance

Percentage of GDP, 4-quarter moving average





Percentage of GDP, 4-quarter moving average







Sources: INE.

7.4 - Gross debt

Percentage of GDP, 4-quarter moving average



Source: Bank of Spain (Financial Accounts).

In the case of the latter, the reduction in the savings rate, coupled with the slight increase in the investment rate, gave rise to a reduction in the financing capacity. This was allocated, as has been happening in recent years, partly to financial asset acquisition, and partly to debt reduction. Thus, the rate of household indebtedness fell in the first quarter to 104.6% of gross disposable income, 1.4 percentage points less than the previous quarter (Exhibit 7.4). Non-financial companies' growing savings rate continues to exceed their (also rising) investment rate, such that this sector continues to show a notable financing capacity equivalent to 2.4% of GDP. This surplus is also allocated largely to the reduction of debt, which decreased in the first quarter to 102.9% of GDP, almost two percentage points less than in the preceding quarter (Exhibit 7.4).

In short, in the first quarter of 2016, we continued to see two of the most noteworthy features of the Spanish economy since the beginning of the recovery, namely the growth in investment by private players in tandem with the reduction of indebtedness, both in relative and nominal terms.

Business investment has been boosted by solid profit margins and reduced enterprise indebtedness.

The deficit of the public administrations excluding local government corporations up to May was 24.6 billion euros, up 1.6 billion euros on the yearago period. This deterioration came in part from the central government, which is suffering a sharp drop in corporate income tax collection, because, among other things, the measures adopted in previous years aimed at increasing prepayments came to an end this year. Income tax collection is also falling because of lower tax rates. The deterioration of the public administrations' fiscal balance also stems from the social security system, mainly due to the fact that benefits -pensions- are growing at a faster rate than social security contributions. The autonomous regions, in contrast, reduced their deficit by 1.3 billion euros thanks to an increase in income resulting from the functioning of the financing system.

The returns on Spanish public debt have fallen more sharply than expected, especially after the result of the UK referendum. In August, returns were on average 1.01%, compared to 1.73% at the start of the year. The yield vis-à-vis German debt has also fallen considerably to 108 basis points, the lowest level since the start of the

The returns on Spanish public debt have fallen more sharply than expected, especially after the result of the UK referendum.

European sovereign debt crisis in May 2010. In addition, 3-year debt rates were negative (Exhibit 6.1).

Outlook for 2016 and 2017

For the remainder of 2016, the Spanish economy is expected to continue to grow at a steady pace. GDP growth could reach 3.1% in 2016, one tenth of a percentage point more than predicted in the previous forecast, and almost double that of the eurozone as a whole (Table 1). However, the signs of weakening seen in recent months are expected to be confirmed, which would cause a slowdown. The GDP growth forecast for 2017 remains unchanged at 2.3%, half a percentage point more than in the eurozone. This implies a somewhat sharper than expected slowdown.

These forecasts have been made using two macroeconomic policy assumptions. Firstly, unchanged monetary conditions, *i.e.* the continuation of the ECB's asset purchase policy extended to corporate debt securities (TLTRO II), as well as zero 12-month interest rates for the interbank market, and around 1.1% for 10-year public debt. During the forecast horizon, the euro would trade at its current level of around 1.10 dollars. Secondly, despite the complex political situation and lack of government, a budgetary effort is expected to improve compliance with public deficit targets.

In this context, a slowdown is predicted, mainly originating from domestic demand –notably private and government consumption. The contribution by the foreign sector would remain slightly negative (Exhibits 8.1 and 8.2).

14

Exhibit 8

Economic forecasts for Spain, 2016-2017

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

8.1 - GDP



8.3 - National demand aggregates



8.5 - Inflation



8.2 - GDP, national demand and external balance



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8.6 - Saving, investment and c/a balance (% GDP, 4MA)



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

Table 1

Economic Forecasts for Spain, 2016-2017 Annual rates of change in %, unless otherwise indicates

	Actual data				Funcas forecasts		Change in forecasts (a)	
	Average 1996-2007	Average 2008-2013	2014	2015	2016	2017	2016	2017
1. GDP and aggregates, constant prices								
GDP	3.8	-1.3	1.4	3.2	3.1	2.3	0.1	0.0
Final consumption households and NPISHs	3.6	-2.2	1.2	3.1	3.3	2.2	-0.2	0.1
Final consumption general government	4.3	0.7	0.0	2.7	0.6	0.6	-1.5	-0.4
Gross fixed capital formation	6.4	-7.0	3.5	6.4	4.2	4.8	0.0	-0.2
Construction	5.9	-9.8	-0.2	5.3	2.4	3.7	0.1	0.1
Residential construction	7.8	-11.2	-1.4	2.4	3.0	4.1	-0.9	-0.3
Non-residential construction	4.2	-8.2	0.8	7.5	2.0	3.4	1.0	0.4
Capital goods and other products	7.5	-2.4	7.7	7.5	6.1	6.0	-0.1	-0.4
Exports goods and services	6.6	1.7	5.1	5.4	5.1	4.2	1.1	-0.1
Imports goods and services	8.7	-4.1	6.4	7.5	5.8	4.9	0.4	-0.4
National demand (b)	4.5	-3.0	1.6	3.7	3.1	2.4	-0.2	-0.1
External balance (b)	-0.7	1.7	-0.2	-0.5	-0.1	-0.1	0.2	0.1
GDP, current prices: - € billion			1,041.2	1,081.2	1,118.4	1,155.6		
- % change	7.4	-0.8	1.0	3.8	3.4	3.3	-0.1	-0.1
2. Inflation, employment and unemployment								
GDP deflator	3.5	0.5	-0.4	0.6	0.4	1.0	-0.1	-0.1
Household consumption deflator	3.1	1.8	0.2	-0.5	-0.4	1.2	-0.1	-0.2
Total employment (National Accounts, FTEJ)	3.4	-3.3	1.1	3.0	2.7	1.9	0.1	0.0
Productivity (FTEJ)	0.4	2.1	0.3	0.2	0.3	0.4	-0.1	0.0
Wages	7.5	-1.1	0.9	3.9	3.6	3.1	0.2	0.1
Gross operating surplus	6.9	-0.2	0.4	3.1	3.1	3.2	-0.2	-0.2
Wages per worker (FTEJ)	3.3	2.4	-0.6	0.5	0.6	1.1	0.0	0.1
Unit labour costs	2.9	0.3	-0.8	0.3	0.3	0.7	0.1	0.1
Unemployment rate (LFS)	12.5	20.2	24.4	22.1	20.0	18.5	0.2	0.4
3. Financial balances (% of GDP)								
National saving rate	22.4	19.9	20.8	22.1	23.4	24.0	0.3	0.3
- of which, private saving	18.6	23.1	24.3	24.8	26.0	25.6	1.1	0.9
National investment rate	26.9	23.2	19.8	20.7	21.3	21.9	0.1	0.0
- of which, private investment	23.0	19.4	17.7	18.2	19.1	19.7	0.1	0.0
Current account balance with RoW	-4.5	-3.3	1.0	1.4	2.1	2.1	0.3	0.3
Nation's net lending (+) / net borrowing (-)	-3.7	-2.8	1.6	2.1	2.7	2.7	0.1	0.2
- Private sector	-2.8	5.9	7.5	7.2	7.3	6.2	0.9	0.8
- Public sector (general governm, deficit)	-0.9	-8.6	-5.9	-5.1	-4.6	-3.6	-0.8	-0.6
- General gov. deficit exc. financial		7.0	- 0		4.0		• •	
instit. bailout		-7.9	-5.8	-5.0	-4.6	-3.0	-0.8	-0.6
Gross public debt	52.2	66.8	99.3	99.2	100.4	101.1	0.9	1.6
4. Other variables								
Household saving rate (% of GDI)	10.2	10.2	9.6	9.4	9.3	9.1	-0.3	-0.4
Household gross debt (% of GDI)	82.1	127.2	112.2	106.0	100.1	94.0	-0.3	-3.3
Non-financial coporates gross debt (% of GDP)	80.0	127.9	112.7	104.8	98.9	92.6	-0.2	-0.2
Spanish external gross debt (% of GDP)	90.8	158.2	166.6	167.7	164.2	158.9	0.0	0.0
12-month EURIBOR (annual %)	3.7	1.9	0.5	0.2	0.0	0.0	0.0	0.0
10-year government bond yield (annual %)	5.0	4.7	2.7	1.7	1.4	1.1	-0.1	-0.3

Notes:

(a) Change between present and previous forecasts, in percentage points.

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

Sources: 1996-2015: INE and Bank of Spain; Forecasts 2016-17: Funcas.

Private consumption will suffer from slower job creation, stagnating wages and the end of the impact of the cuts in personal income taxes. In addition, disposable household income would be affected by the moderate rise in oil prices which is predicted. OPEC's production decisions are expected to have an impact, and the Brent price per barrel is expected to increase slightly to 48.5 dollars in 2017. This would put an end to the improvement in terms of trade that buoyed real income and consumption during 2015 and much of 2016. The savings rate would fall slightly, but it would leave room for housing purchases by households without excessive recourse to borrowing (Exhibit 8.3).

A moderate evolution in public consumption is anticipated, as a consequence of the end of the electoral cycle and the need to reduce the deficit to meet targets. It is likely that, in the absence of any agreement between political parties to form a government, the State Budget for 2016 will be extended until 2017, which would mean the freezing of some expenditure. Projections envisage an increase in expenses compatible with that extension, adjusted to take into account the updating of pensions and wages of civil servants.

It is likely that, in the absence of any agreement between political parties to form a government, the State Budget for 2016 will be extended until 2017, which would mean the freezing of some expenditure. However, the government deficit is likely to exceed targets.

Despite uncertainties in the financial markets and the slowdown in domestic demand, companies continue to make new investments. For 2017, a 6% increase in capital goods investments is expected, similar to that recorded in 2016. Investor dynamism reflects a reduction in financial burdens facilitated by the ECB's accommodative policy and corporate debt reduction. The slowdown is also due to external factors. Annual growth of export markets, an essential driver of economic recovery, could suffer from the weak growth of emerging economies and the direct and indirect effects of Brexit. For 2017, exports of goods and services are expected to grow by 4.2%, two tenths of a percentage point higher than the growth of worldwide markets but one percentage point less than in 2016.

The economic slowdown would be reflected in the labour market. It is estimated that for 2016 as a whole employment will grow by around 2.7%. For 2017, it is expected to grow more slowly, by 1.9%. The unemployment rate, although falling, would remain very high, almost double that of the eurozone (Exhibit 8.4).

Despite the increase in the price of imports, inflation would remain below the 2% target. A moderate change is predicted for unit labour costs, less than that seen in other European countries (Exhibit 8.5).

The current account balance is expected to record a surplus of 2.1% of GDP in 2016, 0.7 percentage points more than in 2015. For 2017, a similar result is expected (Exhibit 8.6). This being so, the favourable differential of economic growth appears to be sustainable from the standpoint of external accounts.

Lastly, the outlook for the general government deficit in 2016 has deteriorated substantially. Now it is estimated that the deficit will reach 4.6% of GDP, *i.e.* 0.8 percentage points higher than initially predicted and 1 percentage point higher than predicted officially in the Stability Programme Update. This situation has resulted in the setting of new targets in agreement with the European Commission. According to the agreement, the deficit should be around 4.6% in 2016, 3.1% in 2017 and 2.2% in 2018. However, the absence of new tax collection measures suggests a 3.6% deficit in GDP, *i.e.* a 0.5 percentage point deviation from the new targets.

Principal challenges in the medium-term

While the recovery is a reality, it is questionable whether it will be enough to correct the main imbalances of the Spanish economy in terms of unemployment and public debt. This is a crucial issue, since reducing imbalances depends on maintaining sustained growth. And, *vice versa*, the persistence of imbalances shapes economic progress, convergence towards the most advanced countries and the reduction of social inequalities.

Economic growth, in and of itself, will not be enough to tackle the main imbalances of the Spanish economy in terms of unemployment and public debt. Specific measures are needed.

According to the projections made under the assumption of broadly unchanged policies, unemployment could fall between now and 2020 and the public debt would stabilize. However, this trend would be insufficient to correct existing imbalances (Table 2). In these projections, the growth of the economy would gradually converge towards its potential to stand at 2% in 2020.

Currently, the jobs deficit is obvious. Only 65% of the population aged 20 to 64 years –the core of the

labour market– has a job. The employment rate is 10 percentage points below the most successful countries. Two thirds of those who do not work are unemployed and the rest are not even looking for a job – they are "inactive" in employment terms.

The projection for 2020, assuming that policies remain unchanged, is an increase in the employment rate but without reaching European standards. 14.3% of the labour force would continue to be unemployed by 2020, while one in four working-age people would be inactive.

These results would be all the more problematic because they arise in an adverse demographic context. The working-age population would fall by half a million people over the next five years, as a result of the drop in birth rates over recent years and access to retirement by the boom generation of the 1960s. The shortage of quality jobs could drive many young people to emigrate, intensifying the adverse demographic trends.

In addition to the threat that this poses to social cohesion, the persistence of a low employment rate would generate a serious problem in terms of the sustainability of the pension system. The number of active persons per person of retirement age would be 2.5 in 2020, compared to 2.7 in 2016 and 3.1 in 2007 before the start of the crisis.

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Jnemplo

Unemployment and public indebtedness in 2020

	2000	2007	2016	2020
Employment imbalance				
Population aged 16-64 (million)	27.0	30.6	30.0	29.6
Unemployment rate, %	11.9	8.2	20.0	14.3
Ocupation rate, 16-64, %	57.9	67.3	60.9	65.9
Active population / population aged more than 64	2.4	3.1	2.7	2.5
Public accounts imbalance				
Net lending (+) or borrowing (-) (% GDP)	-1.0	2.0	-4.6	-2.5
Public debt, total Government (% GDP)	58.0	35.5	100.4	100.9
Source: Funcas.				

There are solutions to the shortage of quality jobs, which include facilitating the participation in the labour market of young people, women and persons aged over 55. These are groups that are especially hard hit by the shortcomings in active policies on employment and the reconciliation of professional and family life, gaps in the educational system and discrimination.

Moreover, in many cases, permanent needs are covered by temporary or short-term contracts. The result is greater job insecurity, together with a loss of human capital and productivity. Lastly, school failure rates are still excessive and the educational system is not always in alignment with the needs of the economy, technological transformation and the evolution of society.

As for public debt, recent trends are for a further increase despite strong economic growth. In 2016, general government debt is estimated to represent 100.4% of GDP, almost three times higher than in 2007. This increase is the result of an accumulation of public deficits as well as the granting of aid to banks –which took place in a context of restructuring and losses by the financial institutions resulting from the bursting of the real estate bubble. Worryingly, public debt has continued to grow during the recovery phase.

The central scenario assumes a stable public expenditure as a percentage of GDP. In other words, the public administration would make a constant effort to provide basic services and meet social needs.

The decrease in spending on unemployment benefits –in line with a reduction in unemployment– would be offset by an increase in expenditure on pensions and health resulting from the ageing of the Spanish population. In addition, it is assumed that financial costs on government debt would increase moderately as a result of the ECB's gradual interest rate rises (on the assumption that the ECB's exceptional measures would be phased out slowly). Tax collection would rise slightly above GDP growth to reflect the expected normalization of corporate income tax revenue. The projections do not envisage further tax cuts.

Based on these assumptions, public debt as a percentage of GDP would cease its upward trend and in 2020 would be at a level close to that observed in 2016. However, a swifter normalization of monetary policy would have significant repercussions on interest payments and would cause public debt to spiral.

To address this risk, a strategy is required that could involve greater tax collection efforts, reconsidering tax relief on the payment of social contributions and taxes and upping the fight against tax fraud. Higher taxes on fossil fuels would be another option, which is also consistent with commitments to fight climate change. There is little leeway for tightening public expenditure, which is already below the European average, especially in education. There is also the need to prepare Spain for the digital revolution.

In short, creating quality jobs and reducing public debt are two of the principal challenges facing the Spanish economy. Economic growth, on its own, will not be enough. A strategy with specific longlasting measures is urgently called for.

Snapshot of the Spanish banking sector in a European context

Santiago Carbó Valverde¹ and Francisco Rodríguez Fernández²

The results of the latest round of EU-wide stress tests have reinforced the perception of improvement in the Spanish banking system, as well as of increased solvency. However, due to persistent doubts about some segments of the European financial system, these tests have failed to reduce investor uncertainty over the state of European banking to the extent desired.

Since the beginning of 2016, financial markets have shown a generally negative trend with notable volatility. The banking sector has been among the hardest hit. In addition to the international macroeconomic difficulties at the start of 2016, other factors have generated uncertainty, such as Brexit or evidence of impairment of Italian bank assets. Negative interest rates have also created a tense financial environment in which the generation of profit margins and profitability is even more complicated, which has led most banking institutions to focus their efforts on improving efficiency - in tandem with solvency- so that their profitability is affected as little as possible. With the market situation and the sharp fall in interest rates in 2016, the six largest Spanish financial institutions in the first half of the year recorded combined net profit of 6,381 million euros, down 21.2% on the year-ago period. However, non-performing loans continued to fall, to stand at 9.48% at June 2016, and solvency increased by 0.6 percentage points from June 2015 to June 2016, with the CET1 ratio reaching 11.8%. The European Banking Authority (EBA) stress tests have consolidated the longer-term vision of the improvement in the Spanish banking sector's solvency, although they have not been able to ascertain, to the extent that would have been desired, which banking sectors present the main problems and to what degree, with regard to both credit risk (e.g. Italy) and market risk (e.g. Germany).

A strained financial and macroeconomic environment

At the beginning of 2016 there was already a widespread expectation of a slowdown in the growth of the world economy, with uneven

development in the case of Europe. In Spain, the macroeconomic outlook was, in general, revised upwards by the major analysts. The latest Funcas forecast panel from September 2016 gave a "consensus" GDP growth estimate for Spain of 3.1% this year. However, the outlook for 2017

¹ Bangor Business School and Funcas.

² Universidad de Granada and Funcas.

remained at 2.3%, suggesting that the uncertainty and turbulence could cause problems next year.

Certain recent events in Europe and, overall, a growing perception of increased political risk have had a lot to do with this deterioration in the medium-term outlook. On July 19th, the International Monetary Fund (IMF) also revised its global growth outlook³ alluding to some of these risks, in particular, pointing to the UK's decision to leave the EU (Brexit), suggesting that "Before the June 23rd vote in the United Kingdom in favour of leaving the European Union, economic data and financial market developments suggested that the global economy was evolving broadly as forecast (...). Growth in most advanced economies remained lacklustre, with low potential growth and a gradual closing of output gaps. Prospects remained diverse across emerging market and developing economies, with some improvement for a few large emerging markets -- in particular Brazil and Russia- pointing to a modest upward revision to 2017 global growth relative to April's forecast." As a result, the IMF concluded that "The outcome of the UK vote, which surprised global financial markets, implies the materialisation of an important downside risk for the world economy. The global outlook for 2016-2017 has worsened, despite the better-than-expected performance in early 2016."

Assessing the consequences of Brexit for the Spanish economy in general, and for its financial system in particular, requires a calm, comprehensive and individual effort to correctly assess the political outcomes that will determine its impact. However, it is hard to find anything positive to say about news that, almost in its entirety, is negative both for the UK and for the European Union and Spain. In the latter case, this is not only because of Spain's trade surplus with the UK, but also because of the involvement of Spanish companies, in particular financial institutions, in the UK, among many other interactions that have to be considered. In addition to the unexpected Brexit, there are other sources of economic and financial uncertainty with varying degrees of current and potential impact on the Spanish banking sector. Uncertainty persists over the short-term development and capacity of recovery of emerging economies that are particularly important for Spanish financial institutions, especially Brazil. This adds to the doubts that are still widespread regarding economies with significant potential global spill over effects such as China, with an uncontained credit bubble, growing problems with its trade balance, imbalance in its investments, and a very high degree of corporate leverage.

The European financial system is facing an unusual situation of negative real interest rates which, leaving aside the opportunity this presents in terms of liquidity, is creating major market distortions.

The response to this environment of prolonged uncertainty and growing European political risk continues to be largely a monetary one. The Bank of England reacted to Brexit with monetary stimuli and a historic interest rate cut. Meanwhile, the positions of the European Central Bank and the Federal Reserve are ever more divergent, reflecting the different inflation and growth expectations on both sides of the Atlantic. In any case, the general discourse of the monetary authorities, especially in Europe, is that it is very difficult for them on their own to be the catalyst for solid and lasting growth. In any event, the European financial system is facing an unusual situation of negative real interest rates which, leaving aside the opportunity this presents in terms of liquidity, is creating major market distortions. Although these rates lighten the debt burden for a wide range of players, they hinder the establishment of prices and spreads in a large number of financial agreements.

³ https://www.imf.org/external/pubs/ft/weo/2016/update/02/pdf/0716.pdf

Furthermore, the situation of Italy's banks and the doubts as to the effectiveness of the measures that have been established to date are further specific sources of uncertainty for the financial system. There is also a widespread perception that the stress tests, the results of which were published by the EBA on July 29th, have not resolved the uncertainty about Italy's banking sector or that of other countries such as Germany, where concerns remain with regard to the quality of assets in various aspects.

In this context, the European markets have had a markedly negative performance in 2016 to date, and the banking sector is among the hardest hit. The combination of growing uncertainty and historically low market interest rates has also been evidenced in the results of the Spanish financial institutions in the first half of the year. However, Spanish banks are increasing their level of solvency and have none of the doubts about the quality of their assets that continue to exist with respect to other EU countries. In any event, as has often happened in recent years, doubts about one part of the EU have a negative effect on the whole.

Bank results and loans in a context of negative interest rates

The situation of European banks in the first eight months of 2016 is influenced by market expectations regarding the value of assets and business prospects. In the case of Spain, although reporting transparency has greatly increased, doubts regarding some European banks extend to the current governance capacity of the banking union and to the industry as a whole. However, perhaps adding further downward pressure on valuations are the negative interest rates and the discounted present value of events, such as Brexit or the expected weakening of the global economy. Taken together, these factors represent the major challenge faced by the banks internationally regarding their profitability. Even before entering the negative interest rate environment, the pressure on net interest income was considerable because global, and in particular European, banking was showing clear symptoms of oversupply and the need for restructuring. The negative interest rates, in addition, have not been

The transmission of low rates to credit demand is not entirely clear-cut. Under these conditions, it is not surprising that, even in countries like Spain where there has been significant progress in bank restructuring, financial institutions continue to plan a reduction in offices and employees to bring supply in line with demand and to reduce costs to offset the reduction of income.

accompanied by an increase in demand for financing, since this demand -and also, to some extent, supply- is shaped by still high levels of private sector debt in many countries. Also, there is no "natural" connection between interest rate levels and the level of solvency of demand for loans because these low interest rates are not caused by an interaction between this demand and supply but rather by an exceptionally expansionary monetary policy. Under these conditions, it is not surprising that, even in countries like Spain where there has been significant progress in bank restructuring, financial institutions continue to plan a reduction in offices and employees to bring supply in line with demand and to reduce costs to offset the reduction of income.

The results of the big Spanish banks and their solvency levels in the first half of 2016 compared to the same period in 2015 (Exhibit 1) illustrate these tendencies. Net profit has fallen year-on-year in most cases. The six largest institutions generated attributable profit of 6,381 million euros in the first six months, down 21.2% on the first half



Sources: Financial statements of Santander, BBVA, Caixabank, Bankia, Sabadell and Popular at June 2016 and Funcas.



Exhibit 2 Average interest rates in loan transactions in the Spanish banking sector (2011-2016)

of 2015. Similarly, net interest margin declined in the same period by 1.5% to 30,176 million euros in the first six months of 2016. This tough market environment, however, has not prevented an increase in solvency (according to the fullyloaded CET1 ratio envisaged by the Basel III requirements) from an average of 11.2% in June 2015 to 11.8% in June 2016.

Exhibit 3





Sources: Bank of Spain and Funcas.

25

Note: *June.

Sources: Bank of Spain and Funcas.

Exhibit 4



Amounts of new financing transactions (June 2015 to June 2016)

(Millions of euros)

The sequence of events mentioned above, which has added to market uncertainty, caused the monetary authorities to redouble their efforts in 2016 to ensure an adequate provision of liquidity. This has resulted in lower interest rates in financing transactions. However, conditions of access via pricing do not necessarily concur with regulatory pressures and the solvency conditions



Sources: Bank of Spain and Funcas.

26

Sources: Bank of Spain and Funcas.

27

of demand. Exhibit 2 shows the fall in average rates of loan supply, especially significant in housing loans and loans to corporations.

Are market conditions hampering the improvement in asset quality? This is not the case in the Spanish banking sector. As can be seen in Exhibit 3, the non-performing loan ratio is falling continuously, from 13.77% at 2013 year-end to 9.48% at June 2016. It is likely, in addition, that this reduction in problematic loans will accelerate as the ratio denominator, the balance of private sector loans, ceases to fall as it has done in recent years and starts to increase. This will be noticeable when debt repayments are overtaken by new financing flows. Specifically, loan flows are on the rise, as shown in Exhibit 4, although the change is more significant in loans to SMEs than in other segments.

Outstanding loans (Exhibit 5) have continued to fall in the case of housing loans but, since February 2016, there has been an increase in consumer loans and, since June, an increase in the stock of loans to corporations.

Stress tests with an unequal impact

The European Banking Authority –in conjunction with the European Central Bank– presented on July 29th the results of the stress tests of 51 financial institutions, which account for around 70% of banking sector assets in the EU, including six Spanish banking groups. It should be noted that these tests were conducted in the midst of growing doubts and deep concern for the health of Italy's banking sector, particularly focused on certain institutions such as Monte dei Paschi Di Siena, with a substantial increase in NPLs and poor medium-term macroeconomic and business prospects.

From the perspective of financial stability, the aim of these simulation exercises should be to increase transparency, identify weaknesses and direct possible courses of action. However, it is not clear that the July 2016 stress tests have had a significant informative effect that has boosted confidence in the European banking sector as a whole and in that of certain countries in particular.

It is not clear that the July 2016 stress tests have had a significant informative effect that has boosted confidence in the European banking sector as a whole and in that of certain countries in particular.

At least three matters can be identified that detract from the value of the stress tests for instilling confidence. The tests were conducted with bank data of December 31st, 2015. While recognizing that all the applicable reporting requirements cannot provide an absolutely up-to-date picture, the 2015 year-end banking results help explain from where we have come more than to where we are going. The EBA itself has acknowledged that Europe is a little behind in these banking transparency and control exercises as compared to the United States.

In recent years, despite the advances in the banking union, problems of institutional cohesion have shown up that have meant that any effort to strengthen the European financial security network is fraught with problems. The banking union, as the main initiative, is one example. It is a union whose simple design and launch are extraordinary news but which, to be effective, needs a practical boost and some traction. Unfortunately, the current situation of some European financial systems (Italy, Germany) is not the best for the launch of single supervision, and this is generating significant reputational problems.

The Italian banking problem in particular presents certain weaknesses that are yet to be resolved, including most notably the following:

- The asset quality problems have been building up for years, without any action having been taken in this respect. Growth in NPLs is the clearest sign that not only has it not improved, but rather it continues to worsen.
- With NPL levels exceeding 20% –with wide variability above this percentage, depending on the estimates– it is not enough to focus supervision efforts on a single institution. The stress tests revealed the existence of 220,000 million of non-performing bank assets in Italy's financial institutions.
- Italy's banking problem is not liquidity –even less so with the financing possibilities currently offered by the ECB– but rather solvency and various European analysts estimate a wide discrepancy between the book value of assets and their market value, which could require a capital injection of at least 40,000 to 60,000 million euros.
- The Italian political and supervisory authorities have pointed to the effects of the economic recession on bank balance sheets. Even assuming that this were the main cause of the problem, most analysts estimate the growth of Italian GDP at around 1% per year for both this year and the next, with significant downside risks, suggesting also that the problem could spread. On this point, a good number of analysts have estimated that the adverse macroeconomic scenario envisaged for the Italian banking sector in the EBA tests was, at least comparatively, rather optimistic.
- An additional problem resides in the possible solution. Italy's government and supervisory institutions claim to be able to resolve the problem without the intervention –whether financial or disciplinary– of the European single supervisor. Rescue by the Italian Treasury would mean that it would be the taxpayer (bailout) and not the shareholder or bank bondholder

(bail-in) that incurs the losses. However, it would mean making an exception with regard to the recently launched European rules governing the functioning of this single supervision. European governance is entering the choppy waters of exceptions and doubts and this also entails uncertainty for investors with regard to the current strength and cohesion of the banking union.

As for Germany, the stress tests have not lead to an appreciable reduction in doubts about the exposure to structured investments and derivatives of some institutions either. Certain German banks that are among the largest worldwide are listed on the markets with a 70% discount with respect to their book value and the credit default swaps are traded at similar rates to those at the time of maximum tension in the sovereign debt crisis. These seem to be sufficient grounds for concern. The July stress tests did indeed show a high market risk associated with investments in derivatives and other securities of these institutions.

With this background for two of the most important European financial systems (Germany and Italy) and the apparent complacency with regard to the test results, financial institutions such as those of Spain have not been able to benefit to the extent that would have been desirable from their higher degree of transparency, soundness and recapitalization. Table 1 shows the estimated resistance of Spanish banks –in terms of capital consumed– in the adverse scenario of the EBA tests.

The Bank of Spain points to the positive aspects of these results of the Spanish banking sector, suggesting that⁴ "the results of the stress tests of Spanish institutions show an appreciable degree of resistance, comfortably exceeding the capital requirements used as reference in previous stress tests. A large portion of the estimated decline in most cases stems from the impact of the gradual

⁴ http://www.bde.es/bde/es/secciones/prensa/infointeres/evaluacion-de-la/actuaciones-de-l/pruebas-de-resis/

	Transitory CET1 Ratio			"Fully loaded" CET1 Ratio			
Bank	31.12.2015 (%)	21.12.2018 Adverse scenario (%)	Impact (Percentage points)	31.12.2015 (%)	21.12.2018 Adverse scenario (%)	Impact (Percentage points)	
BBVA	12.0	8.3	-3.8	10.3	8.2	-2.1	
Sabadell	11.7	8.2	-3.5	11.7	8.0	-3.7	
Popular	13.1	7.0	-6.1	10.2	6.6	-3.6	
Santander	12.7	8.7	-4.0	10.2	8.2	-2.0	
BFA-Bankia	14.6	10.6	-3.9	13.7	9.6	-4.2	
Criteria-Caixa	11.7	9.0	-2.7	9.7	7.8	-1.8	
Source: Bank of Sp	ain.						

Table 1 Solvency of Spanish financial institutions in the adverse macroeconomic scenario established in the stress tests

elimination of the transitional arrangements of the solvency regulations in the three years of tests. Excluding the aforementioned effect, the impact of the tests is reduced significantly, as observed in the evolution of the fully-loaded ratio."

As a whole, there appear to be two opposing forces with respect to the reporting value of the stress tests in reducing market uncertainty. On the one hand, some weaknesses were identified in certain countries in late 2015, many of which the very institutions affected are trying to resolve, mainly through capital increases. On the other hand, however, a certain unequal treatment can be discerned in the reporting requirements. In the past, countries such as Spain or Ireland offered a level of detail on the quality of their assets -and adopted measures proportionate to the problems detected-which no longer appears to be the case. It should also be noted that some of the bail-in measures put in place previously without the relevant regulatory framework are apparently being omitted in cases such as Italy, there now being a legal requirement at the European level for implementing them.

Regulatory and business outlook

This article has reviewed the main figures and ingredients of the complicated context in which

European banks operate in 2016, paying special attention to Spanish financial institutions. The main conclusions from this analysis suggest that:

- Brexit and the solvency problems of Italy's banking sector have added to the sources of financial and macroeconomic uncertainty already seen at the beginning of 2016.
- The negative real interest rates have added pressure to the already significant problems in increasing bank profitability and margins. The sources of uncertainty taken as a whole have had negative repercussions on the market value of European banks.
- The stress tests published by the EBA in July have not had a significant effect on reporting transparency that might have reduced investor doubts as to the state of European banking.
- The results of the EBA stress tests have reinforced the perception of improved quality of Spanish bank assets and increased solvency. In any event, these tests have not permitted a differentiation of the more solvent banking sectors from those showing more problems to the extent desired.

Although loan access conditions have improved by means of pricing, negative interest rates are caused more by the action of an exceptionally expansionary monetary policy than by an increase in demand and its solvency.

Given these conditions, it can be expected that for the remainder of 2016, strategies geared towards restructuring will continue to be seen in the European banking sector. Insofar as the problems of Italian banks are resolved, there may be an improvement in market values. As for Spain, outstanding loans are beginning to show a timid but appreciable recovery, which illustrates that new financing transactions are starting to outstrip loan repayments. An acceleration in the fall in banking NPL rates in Spain can also be expected.

31

Beyond the 2016 stress tests for European banks

Isabel Giménez Zuriaga¹

The 2016 EU-wide stress tests represent a positive, initial step towards further restoring confidence in the European banking sector. However, the implementation of swifter, more forceful disciplinary tools is needed if the sector's reputation is to be preserved and progress is to be made on banking union.

Friday, July 29th, marked the publication of the results of the ECB/EBA European stress tests for 51 major banks. The results were positive for Spanish banks and only some Italian, Irish and Austrian banks clearly showed capital shortfalls. However, European stock markets fell in August and bank securities were particularly hard hit. Against this backdrop, it appears necessary to reflect on the limitations of the stress test exercise, which has not succeeded in reassuring financial markets. If progress is to be made towards banking union and restoring confidence in the banking sector, efforts must be redoubled to discipline those European countries with financial institutions that are less transparent and less diligent in their restructuring processes. Otherwise, good news will be eclipsed by warning signs and all the efforts made to publicise the stress test results will not resolve doubts over the European banking sector. The publication of the results is a good start, but there is also a need to implement more powerful disciplinary tools and greater, swifter adjustments, otherwise asymmetries will hamper the achievement of objectives.

The recent financial crisis has fostered a societal debate over the pros and cons of different bank restructuring processes. Globalization has resulted in growing interdependence between financial systems, and various governments have tried to coordinate policies to offer clearer signals to the market and restore investor and taxpayer confidence. However, proposed solutions remain divergent.

Moreover, the recent crisis has brought about increased concentration in financial systems and a reduction in the number of institutions, raising many questions about systemic instability and about too-big-to-fail banks.

There exist differences across financial institutions' corporate governance and accounting structures that merit a detailed analysis. There are certain asymmetries in the allocation of liabilities and income generated in the bank restructuring processes and the various restructuring roadmaps involve significant differences in costs (as regards both time and money) and in the distribution of costs between governments and citizens (Giménez, 2015).

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On Friday, July 29th, the results of the European stress test for large banks were published (for greater comparison, 51 banks compared to the 140 in previous years), conducted by the European Banking Authority (EBA) and the European Central Bank (ECB) with 2015 data for scenarios in 2018. The results were positive for Spanish banks and only an Italian (MPoS), Irish (Allied Irish Banks) and Austrian (Raiffeisen Landesbanken Holding) bank showed clear capital shortfalls.

Despite these outcomes, the Spanish stock market fell at the start of August, and bank securities were particularly affected. Against this backdrop, it appears necessary to reflect on the limitations of this kind of exercise, which, following the publication of the results, has not succeeded in reassuring financial markets.

The 2008 financial crisis and stress tests

The depth and duration of the recent crisis led many banks and supervisory authorities to question whether stress tests were sufficient prior to the crisis, and whether they are still indispensable and adequate to deal with the changes in banking models.

Banking is extremely reputational, for numerous reasons, the first being because a bank is worth the value of its "brand" or franchise to its present and future clients. In addition, the valuation of any bank will be affected by the valuation of its loan portfolio, linked to the economic (and real estate) cycle. Hence it is very important for any bank to pursue a prudent and meticulous risk management policy, and to put in place *early warning* systems to prevent malfunctions and pathologies before the bank has *liquidity problems*. If not, liquidity problems could become solvency problems, of a much more serious nature, requiring supervisory and government intervention (Giménez, 2010).

Bank stress tests are *risk management* exercises that are often integrated in the risk departments

themselves as internal policy, and since Basel II, they have been promoted as a very useful tool. These tools generate alerts that can help banks to react early enough to avoid a more serious crisis, and among the alerts is included a risk map and the quantification of the capital needed to handle losses generated by internal or external shocks.

The most common bank tools for internal risk control are as follows:

- Forward looking risk assessment techniques.
- Quantification of limits to the models and historical data.
- Support of internal and external reporting with updated information.
- Information on future capital and liquidity needs.
- Specific and recurring information on the evolution of the risk tolerance level.
- Implementation of risk mitigation techniques and contingency plans under stress conditions.

Stress tests are especially important after periods of economic growth and increasingly important for market players. In expansionary cycles, there can be a loss of perspective with regard to previous adjustments and complacency or an underestimation of the risk assumed by bank loan portfolios. They are also a key preventative tool in expansionary phases, when financial innovation generates new bank products without historical precedent in business models.

Historically, the main objective of stress tests was to evaluate and assess the loss-absorbing capacity (resistance) of a specific financial system. However, given the scale and externalities of the recent crisis, these exercises have been used with the additional objective of helping restore confidence in the banking sector, and at the same

32

time, they enable investors, analysts and other market players to form more informed judgements over the situation of the banks.

Stress tests and, therefore, their methodologies, may differ greatly, although they can be grouped into two major categories: *sensitivity analyses* and the more complex tests that analyse the effects of *external shocks* based on scenarios.

They have multiple uses: on one hand, that of each *individual analysis*, and on the other hand, that of the *sectoral analysis*. Well managed stress tests should combine objectives to be met in the micro- and macroeconomic spheres, so that in the microeconomic sphere, they limit *idiosyncratic risk* (potential bankruptcy of one individual institution) and in the macroeconomic sphere they reduce *systemic risk* (probability and costs of systemic instability for the entire European banking system).

In the case of the EBA and the ECB, since the stress tests are conducted for most European banks, and because of the considerable depth of the analysis (number of variables analysed), the tests make it possible to ascertain the financial stability of the continent as a whole, and to enable comparisons to be made between countries. Also, once a common methodology has been established, and weaknesses identified, it will be possible to carry out more detailed analyses and historical comparisons and to observe gradual improvements.

However, the recent crisis has revealed the shortcomings of bank stress tests, due to their questionable validity in quantifying, at the individual level, the aggregate risk exposure of each bank, because of the scant effectiveness of the risk management tools (and of the stress test itself). The main criticisms levelled at stress tests relate to their justification and methodology. Firstly, because banks claim that their reputational nature exacerbates *financial vulnerability* and that the cure can be worse than the disease, and secondly, because their methodology is poor. In

this regard, one of the most frequent criticisms of stress tests is that they are too lightweight, due to their inability to foresee changes in cycle or crises, since their analysis only includes the effect of mild short-lived shocks, underestimating correlations between different positions, types of risk and markets.

One of the most frequent criticisms of stress tests is their inability to foresee changes in cycles or crises, as their analyses include only the effect of mild short-lived shocks, and that they underestimate the correlations between different positions, risk types and markets.

Most of the banking risk management models used historical series that generated vulnerable analyses and, therefore, they did not serve to improve current management, let alone foresee future downturns. In the face of long-lasting bullish cycles, historical models predict that the boom will continue, without preparing for changes or shocks.

Moreover, the financial crisis has also shown how, under difficult conditions, financial markets –and with them, business conditions and bank business risk characteristics– overreact, amplifying the initial shocks. Although extreme reactions are by definition infrequent, historical models remain fully in force, but possible future shocks should be monitored to calibrate the financial vulnerability of each institution and, therefore, the strength of the Banking Union itself (Giménez, 2015). The traditional bank risk management models continue to be fully in force, but they should be supplemented with other tools to improve their predictive power and to reduce some kinds of vulnerability.

For example, before the crisis financial institutions scarcely shared stress test data between departments, hindering the proper functioning of credit risk systems for the market and in relation to liquidity risk in each line of business. Back then, the views of risk analysts on the worsening of market conditions could have been very useful for bullish asset traders.

Before the crisis, many banks did not conduct stress tests, and those that did so were not necessarily more discerning or diligent in their risk management policies. In fact, banks were not capable of foreseeing future illiquidity tensions in financial markets related to their future sources of financing in these same markets.

In this context, the EBA and the ECB have worked hard since the crisis to implement an annual European bank stress test and, to improve the test's quality –along the lines of the World Bank guidelines– they have attempted to achieve international standardisation of the most sensitive accounting terms, for example NPLs, with a higher number of participants in their annual review. All of this is designed to avoid historical prejudices and to promote a pro-transparency culture to make their analyses more representative.

The main objectives of the stress tests conducted by the EBA and the ECB are, at least, the following (Pérez and Trucharte, 2011) :

- Show European banks the benefits of comprehensive (internal and external) risk monitoring models as a means to improve decision-making by regulators.
- Detect sources of error in the stress tests (non-comparable data, areas not analysed), incorporate the appropriate changes and generate more robust statistical analyses.
- Show European banks the benefits of transparency in risk management as a means of restoring market confidence.
- Initiate a powerful, statistical risk management archive that can generate tools to improve and guide future legislation and supervision.

- Conduct a comprehensive diagnosis of risk management in European banks.
- Conduct an individual diagnosis of banking risk management.
- Prevent future crises through the implementation of improved macroprudential supervision.
- Flag liquidity problems, through early warning systems, in order to implement the necessary tools to avoid solvency problems.

Also, the main phases in the preparation of stress tests tend to be the following (Pérez and Trucharte, 2011):

- Establishment of assumptions about the adverse macroeconomic scenario.
- Calculation of the hypothetical impairments caused by the adverse scenario.
- Listing of the items available to absorb the hypothetical impairment in terms of capital.
- Capital ratio that institutions should maintain after the stress.
- Measures to ensure that institutions that do not meet this capital ratio have, as necessary, access to additional capital to achieve it (barriers).

The July 2016 stress tests for large banks

The July stress tests this year (EBA and ECB, 2016) were carried out based on two scenarios, the baseline scenario (provided by the European Commission) and the adverse scenario (provided by the European Systemic Risk Board, ESRB). In the latter case, an adverse mortgage scenario was forecast for the next three years with GDP growth in the eurozone for 2016 of -1.0%, recession in 2017 of -1.3% and slower growth in 2018 of 0.6%; and an unemployment rate of more than 12%.
J		Je)					
2016 stress tests (EBA and ECB)							
	E	Baseline scenario		A	Adverse scenario		
	2016	2017	2018	2016	2017	2018	
Eurozone	1.8	1.9	1.7	-1.0	-1.3	0.6	
EU	2.0	2.1	1.7	-1.2	-1.3	0.7	
2014 stress tests	(EBA and EC	B)					
	Baseline scenario			А	Adverse scenario		
	2016	2017	2018	2016	2017	2018	
Eurozone	1.2	1.8	1.7	-0.7	-1.4	0.0	
EU	1.5	2.0	1.8	-0.7	-1.5	0.1	
Others							
	ABN Amro			Economic consensus			
	2016	2017	2018	2016	2017	2018	
Eurozone	1.3	1.0		1.5	1.2		

Table 1

Comparison of growth forecasts in different scenarios Annual GDP growth (as a percentage)

Source: Kinmonth (2016).

Unlike the overall evaluation of 2014, in which all significant Spanish banking groups took part, in 2015 and 2016, supervision (which was taken over by the ECB since November 2014) only included the six largest Spanish banking groups (Santander, BBVA, BFA-Bankia, Criteria-Caixa, Popular and Sabadell).

In the case of Spain, the six large banks analysed passed the test. Although there was no official

The six major Spanish banks analysed passed the test, clearly exceeding the minimum ratios in the hypothetical adverse scenario in 2018.

threshold for passing the test, the ECB and analysts expected that these institutions could maintain a capital ratio in excess of 5.5% of their risk-weighted assets in 2018 to demonstrate their solvency, once the potential losses from the adverse scenario were taken into account (see Table 2). Banco Popular was the Spanish bank that passed the test with the smallest margin, showing a 6.62% ratio after applying the hypothetical scenario. But this figure does not take into account the capital increase of 2,500 million euros carried out in 2016, since the EBA took as a reference for the starting point banks' balance sheets at year-end 2015. With the above-mentioned increase, the solvency measurement for Popular would rise significantly.

Criteria had a 7.81% ratio after undergoing the stress test. CaixaBank conducted an internal simulation applying the same EBA criteria which, under the most stressed scenario, resulted in a regulatory ratio of 9.8% and a fully-loaded ratio of 8.5%. Taking into account that CaixaBank transferred to Criteria its ownership interests in the Bank of East Asia and Inbursa in the first half of the year, CaixaBank's phase-in or regulatory ratio to over 9.1%. Sabadell would stand at 8.04%, while BBVA would be 8.19%, Santander 8.2% and Bankia 9.58%.

Bank	Transitory CET1 Ratio			Fully-loaded CET1 Ratio			
	12/31/15	12/31/18 Adverse scenario	Impact (pp)	12/31/15	12/31/18 Baseline scenario	12/31/18 Adverse scenario	2018 Impact (pp)
BFA-Bankia	14.6	10.6	-3.9	13.7	14.42	9.58	-4.2
Popular	13.1	7.0	-6.1	10.2	13.45	6.62	-3.6
Santander	12.7	8.7	-4.0	10.2	13.17	8.20	-2.0
BBVA	12.0	8.3	-3.8	10.27	12.03	8.19	-2.1
Sabadell	11.7	8.2	-3.5	10.2	12.81	8.04	-3.7
Criteria-LaCaixa	11.7	9.0	-2.7	9.7	10.97	7.81	-1.84
Sources: EBA and ECB (2016).							

Table 2 **Results of Spanish financial institutions (Impact on the CET1 Ratio)** (Percentage)

These ratios take into account the capital accounting rules that would be in force in 2018, which analysts call the "fully-loaded ratio." The average for Spanish banks would therefore be 8.6%, according to the EBA.

As the market expected, the institution with the worst test result was the Italian bank Monte dei Paschi di Siena, which would have a negative capital ratio of 2.44% in 2018. The institution received the approval of the Single Supervisory Mechanism (SSM) for its plan to reinforce its equity by about 5,000 million euros. This should dispel any doubts that the market had about the survival of the Italian institution.

Allied Irish Banks, part-owned by the Irish Government, achieved a ratio of 6.14% applying transitional capital calculations, but with the fully loaded method this would fall to 4.31%, below the official minimum ratio.

Another bank that only just passed the test was Raffeisen, with a ratio of 6.12% in 2018. Its poor performance, according to analysts, is due to the sharp decline in the economies of Austria and the Eastern European countries forecast by the regulator for the exercise.

Several investment banks also showed results that the market could interpret negatively, also taking into account that this kind of institution must have a greater capital buffer than other institutions.

The Italian bank UniCredit's capital ratio would drop to 7.1% in 2018, while the capital ratios of Barclays would fall to 7.3%, Commerzbank to 7.42%, Société Générale to 7.5%, Deutsche Bank to 7.8% and RBS to 8.08%. The strong negative impact on these banks' own funds is due to the fact that the EBA's adverse scenario envisages high losses due to litigation and irregularities for these institutions.

This is evident in the case of Italy, the fourth largest country in the European Union and the one that presents the most weaknesses. Public debt exceeds 135% of GDP and its employment rate is among the worst in Europe. Amid this deflationary landscape, its banking sector is going through a profound crisis with clear overcapacity (more than 600 institutions) and a volume of problematic assets of around 300,000 million euros on banks' balance sheets, equivalent to a fifth of GDP. Collectively, provisions have been recorded for scarcely 45% of this amount. In a best-case scenario, the weakest banks would hamper the growth of the Italian economy, and in

the worst-case scenario, they would go bankrupt and, therefore, the reputation of the entire sector would be in question.

In the midst of a deflationary scenario, the Italian banking sector is facing a deep crisis, with clear overcapacity and a volume of problematic assets of around 300,000 million euros on banks' balance sheets –equivalent to one fifth of GDP– that are only 45% provisioned.

Although the results of the five banks included in the stress test were positive (and better than expected), there is a large number of Italian banks that have not been analysed, and the news to date on their restructuring process is worrisome and dangerous for the banking union.

The Italian bank reprimanded in the stress test, Monte dei Paschi, had previously submitted a restructuring plan comprised of a capital injection and the sale of problematic assets; whether this will happen in practice is yet to be seen.

Given the fall in the market valuation of Italian banks throughout the first half of 2016 (and taking into account that the stress test was conducted on the basis of 2015 data), according to the rules of the Banking Union and the European Bank Recovery and Resolution Directive (BRRD), if Italian banks fail to obtain sufficient capital from an appeal to the markets, their bondholders and shareholders would be the first in line to assume the costs on an adjustment, although the Italian Government opposes this.

Conclusions

Well managed stress tests should combine objectives to be met in the micro- and macroeconomic spheres, so that in the microeconomic sphere they limit *idiosyncratic risk* (potential bankruptcy of one individual institution), and in the macroeconomic sphere they reduce *systemic risk* (probability and costs of systemic instability for the entire European banking system).

Any criticism of a stress test is comparable to that made in relation to audit reports, but in both cases, it is better to make criticisms than to commit bigger errors arising from lack of information. Clearly, any improvement in data quality and the spectrum of risks covered is desirable, generating quantitative and qualitative returns for the banking sector.

Any criticism of a stress test is comparable to that made in relation to audit reports, but in both cases, it is better to make criticisms than to commit bigger errors arising from lack of information.

As far as the banks are concerned, refusing to participate in stress tests and denying the publication of its results are both harmful tactics, because they could be misinterpreted as even worse. In any company, especially if it is listed, transparency is the basis of trust. Depositors and investors must know punctually and frequently the accounting and financial situation of each bank in order to trust and to support it with their investments and savings.

The distrust in the financial markets arises from the publication of other reports on the banking sector that warn of signs of alarm and exhaustion in banks' business models and tensions in their income statements due to prolonged low interest rates. Furthermore, the heterogeneity across European banks as regards balance sheet composition, the rigour of risk management and the speed of the bank restructuring processes is also a source of concern; a distrust that is very much linked to the process of banking union. 37

A separate issue is the design of the specified methodology for extracting data from the banks analysed. The repetition of the exercises since their initiation in 2011 has meant that most of the indicators can be obtained directly by the EBA, a contribution from each bank only being necessary for a residual minority. This process allows greater autonomy for the European supervisor (ECB) and better performance of macroprudential work, so that liquidity, and its interaction with solvency and systemic risk, can be analysed.

With regard to the scenarios chosen for the simulations, which are always questionable, the adverse scenario envisages a higher number of shocks and is somewhat harsher than that of the three previous years, but it could also have been more so. However, the baseline scenario is perhaps too optimistic, especially when compared to other forecasts published in July for eurozone GDP, such as those of some banks (ABN Amro) or economic consensus itself (Kinmonth, 2016).

In addition, the importance of the publication of results is key because of its timing, since they are made public when there is negative market sentiment towards banks, and because it is the first publication since the ECB became the single European supervisor, showing adequate levels of capital requirements, incorporating results to its comprehensive scorecard, and sending a signal of transparency and responsibility and, therefore, of diligence and good work.

However, if the historical evolution of the stress tests conducted by the EBA since its creation is analysed, the balance is critical in that the number of banks analysed has fallen: since 2015, only the so-called "large banks" (70% of the sector) have been analysed, reducing the precision of the analysis.

Analysing the 123 institutions included in the 2014 stress test (with 10 fails and 14 partial noncompliances) using the parameters of the 2016 stress test, only one of them would be deemed below the minimum threshold and another with partial non-compliance, and so it seems that the sectoral situation has improved. However, financial markets appear to discount that institutions' have been too slow to adjust (BIS, 2015) (as regards the speed of reducing the volume of NPLs or assets at risk of default).

However, the use of the stress test results, directly incorporated as input for the ESRB annual report as a support tool for macroprudential supervision, to safeguard financial stability and help construct the Banking Union is commendable.

In this connection, it seems clear that if progress is to be made towards Banking Union and restoring confidence in the banking sector, efforts must be redoubled to effectively penalise those European countries with financial institutions that are less transparent and less diligent in their restructuring processes. Otherwise, good news will be eclipsed by warning signs and all the efforts made to publicise the stress test results will not disseminate doubts about the sector, which can be severely damaging to a reputational-based business such as banking.

The publication of the stress tests results by the European Supervisor (ECB) is a good start, but banks' income statements, strained by low interest rates, reveal that more swiftly executed, forceful disciplinary tools, such as Asset Management Companies (AMCs) or bad banks, or transnational mergers, will be needed, and with increasing urgency.

The 2016 stress test results have been favourable, but the warning signs show the need for further adjustments (taking into account individual viability, case by case) despite the considerable reduction in the number of institutions. Moreover, action is to be taken more swiftly if there is to be progress on Banking Union and the reputation of the sector and of the supervisor (ECB) is

38

to be preserved. Otherwise, asymmetries may overshadow the goals already achieved.

The results of the 2016 stress test have been favourable, but the warning signs show the need to make greater, swifter adjustments if the sector's reputation is to be preserved and progress is to be made on banking union.

A broader issue is the restoration of the banking sector's reputation. The recent financial crisis has generated certain scepticism among market players with regard to the accuracy of banks' accounting statements, not only in Europe, but also on the international level, which will require a continuous stream of good news, as well as numerous displays of rigour and exemplary conduct. The regular publication of results by the ECB is just one example of the degree of awareness of the European supervisory authorities of the seriousness of the situation, but the road is likely to be long.

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41

The impact of low interest rates on the insurance sector

Iratxe Galdeano and Pablo Aumente¹

The protracted period of low-interest rates is undermining interest income in the insurance sector in Spain and in Europe. As part of the adaptation to this new paradigm, the search for profitability has forced entities to reallocate their portfolios towards higher-risk/higher-yield assets, as well as recalibrate their product ranges, alongside other efforts to diversify risk and boost underwriting results.

The uncertainty generated from the prolonged episode of low interest rates is one of the main issues affecting the insurance sectors in Spain and in the rest of Europe, particularly for insurers with guaranteed long-term commitments. (The impact is proving less severe in Spain, where assets and liabilities are well matched in terms of duration, reducing insurers' exposure to exchange rate volatility.) Despite an overall increase in the volume of premiums, the contraction in investment income is exerting upward pressure on expectations for underwriting results. Insurance companies are taking action to adapt to this new environment through attempts to boost income and streamline pay-outs, including: portfolio reallocation towards higher risk, higher yield and longer duration assets; shifts in product offerings; cost cutting measures; and, geographic diversification.

2015 in review: Increase in premium volumes in contrast to decline in profitability

The Spanish insurance sector experienced growth in overall premium volumes in 2015 for the first time since 2012: volumes registered growth of 1.89% according to data compiled by Spain's insurance and pension watchdog (DGSFP according to its acronym in Spanish).

The positive trend in premiums contrasts with the profits reported by the Spanish insurers, which contracted by 27.3% year-on-year in 2015.

The sector's ROE was just 8.8%, down from 12% in the fourth quarter of 2014.

Both branches of the insurance sector, life and non-life, sustained growth. However, growth in the life segment was undermined by life savings products due to the low yields on offer against the backdrop of low interest rates, coupled with the need to put more capital aside for certain products under the Solvency 2 regime. Non-guaranteed life insurance products fared remarkably well however.

Insurance profit (investment income + underwriting profit) fell in both the life and non-life segments

¹ A.F.I. - Analistas Financieros Internacionales, S.A.

Branch	Volume of gross direct ir in Spa	Growth (%)			
	2014	2015			
Life	25,321	25,791	1.86		
Non-Life	30,695	31,282	1.91		
Total direct insurance	56,016	57,073	1.89		
Source: AFI, based on DGSFP data.					

Table 1 Growth in insurance premium volumes

in 2015 due to deterioration in both underwriting results and interest income on the back of low interest rates.

The protracted episode of low interest rates is undermining insurers' profits, particularly for entities that have underwritten life insurance with guaranteed long-term commitments. This phenomenon is more pronounced in other European markets such as Germany; in Spain assets and liabilities are well matched in terms of duration, substantially immunising insurers from movements in exchange rates. Moreover, the fallout is more gradual, as the higher-yielding assets mature and are replaced by new securities acquired at lower rates; also, the impact is prolonged in time.

Insurance sector profitability (Percentage) a) Life insurance segment Underwriting Profit, Investment Income and Insurance Profit (Total Life) Margin 4Q13 4Q14 4Q15 Underwriting profit -20.00 -23.80 -24.90 margin Investment income 30.70 32.90 32.00 margin Insurance profit 10.70 9.10 7.10 margin

b) Non-life insurance segment

Margin	Underwriting Profit, Investment Income and Insurance Profit (Total Non-Life)				
	4Q13	4Q14	4Q15		
Underwriting profit margin	5.10	5.80	5.30		
Underwriting profit margin	4.00	4.80	4.30		
Insurance profit margin	9.10	10.60	9.60		
Source: AFI, based on DGSFP data.					

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Table 2

In parallel, the companies that had been financing themselves from their investment income, as

The impact is proving less severe in Spain, where assets and liabilities are well matched, reducing exposure to exchange rate fluctuations.

their underwriting results were negligible or even negative (*e.g.* motor) are also facing difficulties in light of low returns.

Spanish insurers predominantly invest in fixed-income securities

The Spanish insurance sector's investment portfolio is mostly made up of fixed-income investments: 71.8% and 53.1% of the total in life and non-life, respectively, in 2015.



In recent years, it is worth highlighting the gradual reduction in the weight of private fixed-income paper in the life segment in favour of public debt, due mainly to the favourable treatment afforded EU sovereign debt relative to other higher-yielding and higher-risk assets under the Solvency 2 regime (zero capital allocation).

In recent years, there has been a gradual substitution of private debt for public debt due primarily to the favourable treatment of EU sovereign debt relative to other higheryielding and higher-risk assets under Solvency 2.

Allocations to deposits and loans are also higher in the life segment. In contrast, investment in real estate, equities and mutual funds is relatively lower. The composition of the life segment's investment portfolio implies greater vulnerability to low rates.

Europe: Shift towards more credit and longer duration

The latest developments evidence the fact that rates are set to remain very low for the coming years. This will foster a shift in investment policy and in the insurance companies' asset mixes, fostering growth in the relative weight of equities and other higher-risk assets. Even within the fixed-income portfolios, we are seeing a shift towards higher-risk and higher-yielding paper (Exhibit 2.a).

All of this is increasing the insurance companies' risk exposure and capital allocation requirements.

However, in the countries most affected by the crisis, including Spain (Exhibit 2.b), we are witnessing growth in exposure to sovereign bonds due to their preferential treatment (no capital

Exhibit 2.a

Investment in bonds by large insurers in the eurozone by rating category

(2011-15, percentage of total investment portfolio, weighted averages)



Note: Based on available data for 15 large euro area insurers and reinsurers.

Source: AFI, based on JPMorgan, Cazenove, Individual institutions' financial reports and ECB calculations.

Exhibit 2.b

Geographic split of the sovereign bond holdings of the large eurozone insurers (2011-15, EUR billions)



Note: Euro area countries most affected by the crisis include Greece, Ireland, Italy, Portugal and Spain. Euro area countries less effected by the crisis include Belgium, France, Germany, Luxembourg and the Netherlands. The split of euro area countries into the two different groups is done according to euro area countries that have experienced a significant deterioration in the longterm credit rating since the onset of the financial crisis. Based on available data for 15 large euro area insurers and reinsurers.

Source: AFI, based on JPMorgan, Cazenove, Individual institutions' financial reports and ECB calculations.

allocation requirement) under Solvency 2 relative to other higher-yielding but higher-risk assets.

How are the players adapting to the new low-rate paradigm?

On the income side, the uncertainty deriving from volatility in the equity markets, coupled with the prolonged episode of low interest rates, is one of the areas to watch in the insurance sector.

Current estimates point to contracting investment income, placing upward pressure on expectations for underwriting profit, which needs to start 'making money' in its own right. With the aim of adapting to this new paradigm, life insurers are shifting their portfolio investments into higher-returning and higher-risk assets. Specifically, assets are being shifted into lower-rated and longerterm fixed-income securities (even unrated paper), equities and alternative assets and infrastructure, underpinned in the latter instance by a relatively favourable capital treatment under Solvency 2. Asset managers are also taking a look at new geographic areas.

These shifts in exposure warrant analysis of the risk-reward trade-off associated with each kind of investment, particularly for those entities suffering capital constraints, as they will find it very hard to recalibrate their portfolios in search of higher yield, making them the candidates likely to face the biggest challenges in adapting to the new paradigm.

Recent shifts in exposure warrant analysis of the risk-reward trade-off associated with each investment, particularly for entities with capital constraints, which are likely to face the biggest challenges in adapting to the new paradigm.

As part of their efforts to adapt to the new context, life insurers are also finding themselves forced to reconfigure their product ranges, offering lower guaranteed rates, shorter terms and/or periodic rate resets. Some entities have stopped selling annuities altogether on account of the substantial amount of capital that has to be put aside for these products under Solvency 2.

We are also seeing an uptick in the marketing of unit-linked products for long-term savings schemes in which the policyholder assumes some or all of the risk and products without interest rate risk (*e.g.*, non-life and risk life) in an effort to diversify. In parallel, insurers are rushing to pare back product costs, cutting commissions, eliminating products whose cost structures are not compatible with the low-rate environment and launching new savings product formulae with cost structures tailored for the new context.

Meanwhile, non-life insurers, in addition to trying to boost their investment income (with shorterterm investments relative to the life segment), are focusing primarily on lifting their underwriting results, particularly in motor insurance, in an attempt to avoid having to pass the low rate fallout on to premiums. The health insurers have gone to lengths to tailor their coverage and prices to the needs of lower-income policyholders (*e.g.* low-cost health insurance policies with reduced coverage, group policies for companies). There is also a clearcut shift towards prevention (*e.g.* multi-risk home insurance associated with home automation) in the insurance sector in general.

Lastly, although the low-rate environment is squeezing entities' margins, it is also prompting them to look for profitability in new markets, particularly in Latin America, thereby accelerating their international expansion processes. Not just the large insurers but also the mediumsized entities have decided to hunt for business outside of Spain. One of the destinations selected for expansion in Latam has been Chile, due to its social, economic and political stability. In Chile, motor insurance is not mandatory but it is estimated that civil liability motor coverage will become compulsory within the next five to ten years, a requirement likely to become widespread in the rest of Latam, foreshadowing very significant growth in this segment.

Conclusions

Low interest rates are taking a heavy toll on insurers' margins in Spain and broader Europe, as evidenced by the contraction in sector profits in 2015 despite the growth in premiums. The P&L impact is proving more significant for life insurers with guaranteed long-term commitments.

The impact is proving severe in countries such as Germany, where, unlike in Spain, assets and liabilities are not well matched in terms of duration, leaving insurers exposed to movements in exchange rates.

The companies that had been financing themselves from their investment income – as their underwriting results were negligible or even negative (*e.g.* motor) – are also facing difficulties in light of low returns.

The sustained, low-rate environment is driving a shift in investment policy and the insurance companies' asset mixes, boosting the relative weight of equities and other assets with higher risk, higher yields and longer duration. This is in turn increasing the insurance companies' risk exposure and capital allocation requirements. As a result, insurers faced with capital restraints will encounter greater difficulty in guaranteeing their obligations to their policyholders.

Similarly, in the course of adapting to this new paradigm, entities have been forced to recalibrate their product offerings (reducing guaranteed interest rates and boosting other products such as unit-linked, risk life and non-life policies), cut costs and, generally, boost their underwriting profits.

Lastly, in a bid to restore the profits battered by the prevailing low rates, insurers are accelerating their international expansion, focusing especially on Latin America, with a view to diversifying sources of income outside of Spain.

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Recent Spanish regulation aimed to improve SMEs' access to finance

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Recent regulations approved in Spain seek to improve SMEs' access to both bank and alternative financial sources through reducing information asymmetries across borrowers. Although too early to assess the efficacy of the measures, they no doubt represent an important step forward towards increasing transparency of the SME credit risk assessment process.

Despite recent improvement in SMEs' access to finance in Europe as a whole, and in Spain in particular, small and medium size enterprises still face significant constraints. In Spain, this issue is of particular significant because i) SMEs' comprise nearly 99.9% of the Spanish business landscape; and, ii) the drying up of credit experienced in Spain relative to that of neighbouring economies was more pronounced. Recent regulations approved in Spain aim to address some of the existing SME finance challenges by attempting to make bank finance more accessible and flexible, while at the same time increasing access to alternative financing sources, through the publication by finance providers of an SME Financial Information report – designed to reduce SME information asymmetries. The report contemplates various aspects of the borrower's credit profile, with one of the most significant novelties being a borrower risk rating, comprised on the basis of both financial and qualitative variables. Additionally, the report provides information over the borrower's relative position in the sector. Although the measures will not come into effect until October, these regulatory developments already undeniably mark a milestone in terms of the transparency of financial institutions' decision-making process.

The agendas of the main economic authorities, in both Spain and Europe, and of the main international organisations² have been focusing in recent years on the impact of the economic and financial crisis on the flow of financing to companies, particularly to small- and mediumsized enterprises (SMEs), for whom, despite the improvement in the availability of credit in recent years, access to financing remains one of the biggest problems they face.

¹ Bank of Spain.

² The EC's pro-SME policy stance is clear; what is not so clear is the effectiveness of these policies, according to sceptics. Some of these sceptics defend the role of large firms relative to SMEs because they can exploit economies of scale and more easily undertake the large fixed costs associated with research and development (R&D), thus making them better at innovating and boosting productivity; they also hold that large firms can offer more and higher-quality jobs, so having a bigger impact on the poverty alleviation effort. Others believe that policy makers should not focus on propping up a particular company size but rather focus on improving the full range of institutions that affect the overall business environment.

In Spain, if we extrapolate the trend in the figures shown in Exhibit 1, compiled from the ECB's six-monthly *Survey on the Access to Finance of Enterprises*³ (SAFE), to the 3.2 million SMEs in existence at present,⁴ we see that indeed access to financing has been dissipating as a concern since 2009, as is evidenced in the summary of the most recent survey (April-September 2015) published in the Bank of Spain's December 2015 *Economic Bulletin:*

"In short, the latest SAFE results evidence extension of the gradual improvement in access by Spanish SMEs to external financing between April and September 2015. Against the backdrop of gradual recovery in business volumes and their financial situation, these companies are perceiving increased bank willingness to lend them money, fewer difficulties in securing new funds and more favourable financing terms and conditions. In addition, on many of the aspects analysed, the improvement is being felt more robustly in Spain than in the EMU as a whole. Lastly, the survey also reveals positive expectations, with Spain's SMEs expecting their access to bank credit to continue to improve between October 2015 and March 2016."

This improvement does not, however, prevent access to financing from ranking sixth among these companies' concerns (just below the issues related to the 'cost of labour', 'availability of skilled labour' and 'regulation'), and as the top concern facing some 11% of these firms.

Regardless of this positive trend, the overwhelming predominance of SMEs in the Spanish business landscape – 99.9% –, coupled with the fact that they generate 66% of corporate jobs,⁵ is reason enough for any economic strategy tackling matters of social cohesion, innovation or job



³ http://www.ecb.europa.eu/stats/money/surveys/sme/html/index.en.html

Exhibit 1

⁴ Data published by the Spanish government's Department of Industry and Small- and Medium-Sized Enterprises (hereinafter, DGIPYME for its acronym in Spanish).

⁵ Retrato de la Pyme [Portrait of the SME] - DIRCE (Spain's Central Companies Directory) as of January 1st, 2015. The DGIPYME.

49

SEFO - Spanish Economic and Financial Outlook

creation to address in parallel the development, diversification and upsizing of these companies (95.9% of Spain's SMEs had less than nine employees at year-end 2014), to which end it is necessary to continue to improve their access to finance.

In order to facilitate this climate of *credit normalcy,* in recent years, the regulatory effort has taken two simultaneous directions: firstly, reforms designed to enhance the flow of bank credit and secondly, reforms aimed at diversifying SMEs' financing options, mainly via the capital markets.

The legislation is an attempt to boost development of alternatives to bank financing, while at the same time seeking to make bank financing more accessible and flexible, specifically by remedying the information gap between SMEs and investors believed to potentially impede and increase the cost of SME access to finance.

In Spain, Law 5/2015 (of April 27th, 2015), on the promotion of business financing, represents the Spanish law-makers' response to the decrease in credit experienced in the early years of crisis following a period marked by a significant credit boom. The drying up of credit was, moreover, more pronounced in Spain than in neighbouring economies as a result of the deleveraging forced upon certain Spanish banks as part of far-reaching restructuring efforts undertaken to correct the imbalances accumulated in the past and, above all, the measures adopted in the wake of implementation of the Memorandum of Understanding entered into under the scope of the EU's Financial Assistance programme.

With this in mind, the afore-mentioned piece of legislation marks a strategic shift in the legislation governing the various sources of financing available to the Spanish economy in an attempt to boost development of alternatives to bank financing while at the same time seeking to make bank financing more accessible and flexible, specifically by remedying, at least to a degree, the information gap between SMEs and finance providers believed to potentially impede and increase the cost of SME access to finance.

At the European level, the most ambitious initiative in this respect is the Action Plan on Building a Capital Markets Union,⁶ approved by the European Commission on September 30th, 2015, which contemplates, among other actions, overcoming "information barriers that prevent SMEs and prospective investors from identifying funding or investment opportunities," including through structuring "the feedback given by banks declining SME credit applications." In addition, and in this same information-enhancing vein, the Commission wants to promote the exchange of best practices among EU member states such that SMEs seeking market-based financing can avail of efficient sources of information and support in all member states.⁷ Perhaps the time has come to add the Spanish model for SME financial information, which is articulated around the SME-Financial Information document - a standardised report assessing the creditworthiness of SMEs and their relative positioning as borrowers in their respective business sectors, to the universe of member state best practices, such as Britain's Business Bank or France's Fichier Bancaire des Entreprises.

⁶ http://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:52015DC0468&from=EN

This plan, starting from the fact that "a lot of SMEs don't get all the financing they ask from banks in Europe (in the euro area, 35% of SMEs didn't get the complete financing they asked their banks for in 2013)," seeks to "move the EU closer towards a situation where, for example, SMEs can raise financing as easily as large companies; costs of investing and access to investment products converge across the EU; obtaining finance through capital markets is increasingly straightforward; and seeking funding in another Member State is not impeded by unnecessary legal or supervisory barriers."

⁷ European Commission. Access to finance for SMEs (https://ec.europa.eu/growth/access-to-finance_en).

The Spanish approach to getting more bank finance flowing to SMEs

The information asymmetry issue

Deficient, insufficient or unreliable information about finance-seekers translates, in general terms, into less abundant or more costly bank credit for SMEs.

Using the SAFE data once again for 2009-2015, and in line with the developments outlined in the first section, it might appear that this is not an issue in Spain: as illustrated by Exhibits 2 and 3, there has been a significant improvement in the availability of bank loans, coupled with a sustained improvement in the terms and conditions attached to such loans.

Nevertheless, the reasons justifying this trend (economic recovery, improved health of the banks, etc.) are independent of the information gap the legislation attempts to close, so that it remains valid as an objective.

This information asymmetry becomes evident in the credit assessment process, in which the

lack of information faced by the banks gives rise to what Akerlof (1970) termed the "adverse selection" effect, which ultimately leads to application of the same terms and conditions to projects with different risk profiles. It also comes into play during the loan granting process, in which the bank assumes a moral hazard given the possibility that the borrower will use the funds for purposes other than those contemplated. Faced with either scenario, a bank may conclude that the loan applicant is not sufficiently solvent, thus choking off the flow of funding or shutting it off altogether, or decide to levy a surcharge on the universe of SME borrowers as a whole. In either event, creditworthy borrowers may end up out of the market or involuntarily subsidising their less creditworthy peers.

One of the ways in which the banks have traditionally overcome this lack of sufficient information when it comes to granting a loan, and even at later stages of the lending process, is to use signals transmitting information about the intrinsic worth of the project and the borrower's commitment thereto.

Such reliable signals notably include the willingness on the part of the borrower to provide,



Source: SAFE, December 2015.

50



in exchange for additional funding or a lower interest rate, collateral which gets transferred to the lender if the venture's earnings are not sufficient to repay the loan in full or personal guarantees which give the guarantor a vested

In addition to external signals, banks gather other signals during the course of their longstanding relationships with their customers which provide them with qualitative information about these entities and their debt servicing capabilities.

interest in the project, thereby signalling his or her confidence therein. Borrowers can also demonstrate their confidence in the quality of their projects by injecting more capital or accepting contractual terms designed to enhance protection of the lender's rights. The lender, meanwhile, can make use of other external information sources, such as those provided by the Bank of Spain's Central Credit Register to reporting entities and reporting institutions, insofar as they help curb the adverse selection phenomenon.

In addition to these external signals, the banks gather other signals during the course of their long-standing relationships with their customers which provide them with qualitative information about these entities and their debt servicing capabilities.

Regulatory measures taken in Spain to get more bank finance flowing to SMEs

With the aim of mitigating the information asymmetry issue, Title I of Spanish Law 5/2015 (Improving access to bank finance for SMEs) stipulates two mutually-independent obligations:

 Provision of prior notice: Whenever finance providers⁸ decide to cancel or reduce by at least 35% the flow of financing they had been

⁸ The references made in this paper to finance providers shall be understood to encompass both credit institutions and specialised lending institutions, by virtue of application of article 7 of Law 5/2015.

extending a given SME, they must so notify the SME,⁹ using any method that enables confirmation of receipt, with a lead time of at least three months, such that the affected borrower has enough time to find new sources of finance or recalibrate its liquidity management strategies.

The notice is not binding and does not therefore oblige the bank to subsequently cancel or reduce the loan, nor does it amend the binding content of the loan agreement or affect its effectiveness between the parties.

Law 5/2015 introduces a definition of 'flow of financing' which, in broad terms, encompasses all agreements whose overriding purpose is to finance the working capital and general business activity of the SME, the terms of which, as a general rule, in the ordinary course of business, do not exceed one year.

Delivery of the 'SME-Financial Information' document: Within 10 days of provision of the above notice, the finance providers are obliged to furnish the borrower with an extensive report on its financial situation and payment history in the form of the so-called SME-Financial Information document, which must also include a borrower risk rating. The idea is to reduce the information gap faced by potential new financiers when analysing the loan-seekers' creditworthiness, thus facilitating the search for alternative sources of financing.

Additionally, in order to enable all borrowers in receipt of flow of financing to make the best possible use of their financial information, making strategy adjustments as warranted, the finance providers are similarly obliged to furnish the *SME-Financial Information* document within 15 days if so requested by the SME. This measure has the potential to reinforce new lender or investor confidence. However, to make sure its cost is not borne by the original lender, it is subject to payment by the SME of the fee set by the original provider.

Law 5/2015 envisages a series of situations in which neither obligation is applicable, such as the provision of very short-term paper, when the decision to terminate or downsize the loan has been mutually agreed, when the borrower is legally insolvent or has breached its obligations or when financial conditions have deteriorated without warning without leaving time for the required notice period.

The failure to provide the stipulated notice and/or deliver the credit document does not mean that the provider cannot subsequently cancel the loan but does constitute a breach of compliance and disciplinary regulations which could give rise to a fine for the breaching entity.

The law itself goes one step further: with a view to ensuring that the above-listed requirements emerge as an effective tool and the information generated is comparable and reliable, it tasked the Bank of Spain with specifying the content and format of the *SME-Financial Information* report, establishing the corresponding template and drawing up methodology for standardising the SME credit scoring process.

Bank of Spain Circular 6/2016¹⁰

Before embarking on an analysis of the Circular, it is worth highlighting one of the goals pervading its elaboration, namely that of making sure it did not imply disproportionate costs for the bound institutions; accordingly, in addition to the public consultation process which customarily accompanies

⁹ The references made in this paper to SMEs shall be understood to include self-employed professionals, having been included within the scope of Law 5/2015.

¹⁰ Bank of Spain Circular 6/2016 (of June 30th, 2016), addressed to banks and specialised credit institutions, specifying the contents and format of the document titled *SME-Financial Information* and the risk classification methodology contemplated in Spanish Law 5/2015 (of April 27th, 2015) on the promotion of business financing.

the drafting of regulations of this order, feedback has been sought from the finance providers throughout the process, mainly channelled through the sector associations.

The SME-Financial Information report

The overriding purpose of the *SME-Financial Information* report is to reduce, by leveraging the information in the hands of the original lending institutions, the information asymmetry faced by potential SME lenders, thereby minimising the fallout from adverse selection and moral hazard phenomena intrinsic to a shortfall of information for credit assessment purposes.

The overriding purpose of the SME-Financial Information report is to reduce, the information asymmetry faced by potential SME lenders, thereby minimising the fallout from adverse selection and moral hazard phenomena intrinsic to a shortfall of information for credit assessment purposes.

The contents of the document have been designed following the legislator's instructions with a dual objective. Firstly, to compile the minimum amount of information about an SME deemed necessary for a risk analyst to appropriately assess the risk implied by granting that SME a new loan. In reducing the information gap vis-a-vis the new financier and, as warranted, the costs of so doing, two goals are pursued: (i) accelerating the loan analysis and granting process; and, (ii) better aligning funding costs with individual SME risk profiles.

Secondly, so that the *SME-Financial Information* report is truly useful, an attempt was made to ensure that the information contained in the document is reliable and comparable, so that the new providers can both rely on its contents

and automate their risk assessments on the basis of the data contained in the report to the extent possible. To this end, the contents of the document were designed by relying to a large degree on the data compiled in the statements filed monthly by financial providers with the Bank of Spain's Central Credit Register (CIR for its acronym in Spanish) so as to guarantee data availability, quality and comparability.

Elsewhere, it is worth noting that the reference date for the document is the last day of the month prior to the date of notice or the date of the report request, although the document must be filled out using the most updated information the entity deems relevant.

The *SME-Financial Information* document is divided into five sections:

SME information statements submitted by the reporting institution to the CIR during the last five years. Given that a portion of the data reported by the financial institutions to the CIR is intended for the Bank of Spain in its role as supervisor and is by extension strictly confidential, the fields that have to be filled in for the purposes of the SME-Financial Information report have been limited to those included in the feedback provided by the Bank of Spain to the reporting institutions. In short, the entities must include in the SME Financial Information report the data fields that they have reported on the SME.

To this end, they must provide the last four monthly statements and those corresponding to the end of each quarter for the five years prior to the date of notice or report request.

Data reported to firms that provide financial solvency and credit analysis services. Here the finance providers must include the data that remain on record at these firms as of the document reference date.

- Credit history. The document must include information about the transactions between the borrower and the reporting institution, including those still outstanding and those cancelled during the last five years. Specifically, the following information:
 - A list of historical and outstanding loans, specifying the essential particulars of all transactions arranged between the SME and the finance provider, *i.e.*, basic transaction data (type of product, use of proceeds, amount granted, date of grant, etc.), the current status of the exposure (limit granted, balance drawn down, status of any refinancing or restructuring work, etc.), and the collateral and personal guarantees (type of guarantee, coverage, etc.) associated with each transaction.
 - A chronological list, indicating the current status, of any unserviced obligations, specifying, among other things, the dates of nonperformance and the amounts unserviced. In the absence of any non-performance, the reporting entity must provide an explicit statement attesting to the fact that the borrower has met its obligations in full.
 - A list of any bankruptcy proceedings, refinancing agreements or out-of-court payments, embargoes, enforcement proceedings or other legal incidents: The reporting entity must inform of any such situation affecting the SME in the last five years to which it has been party.
 - A list of insurance contracts related with the flows of financing: Entities shall include information about any insurance policies which serve to mitigate the credit risk.
- Statement of fund flows for the last year in respect of the contracts comprising the flow of financing. This is the only section of the document for which the entities are not obliged to use a specific template so that each has the freedom to report this information using the format that best matches its IT systems.

Risk rating. One of the most significant novelties introduced by the Spanish regulation is the requirement that the finance providers score their SME customers' ability to service their financial commitments. With the aim of making the ratings comparable across the sector, thereby facilitating the search for new sources of financing, the banks must use the methodology outlined in the next section.

One of the most significant novelties introduced by the Spanish regulation is the requirement that the finance providers score their SME customers' ability to service their financial commitments.

In addition, leveraging the data bank built up and the highly-advanced and tried-and-tested tools designed by the Bank of Spain's Central Balance Sheet Data Office, the document must also include, in order to complement the risk rating, information about the *borrower's relative positioning in its respective business sector*. This relative positioning is articulated around analysis of certain financial ratios which rank the SME by quartile relative to the companies comprising its specific business sector and is as such a proxy for an analysis of the SME's strengths and weaknesses relative to its competitors.

Risk rating methodology

One of the most important aspects of the Circular is how it fleshes out this methodology. The methodology is designed to ensure standardised and comparable SME risk ratings. It is not intended to substitute the institutions' internal rating models or risk management criteria, which vary greatly in terms of complexity and utilisation from one entity to the next.

The purpose of the methodology is to have the entities assess their borrowers' ability to service

their financial commitments, expressed as one of the following risk ratings: low risk, medium-low risk, medium-high risk, high risk or 'not available' (for instances in which there is not enough information to apply the methodology). To this end, the methodology draws from the universe of information available to the financial institutions which covers not only that related with the borrowers' financial situation but also that acquired by the entity in the course of its relationship -personal and contractual- with the SME. The methodology is underpinned by three pillars: (i) analysis of the SME's financial statements; (ii) the lender's knowledge of the customer, its business, activity or group; and (iii) the SME's conduct over time in its contractual dealings with the institution. The sharing of information about the latter two aspects, in a manner that is comparable across the sector, is what adds the most value to the risk rating process, by making a significant contribution to reducing the effects of the information asymmetry that faces potential new financiers.

The immediate consequence of the foregoing is that two financial institutions will not necessarily award a given SME the same rating as their knowledge of and experience with the firm in question may well vary from one firm to the next. For this reason, the Circular does not prescribe a specific risk weighting to each group of variables but rather gives the finance providers the responsibility of establishing the relationship between the scores given to each category and the final rating assigned to the borrower. However, it is mandatory to rank each of the groups of variables in order of priority from 1 to 3.

By means of this flexibility the methodology seeks to guarantee high-quality ratings. To ensure correct use of this flexibility the institutions are required to provide justification, for each borrower, of the scores awarded for each group of variables analysed and the order of importance given to each group within the overall risk rating.

Financial situation of the borrower. This assessment must make use of the ratios stipulated in the Circular, selected from those included in the sectoral rates of non-financial corporations' reports used by the Bank of Spain's Central Balance Sheet Data Office, using the borrower's most up-to-date financial statements. The overall assessment of these

Exhibit 4



Vol. 5, N.º 5 (September 2016)

55

Source: Authors' own elaboration.

ratios results in ratings of the borrower's financial situation ranging from very good to weak, 'not available' being an option if there are no financial statements or no sufficiently recent statements.

In the event it is not possible to use some or all of the ratios, the institutions must evaluate at least each borrower's business performance, profitability, liquidity, leverage and solvency.

- Qualitative variables: The institutions must evaluate (issuing a positive, neutral or negative opinion) their knowledge of the borrower as a customer, of their business and, if applicable, of the support they receive from their shareholders or the corporate group to which they belong. To this end, they must use the qualitative information available within their management systems and, at least, provide the information related to the length of time the borrower has been in existence and has had business dealings with the lender and that related to the sector of the economy in which they operate.
- Conduct-related variables: The institutions must assess borrowers on the basis of their conduct

vis-a-vis the entity and the alert systems put in place by the latter. The resulting rating can be *positive, neutral or negative.*

The combination of the three groups of variables will yield an assessment of the borrower's credit profile, subject to the following set rules:

- If the assessment of the borrower's financial situation is 'not available', then the overall risk rating may also be 'not available.'
- If the assessment of the conduct-related variables is 'negative', then the borrower's overall risk rating must be 'medium-high risk' or 'high risk.'

Along with the final risk rating, the institutions must disclose in their '*SME-Financial Information*' reports the ratings awarded for each group of variables, additionally ascribing an order of importance to each, 1 being the most important and 3 being the least important, without scope for repetition and applied consistently over time for similar groups of borrowers.

Table	1
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Applicable methodology and resulting ratings

Variables	Description	Ratings		
+ Financial situation	Analysis of the SME's financial statements (profitability, liquidity, solvency, leverage, etc.)	<i>Financial wherewithal</i> to service its financial commitments Very good - Weak (4 notches) N/A due to lack of financial statements		
+ Qualitative variables	Information about the borrower and its business or activity (age, shareholders, sector of the economy, etc.)	<i>Opinion</i> on the borrower and its business Positive - Negative (3 notches)		
+ Conduct-related variables	Assessment of the conduct of the borrower vis-a-vis the lender (alerts, overdrafts, etc.)	Assessment of the borrower in respect of incidents and dealings with the entity Positive - Negative (3 notches)		
= Risk rating	Ability to meet its financial commitments with the entity	<i>Combination</i> of the 3 variables Low risk – High risk (4 notches) N/A due to lack of sufficient information		

Source: Authors' own elaboration.

The borrower's relative positioning in its respective business sector

For the most recent financial year for which there is accounting information, the entity must provide the borrower, along with its risk rating, information about its relative positioning in the sector in which it operates.

To this end, the entities will have access to a specific application used by the Bank of Spain's Central Balance Sheet Data Office that will generate this information by inputting the customer's identification particulars and financial statement details. Use of this tool will generate, by means of the same ratios as are used to analyse the borrower's financial situation, the quartile in which the borrower ranks relative to the rest of the players in its respective business sector. This vields a visual snapshot of the borrower's performance relative to its peers. In addition, in order to encourage use of this tool by the borrowers themselves, the institutions must inform the latter of the possibility of obtaining, free of charge, a more detailed individual study containing sector benchmarking data from the Bank of Spain's Central Balance Sheet Data Office with which to perform more exhaustive analysis of their business performance.

Lastly, we would like to note that in this paper we have sought to expound the context, spirit and objectives surrounding the drafting of the regulation aimed at improving access to bank finance for SMEs. We must await its implementation in practice, from October 11th, 2016, the date of effectiveness of Law 5/2015 and Bank of Spain Circular 6/2016, to be able to assess the degree of delivery of the stated objectives. Regardless, these regulatory developments undeniably mark a milestone in terms of the transparency of the financial institutions' decision-making. The hope is, on the other hand, that the SMEs will play an active role in this new paradigm, demanding but also providing more and better information.

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59

SEFO - Spanish Economic and Financial Outlook

The role of the Bank of Spain's SME Circular in facilitating access to finance

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The high degree of dependence on bank credit represents a key challenges for access to finance for Spain's SMEs. Recent regulations adopted by the Bank of Spain are a necessary and welcome step towards addressing this and other issues related to facilitating SME financing.

The percentage of micro enterprises, as well as their weight in the economy, is higher in Spain relative to other EU countries. For these and other small companies, the process of securing and maintaining credit has been historically cumbersome. In addition, their high degree of dependence on bank credit, lack of access to alternative financing sources and the lack of transparency over banks' credit evaluation process has been problematic. The Bank of Spain's new SME-Financial Information Circular aims to address some of these problems. By forcing banks to provide SMEs with feedback on their financial situation, quantitative variables and a risk rating, SMEs will have the opportunity to benefit from new tools, make changes to management policies and overall business conduct, as well as access new sources of funding. The approval of this circular could thereby represent a tipping point for SMEs' access to finance, reducing information asymmetries, promoting greater standardisation and enhancing transparency for all actors involved in the business and credit cycle.

This articles studies in depth the importance of the new Bank of Spain Circular on the information banks must provide small companies. The Circular is of crucial importance in the current environment, despite the fact that the credit crunch facing businesses has largely dissipated, thanks to the forceful measures rolled out by the European Central Bank. Its importance lies with the effort to standardise the information provided to smaller sized companies in a bid to facilitate decision-making by financiers and foster the development of non-bank financing formulae such as securitisations.

Bank of Spain Circular 6/2016 (of June 30th, 2016) was published in the Official State Journal on July 11th, 2016, specifying the contents and format of the document titled *SME-Financial Information*—and the risk classification methodology contemplated in Spanish Law 5/2015 (of April 27th, 2015) on the promotion of business financing.

The Business Financing Promotion Act and the *SME Financial Information Circular:* In search of greater standardisation

¹ A.F.I. - Analistas Financieros Internacionales, S.A.

Popularly known as the SME Circular, the Bank of Spain's initiative is aimed at reducing the information asymmetries that have traditionally characterised the SME segment in order to enhance the flow of financing to these companies by means of better and more standardised analysis of their credit risk profiles.

As addressed in the following section, the fragmentation of the Spanish business landscape, populated by a large number of self-employed professionals and micro-sized (< 10 employees) and small companies (< 50 employees), has traditionally hindered these companies from seeking alternative sources of financing to bank debt, such as capital markets funding. It has also prevented both banks and investors from being able to conduct rigorous professional analysis on par with that performed on larger companies.

This has translated into tremendous dependence on bank financing, usually very short-dated paper, given the risk profile (or, rather, the difficulties in analysing the long-term risks), which has in turn exacerbated the 'small scale' issue by preventing companies from reinforcing their financial structure in order to invest significantly in growth.

With a view to partially mitigating this vicious circle, and fuelling the flow of bank financing to SMEs by making it more flexible, accessible and transparent, chapter one of the afore-mentioned Law 5/2015 obliges the banks to:

- Firstly, notify SMEs,² in writing and with at least three months' notice, of any decision regarding the termination or reduction in the flow of financing granted to them;
- Secondly, to accompany such notification, free of charge,³ with information about their financial situation and payment history in a document

titled *SME-Financial Information*, which must include the assignation of a credit risk rating.

With these two measures, Law 5/2015 aims at giving SMEs enough time to look for financing alternatives without incurring significant liquidity issues and helping make this search more successful by ensuring a comparable and objective risk assessment underpinned by a combination of useful financial information, provided by the banks, and the tailored and standardised methodology stipulated in the Circular.

Risk assessments, or ratings, provide information about a company's creditworthiness that goes beyond that which can be obtained from public databases.

Risk assessments, or ratings, provide information about a company's creditworthiness that goes beyond that which can be obtained from public databases. This is particularly importance in the case of SMEs, for which public information is virtually non-existent, these enterprises having traditionally been shrouded by opacity with respect to their business management. Indeed, the banks themselves, thanks to their long-standing relationships and local reach, are the best sources of information about these companies.

The idea is, therefore, to extract this SME knowledge and standardise it with the aim of using this 'risk measurement' know-how to simplify the search for alternative financing sources (*e.g.* instances in which a bank denies a loan due to excessive exposure to the sector rather than any company weakness *per se*), and pave the way, to an extent, for tailoring loan pricing and terms for a degree of SME risk classification.

² SMEs: Micro companies, small- and medium-sized enterprises, including self-employed professionals and freelancers.

³ In addition, banks are obliged to furnish the *SME-Financial Information* file upon request by their SME customers. Failure to do so would make them subject to payment of the corresponding fee, which may be capped by the Bank of Spain.

Other advantages associated with the credit ratings, which can be taken from the experience with large corporates to the benefit of SMEs, are the following:

- A rating is an external assessment of a company's quality. Companies with similar ratings should be able to aspire to funding on similar terms;
- Once a company is aware of its rating, it may be motivated to pursue prudent management policies aimed at maintaining or improving that rating;
- The report is akin to a positive report from a credit bureau as the company will have been assessed by banks and can provide the results to new potential financiers, facilitating the search for new funds;
- The credit report, in this case the 'SME-Financial Information' document, favours a longer-term vision of the business by means of alerts about liquidity positions, leverage, etc.;

Exhibit 1

Average company size in various economies. No. of employees



The report can be used not only by the company to secure financing at an explicit cost (bank debt/capital markets financing) but also as a tool for negotiating with its suppliers.

Factors shaping dependence on bank financing in Spain: Characteristics of the business landscape

In this section, we analyse three of the factors that have shaped the strong ties between Spain's companies and banks:

- Relatively small average size.
- Financial indicator diversity.
- Motives for enterprising: Filling needs rather than searching for opportunities.

Relative average size

One of the main factors shaping the business landscape in Spain is the average size of its companies. According to information published

Exhibit 2 Average company size in Spain vs. EU. No. of employees (June 2016) (Percentage)



61

by the Spanish statistics bureau, the INE, and Eurostat (June 2016), 95.7% of all companies in Spain are micro enterprises (between 0 and 9 employees), 3.6% are small-sized (between 10 and 49 employees) and 0.6% are medium-sized (between 50 and 249 employees), with just 0.1% of the total classifying as large (> 250 employees). Particularly noteworthy is the fact that there are 1.5 million self-employed professionals in Spain, which is substantially more than the number of salaried employees at companies (1.3 million).

The main differences with respect to Spain's neighbouring economies relates to micro enterprises, which in the EU account for a smaller 92% of the total on average, and medium-sized enterprises, which account for over 1% of the EU total.

The relatively smaller weight of medium-sized and large companies in the business landscape also helps explain the differences in average size measured by the number of employees. In Spain, the average size stands at 4.7 employees, which is considerably smaller than the average company size in the main EU economies (6 in France, 11 in the UK and 12 in Germany), shaped by the above-mentioned small weight of mediumand large-companies.

These percentages help illustrate one of the sources of the heterogeneity that characterises the Spanish business landscape and, more specifically, the extraordinary dependence on bank financing. These business units lack the capacity to access financial markets on their own on account of their small scale and, therefore, their sole source of external financing come from banks, which are far more knowledgeable about the company and economic landscape than capital markets investors.

In addition, and although beyond the realm of this article, the small average company size leaves the Spanish economy highly vulnerable to job destruction during recessionary bouts, as smaller companies are more sensitive to the cyclicality of the growth cycle. This circumstance can alter, on occasion, the ability to secure bank financing.

Financial indicator diversity

The *SME Financial Information Circular* stipulates the calculation of certain benchmark credit risk ratios by financial institutions, including ratios

SME financial indicators reveal another of the factors characterising the business landscape in Spain: tremendous heterogeneity in companies' financial ratios and lags in the availability of updated financial information.

related to business performance (revenue trend for the last five years), profitability, returns and solvency, among others. These indicators reveal

Table 1

Profitability and solvency measures for medium-sized companies in Spain (Percentage)

	Revenue growth (5 years average)	Total assets/equity	ROA	ROE
Average	4473.5	435.4	8.7	312.4
Median	6.5	244.0	7.3	8.2
10 th percentile	-5.0	111.2	-1.7	-8.1
90 th percentile	57.3	958.2	20.9	53.9
Comple size	711			

Sample size 711 companies

Source: SABI database, AFI.

another of the factors characterising the business landscape in Spain: tremendous heterogeneity in companies' financial ratios and lags in the availability of updated financial information.

To calculate the statistical dispersion, we took a sample of medium-sized enterprises with:

- Revenue of between 6 and 21 million euros.
- Available financial information as of year-end 2015.

Using information filed with the Companies Register we pinpointed a total of 711 companies meeting these two requirements. Financial/ business ratio dispersion can be observed in different ways:

- The average and median of the various indicators are very far apart, evidencing the existence of outliers in the sample, at both the upper and lower ends of the ranges;
- If we strip out the outliers and reduce the sample to those falling within the 10th and 90th percentile, we find ourselves with a loss of

information which on average represents 10% of the sample (approximately 70 companies); however, this figure rises to 30% in the case of the business profitability metrics. In short, the business and financial indicators are not uniformly distributed around a central value, a situation that often times complicates the task of calibrating internal credit risk measurement models.

These circumstances are illustrated in the graphical analysis of the main variables used to perform traditional risk assessments. The analysis shows that there is no concentration around a defining value and that there are even outlying values around which a large number of companies are clustered.

It is worth noting that this dispersion exercise was calculated using medium-sized enterprises which are presumably capable of generating far more organised financial information than their smaller-scale counterparts (whether small or micro companies). Zooming in on the smallersized companies would presumably only reveal

Exhibit 3



Source: SABI database, AFI.

⁵⁾ Vol. 5, N.² 5 (September 2016)

Irene Peña and Pablo Guijarro



Exhibit 4 Business profitability (5-year average) (Percentage)

greater dispersion, further complicating decisionmaking and potentially triggering contradictory decisions by banks on the basis of financial information alone.



Source: SABI database, AFI.

Source: SABI database, AFI.



Exhibit 6

Motivation for setting up companies

Lastly, it is interesting to stand back and take a look at the reasons why entrepreneurs start up companies in Spain. It is true than entrepreneurship has flourished in Spain in recent years. However, it is worth pausing to ask whether what is behind this increased enterprising zeal is a change in the economic growth model and, by extension, the advent of new opportunities, or rather a response to a labour market problem justifying the search for economic sustainability on the part of those affected by unemployment.

The annual survey compiled by the Global Entrepreneurship Monitor yields compelling findings in this respect: although the identification of a perceived opportunity remains a key factor when starting up a new business (reason given over 70% of the time), its relative weight has fallen considerably in recent years (by 10 points), giving way to necessity as the justification for starting a business (25%).

This phenomenon is attributable to the fact that entrepreneurship is starting to been seen as a

remedy for job market inability to absorb large segments of the unemployed population. This dynamic justifies banks' approaches to risk measurement for the smallest companies, which are more akin to classical credit assessment for



private individuals than the methodology used to assess established companies.

Risk rating methodology

As stated previously, with the aim of standardising risk ratings, under the scope of the provisions of Law 5/2015, banks will be obliged to furnish SMEs, in addition to the rest of the information contained in the 'SME-Financial Information' document, a risk rating, for which the Bank of Spain has developed a specific methodology and template.

As stipulated in the Circular, banks have three months from its effectiveness, *i.e.*, until October 11th, 2016, to adapt their systems so as to be able to provide SMEs with this information.

According to the proposed methodology, in order to assign a rating to their SME customers, the banks need to assess the borrowers' information with respect to three main categories:

 Financial situation: based on analysis of their financial statements and/or latest income tax returns (in the case of self-employed professionals, based on available tax and/or net worth data);

- Qualitative variables: assessment of aspects related to the business or activity that the SME has developed;
- Conduct-related variables: analysis and assessment of the borrowers' conduct as regards the contractual relationships to which the lender or potential lender has been party.

For each of these three categories, the regulator itemises the minimum aspects that the entities must consider, albeit allowing for a degree of flexibility so that the banks can use additional and/ or alternative criteria in the event a specific item of information is not available.

The Bank of Spain proposes a battery of new ratios with the goal of assessing the SMEs' business performance, profitability, liquidity, leverage and solvency.

For example, to analyse the borrower's financial situation, the Bank of Spain proposes a battery of new ratios with the goal of assessing the SMEs' business performance, profitability, liquidity,

Risk rating interpretation according to Circular 6/2016						
Financial asse	ssment	+ Q	ualitative assessment	+	Conduct assessment	
 Very good Good Adequate Weak Not available 			PositiveNeutralNegative	PositiveNeutralNegative		
			Risk rating			
Low risk:	Mediun	n-low risk:	Medium-high risk:	High risk:	Not available:	
Sufficient capacity to service financial commitments	Some unc albeit not s regarding ability to s financial c	ertainty, significant, current ervice ommitments	Significant uncertainty regarding ability to service financial commitments	Serious doubts over ability to service financia commitments.	Unable to obtain sufficient information to calculate a rating	

Source: AFI.

SEFO - Spanish Economic and Financial Outlook

Table 2

SEFO - Spanish Economic and Financial Outlook

leverage and solvency. However, the Circular contemplates the use of other ratios deemed more suitable so long as they cover the same areas of analysis.

In the qualitative and quantitative areas, the regulator also specifies that, in addition to the criteria stipulated by it, banks may complement the analysis by including other variables specific to the business and the customer relationship, respectively, that they deem appropriate.

For each of the three main areas of analysis, banks are required to assign a rating using the scales defined by the Bank of Spain in its Circular. Banks will also have to use their best judgement to weight each category and, within the three categories, each variable.

The final result of the analysis must be presented on a scale similarly established by the Bank of Spain, which contemplates four levels of risk: low risk, medium-low risk, medium-high risk and high risk; in addition, in the event that there is not enough information about a given SME, a fifth category for information 'not available' is allowed.

Lastly, the banks are obliged to provide the SMEs, to the extent feasible, with information regarding their relative position within their sectors or businesses using the sector ratios for non-financial corporates designed by the Bank of Spain's service, which analyses the financial information submitted voluntarily by Spanish non-financial corporates to enable enhanced familiarity with these enterprises.

Bank of Spain Circular 6/2016: Implications for the SME segment

Despite the relative simplicity of both the SME rating calculation and results presentation methodology introduced by means of Circular 6/2016, its implementation may have major implications for SMEs in the future, potentially

marking a radical change in how self-employed professionals and small companies approach the process of securing credit.

The Bank of Spain's new circular may have major implications for SMEs in the future, potentially marking a radical change in how self-employed professionals and small companies approach the process of securing credit.

The recent financial crisis highlighted SMEs' excessive dependence on bank financing, on the one hand, and greater vulnerability to credit shocks, on the other. As evidenced by certain empirical studies (Beck *et al.*, 2008) the smaller and newer a company is, the harder it is for it to access financing, as these companies are perceived as higher-risk entities with relatively more scant information, making them harder to assess.

The methodology defined in the Circular, despite its apparent simplicity, implies considerable progress in this respect as it means reducing the information inequalities surrounding SMEs and provides a standard set of criteria for analysing their credit risk, enabling classification of these entities into four major risk categories.

The theory goes that the more information available, the fewer the barriers an SME will face in securing financing and the lower its vulnerability to credit shocks. This is particularly important for an economy in which SMEs account for 99% of the business landscape and in which it has been proven that the barriers these enterprises face when it comes to accessing financing have important economic ramifications in terms of growth and jobs.

Clearly this is not only a Spanish issue, but rather one that affects most European economies. That is why one of the main objectives set by the



Exhibit 8 Relationship between the availability of bank credit and the difficulties faced by SMEs in obtaining financing

Source: SAFE, AFI.

current European Commission presidency is the creation of a Capital Markets Union that, among other goals, will foster reduced dependency on banks in Europe and favour the development of alternative sources of financing that will bring SMEs and investors together.

As indicated by the Commission itself, the roots of SME over-dependence on bank financing lie with their long-standing relationships with banks. Indeed, until the recent financial crisis, the European economy had been experiencing a long spell of high liquidity in which abundant bank financing only meant that the companies did not have to look for alternative sources of financing. This has given banks a comparative advantage in terms of obtaining information about SMEs.

Now, given the information requirements established in the *SME-Financial Information* document, banks will be obliged to share their historical information about their SME customers, enabling companies themselves to build new relationships with other providers of finance (investors) and to participate in capital markets.

Against this backdrop, the availability of new financial information for SMEs should foster the consolidation of the alternative financing formulae (formerly known as 'shadow banking') that found their opportunity for development in the recent financial crisis in light of banks' difficulties in intermediating in the credit process and have continued to grow in part thanks to the ongoing digitalisation of the economy, as many of these new financing channels are articulated around technology platforms (such as peer-to-peer lending or crowdfunding).

Lastly, SME financing also stands to benefit from the Circular by means of mechanisms, such as asset securitisation transactions which bring capital markets and traditional banks together. This financing mechanism, which can also be used by companies, has been widely used by banks to monetise their assets (usually securitising mortgage and SME loan books). However, the crisis has severely curtailed the asset securitisation business, precisely on account of issues deriving from asymmetric information about the collateral securitised.

68



Exhibit 9 Face value of issued asset-backed bonds and promissory notes

For this very reason, one of the objectives of the European Commission's Capital Markets Union initiative is to promote simple, standardised and transparent asset securitisation. Spain's small companies may benefit indirectly from asset securitisation if banks manage to securitise the loans they grant to SMEs at a reasonable price, as this liquidity should translate into new loans at lower rates.

To this end it is vital, not only to restore confidence in the instrument, an issue that should gradually resolve itself via the new regulations contemplated by the EC, but also to resolve the information issues related to SMEs. Loans to SMEs are far harder to evaluate than collateral for a mortgage loan due to greater underlying business diversity, coupled with information limitations. Against this backdrop, the scope for grouping SMEs into similar risk categories and the provision of more abundant and comparable information fostered by the new Bank of Spain Circular should help reduce information disparity and enable a more homogeneous approach to SMEs for loan securitisation purposes.

Conclusions

The new SME Financial Information Circular addresses the requirements established by the Business Financing Act, a piece of legislation intended to re-establish business access to bank financing against the backdrop of a sharp credit crunch. Although the credit crunch has reverted very considerably in the last few months thanks to ECB intervention and the widespread improvement in the Spanish economy, we believe that the Circular is nevertheless of vital importance for the business landscape. This is because, looking beyond bank lending dynamics, the Circular lays the foundations for making progress on an aspect of critical importance: standardisation of information available about small-sized companies.

The report contemplated by the Bank of Spain should help to generate very useful information in terms of facilitating decision-making on the part of these enterprises' customary financiers (banks), as well as promoting alternative sources of financing, such as the securitisation of these companies' collection rights, an initiative framed by the European Commission's Capital Markets Union strategy. Lastly, companies themselves will avail of a tool that will help them develop prudent management policies aimed at maintaining or improving the credit ratings assigned to them by the banks, ratings that will also mark progress in terms of the development of credit bureau type reports in Spain.

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An assessment of fiscal slippage at the regional government level in Spain

Santiago Lago Peñas¹

A closer look at the diversity of fiscal performance at the regional level provides insights into the possible causes behind recent slippage. However, even in the face of an improved regional fiscal outlook for 2016, it will be necessary to incorporate these insights into new fiscal strategies to ensure budgetary stability over time.

The public deficit has been a key issue for economic policy in Spain since the start of the crisis. In general terms, the fiscal performance of local corporations has served to offset the deterioration of Spanish public finances at other levels of government, recording surpluses and reducing borrowing in nominal terms. But, the rapid increase of regional financial liabilities has become a source of concern. However, judging by the projections available for 2016, it seems that the regional government deficit is expected to return to pre-crisis levels and risk will shift to the central government, including the Social Security funds. Understanding and correcting the causes of regional fiscal slippage is a pre-requisite for designing on-target fiscal strategies to address this problem in the longer-term.

The public deficit has been a core concern of Spanish economic policy since the start of the crisis. An ample surplus in 2007 rapidly transformed into a deficit in the order of 10% of GDP. In tandem, the public debt ratio soared from below 40% of GDP to exceed the 100% threshold.

There are multiple causes of this fiscal deterioration, including: counter-cyclical fiscal policy measures and the increased cost of spending programmes, such as unemployment benefits; the collapse in tax revenue- far more pronounced than was expected in light of the estimated elasticity of tax receipts to GDP, which ultimately revealed a worrying structural shortcoming in the Spanish tax system; a growing debt service burden; the need to financing the restructuring of the financial system; and the decline in nominal GDP, pushing up any ratios using this as their denominator. The estimates compiled by Delgado, Gordo and Martí (2015) divide the drivers of the increase in debt into four factors. The most relevant in quantitative terms (accounting for over half of the cumulative increase) is the deterioration in the primary deficit, a factor which encompasses the counter-cyclical measures, the impact of the automatic stabilisers, and the intrinsic weaknesses of the fiscal system. The debt burden ranks second. Next, the measures that have led to more debt but do not compute for excessive deficit procedure purposes (such as the bank restructuring exercise). Lastly, the drop in nominal GDP.

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When the above factors are observed at the various levels of government in Spain, the reality is highly diverse. The local corporations have served to offset the deterioration as a whole, recording surpluses and reducing their borrowings in nominal terms. The Social Security administration is running substantial deficits that have not waned with the recovery in job creation (Lago Peñas, 2016) but have been financed by a reserve fund that has prevented the generation of new debt. The central government is accountable for the largest spike in deficit and debt alike, albeit largely due to its key role as stabilising agent and lender of last resort to other public agents and the financial system. Lastly, the regional governments have seen their financial liabilities jump from roughly 5% of GDP in 2007 to close to 25% today due to very considerable deficits that have, on average, come to surpass 3% of GDP, emerging as a cause of concern in Spain and abroad. The purpose of this paper is to examine this trend at the regional level, particularly the mismatch between the figures reported relative to the regional governments' deficit targets. Only by properly understanding the causes of this fiscal breach will the Spanish public sector be able to design on-target fiscal strategies directed at the heart of the problem.

The dynamics of regional deficit target non-compliance

We define *deficit compliance* as the difference between the observed deficit (-) or surplus (+) and the stated deficit/surplus target, both expressed as a percentage of regional GDP. Positive readings mean that the deficit has come in narrower than targeted and *vice versa*.

Exhibit 1 illustrates the trend in the average of three variables between 2005 and 2015: the observed deficit, deficit compliance and the interest burden, each of which are expressed as a percentage of GDP in each region. Starting from a situation close to that of a balanced budget in the run-up to the crisis (2005-2006), matters began to deteriorate in 2007, with the worst reading recorded in 2011, when the regional deficit averaged 3.5%. The improvement between 2011 and 2012 was very noteworthy, putting the deficit once again within 2%. Since then (until 2015), the deficit has stabilised at slightly over 1.5%.

The deficit compliance dynamics are similar, albeit with nuances. Until 2010, the deficit targets were

Exhibit 1 Trend in average observed deficits, target compliance and interest burdens between 2005 and 2015 (% GDP)



adjusted progressively to the deficits reported, such that the non-compliance trend is not as adverse as the trend in the deficit *per se*. From 2011, this adjustment process became less pronounced and since 2013 the target-setting process has been independent of the trend in the underlying numbers. The roadmap set for the deficit (gradual but inflexible) means that a reported deficit in line with that of prior years has the effect of exacerbating the degree of noncompliance.

The drop in interest rates and the country risk premium in Spain, coupled with the financial support programmes approved by the central government, had the effect of significantly reducing the (interest) burden in 2015.

Lastly, the trend in the interest burden reveals stability until 2010 and progressive growth between then and 2014, when it approached 1% of GDP. However, the drop in interest rates and the country risk premium in Spain, coupled with the financial support programmes approved by the central government, had the effect of significantly reducing the (interest) burden in 2015, bringing it in line with the average level of 0.5% of GDP.

Fiscal performance across the regions is highly diverse: there are regions that have missed their deficit targets by a narrow margin; some in which compliance has predominated; and others where target breaches have been the norm.

The above analysis masks the existence of highly divergent regional dynamics in terms of the pattern and absolute level of deficit target non-compliance.

Against this backdrop, Exhibit 2 depicts the trend in the *deficit compliance* variable individually for each of Spain's 17 regions between 2005 and 2015. The exhibit shows the aforementioned diversity. There are regions that have missed their targets by only a narrow margin and even some in which compliance has predominated, compared to others where target breaches have been the norm.

It is possible to group the regions into categories and flag idiosyncratic behaviour.² The first category comprises eight regions (Andalusia, Castile-Leon, Asturias, Aragon, Canary Islands, Galicia, Madrid and La Rioja).These are the most compliant and consistent regions as regards adherence to targets over time. Within this category, it makes sense to distinguish a subgroup comprised of the Canary Islands, Galicia and Madrid, in which target compliance has been the norm and whose performance is consistently very close to 0, occasionally even recording a surplus.

The second category is made up of the four regions along the Mediterranean: Murcia, Valencia, Catalonia and the Balearic Islands. The defining trait in this instance is systematic target breaches, with matters gradually deteriorating between 2005 and 2011, when non-compliance was in the order of -4%, followed by substantial improvement in 2012 and 2013 (with the Balearic Islands registering a positive reading in 2013), since which time their performance has worsened once again.

The third cluster includes the Basque Country and Cantabria, which rank somewhere in between the first two categories. Although they are not capable of staying as close to targets as the constituents of the first category, their deviations are more one-off and less pronounced than those of the second group; moreover, they have been improving significantly on the budget stability front since 2011.

² Lago-Peñas *et al.* (2016) perform cluster analysis that supports this categorisation.



Exhibit 2 Trend in fiscal consolidation by region between 2005 and 2015 (% GDP)



Exhibit 2 (continued) Trend in fiscal consolidation by region between 2005 and 2015 (% GDP)

Source: Lago Peñas et al. (2016).

Navarre and Castile-La Mancha are the two regions with the most asymmetric dynamics and are outliers with respect to the rest of their peers. Navarre went from strongly positive readings until 2007 (peaking at over +2%) to suffering the biggest collapse in 2008, due to the unique nature of the so-called "foral" financing system: the drop in tax revenue is felt more keenly in this region than elsewhere in Spain because of the lack of withholdings and payments on account. In comparison with the other foral region (the Basque Country), Navarre is having a harder time balancing its budget once again. In the case of

Navarre and Castile-La Mancha are the two regions with the most asymmetric dynamics and are outliers with respect to the rest of their peers.

Castile-La Mancha, the deterioration observed between 2007 and 2011 is unparalleled. Nor, however, has any other region improved its situation by as much or as quickly, having started to meet its targets as early as 2012. Lastly, Extremadura's performance resembles that of Cantabria and the Basque country somewhat, differing most notably in the deterioration observed between 2013 and 2015, compared to improved budget stability in the case of its northern counterparts.

The causes of non-compliance between 2005 and 2015

Econometric analysis of the drivers of noncompliance at the regional government level as a whole between 2005 and 2015 yields the following results (Lago Peñas *et al.*, 2016):

The level of compliance in a given year has depended directly on what had happened the prior year. The reason is that the starting point is more challenging the bigger the target breach the prior year.

- The level of compliance appears to be inversely correlated to the deficit cuts approved for the year in question. Deficit targets have been missed by a wider margin the more ambitious the targets.
- The regional governments with the highest per capita revenue have tended to fare better with respect to their targets.
- Political changes have helped in the achievement of fiscal objectives in the year after the change in office for two reasons. Firstly, at the beginning of a new term in office and with new officials in charge it is easier to take unpopular decisions. Secondly, because the fact of holding elections and electing a new government usually brings previously concealed sources of deficit to light (unprocessed invoices, inflated revenues). 'Cleaning up' the accounts raises the deficit in year *n* (when the change of incumbent is done) and reduces it in year *n*+1.
- Coincidence between the party in government at the regional and national levels appears to foster target compliance to the extent that ultimate responsibility for fiscal austerity lies with the latter and the former tends to be more cooperative with what is seen as a 'friendly government'. However, this result is less sensitive to changes in the econometric methodology and sample.

In contrast, the exercise reveals scant significance, as a general rule, with respect to other factors often rolled out in the course of the public debate. Specifically:

- The proximity of elections has not clearly or systematically increased target non-compliance, the theory being that political considerations can lead to delaying spending cuts or tax hikes, encouraging the opposite behaviour.
- The estimates do not back up the thesis that the debt burden has played a meaningful role as a general rule.

76

77

Although one might think that the regions that have seen their primary spending increase the most in the recent past would have the greatest scope for cutting back in the present day, thereby meeting the targets set, the econometric estimates demonstrate otherwise.³

That being said, the econometric findings show that the above list is not all-encompassing in terms of possible explanatory variables.⁴ The interpretation is two-fold. Firstly, the figures suggest that there have been regional governments that have taken fiscal austerity more seriously than others, assuming a higher political cost and taking advantage of their autonomy, particularly on the spending side of the equation, to meet their targets by making bigger cuts.

There have been regional governments that have taken fiscal austerity more seriously than others, assuming a higher political cost and taking advantage of their autonomy.

Secondly, some non-compliance is attributable to unforeseen developments of all manner, such as court sentences or decisions taken at other levels of government that impact the regional governments' expenditure or income. Both lines of reasoning warrant an examination of case studies to achieve a better understanding of the diversity of results.

Target compliance prospects for 2016

At this juncture of the year, projections are available for deficit target compliance by region for 2016. They have been compiled by AIReF (2016) (Spain's so-called independent fiscal responsibility authority) using the first-half budget outturn figures. Table 1 replicates the corresponding figures. Exhibit 3, meanwhile, shows the relationship

Regional governments are expected to almost comply with their deficit target for 2016, following the revision from 0.3% to 0.7% announced a few months ago, which was tantamount to freezing the target missed in 2015.

between the year-end 2015 figures and the projections for 2016. A combined reading of the table and exhibit points to a very considerable improvement. For the first time since the start of the crisis, the deficit is expected to go below the 1% threshold. Moreover, the regional governments are expected to almost comply with their deficit target for 2016, following the revision from 0.3% to 0.7% announced a few months ago, which was tantamount to freezing the target missed in 2015. Secondly, deficits are expected to be reined in far more significantly in the regions in which the imbalance was more pronounced in 2015. This outcome is illustrated graphically by the slope of the regression line in the exhibit. If the reduction were similar across the regions, the line would be parallel to the line bisecting the square. The slope would be the same; what would differ would be the intercept. In contrast, the regions that already met their targets in 2015 and therefore worked with more room for manoeuvre in 2016 have used the leeway to increase their spending. Only the Canary Islands looks likely to comply with the original deficit target for 2016 (0.3%).

Looking closer at the variables accountable for this very encouraging deficit performance, the AIReF attributes responsibility in full to just two factors: the improvement in the financing panorama and one-off budget items not recurring

³ Our findings coincide with those of Leal and López Laborda (2015) with respect to the dynamic nature of the process (complying today is crucial to being in a position to do so once again tomorrow), the irrelevance of the financial burden and the importance of the non-financial resources on hand.

⁴ The coefficient of determination was around 70%.

Santiago Lago Peñas

Table 1

Base case projections compiled by AIReF for the year-end 2016 deficits by region (Percentage)

Andalusia	-0.6
Aragon	-1.1
Asturias	-0.6
Balearic Islands	-0.6
Canary Islands	-0.3
Cantabria	-0.7
Castile-Leon	-0.7
Castile-La Mancha	-0.8
Catalonia	-0.9
Extremadura	-1.2
Galicia	-0.6
Madrid	-0.6
Murcia	-1.4
Navarre	-0.7
Basque Country	-0.7
La Rioja	-0.4
Valencia	-1.3
Total	-0.8

Source: AIReF (2016).



in 2016. For the regional governments as a whole, the deficit is projected to decline by 90 basis points. The AIReF attributes approximately two-thirds of this improvement to the financing phenomenon and one-third to the non-recurrence of one-off charges. Deficit-cutting measures are insignificant on aggregate. In all, the AIReF (2016) sees compliance by the regional governments of their targeted deficit of 0.7% in 2016 as "feasible but tight;" that being said, compliance is considered improbable in the case of Castile-La Mancha and Catalonia and highly improbable in Aragon, Extremadura, Valencia and Murcia.

The projections compiled by Díaz and Marín (2016) for FEDEA are similar on aggregate. In their opinion, the regional governments as a whole have overstated their revenue budgets for 2016 (albeit by less than in 2015), such that they will end the year with a deficit of 0.9 points of GDP. The 0.2 point shortfall with respect to target would be salvageable with rigorous spending control during the second half of the year.

Conclusions

The regional governments have been a recurring source of concern in terms of evaluating compliance of the fiscal consolidation targets. However, judging by the projections available for 2016, the target for this year having been relaxed, the problem seems to be mostly resolved. The regional government deficit is expected to return to pre-crisis levels with risk shifting to the central government, including the Social Security funds. If we take this at face value, however, we run the risk of ignoring the need to tackle reforms and define more ambitious consolidation strategies at the regional level. There are two key reasons for avoiding this risk.

Firstly, the improvement in the deficit has to do primarily with the growth in revenues provided by the financing model in place in most of the regions (the so-called common regime). A model based on the use of withholdings and payments on account that are settled with a significant lag which can, as shown in 2008 and 2009 (Lago Peñas and Fernández Leiceaga, 2013), generate a false sense of financial sufficiency. As warned by the AIReF itself, the tax collection numbers for 2016 are tracking below estimates and this implies a risk of a reduction in the sums ultimately allocated to the regional governments.

Secondly, the divergence among the various regions remains very pronounced. As we have seen throughout this paper, certain regions have met and continue to meet their targets. Others have not. Although the regional governments on aggregate have improved their situation, certain regions continue to face enormous difficulty in reining in their deficits.

This yields three conclusions. The first is that reforming the regional financing regime remains necessary and pressing in order to reinforce the regional governments' financial autonomy and sufficiency, but also to tighten their budget restrictions. There is major risk the anticipated improvement in the system's revenue alone will not resolve the underlying issues.

The second is that the workings of the system of payments on account and withholdings need to be reviewed. The regional governments need real-time information about the trend in their revenue; and they need to feel it in their cash receipts so that they take the required offsetting measures when trying to stick to budget. Against this backdrop, the proposal made by Hernández de Cos and Pérez (2015) for the introduction of an adaptive mechanism by which the revenue estimate gets updated over the course of the year with an impact on payments on account could be a good solution. Cuenca (2015), meanwhile, suggests bringing the calculation of the definitive settlement forward by one year and having the central tax authority directly allocate monthly tax collection revenues to the regional governments. There are accordingly technical solutions worth exploring. What is needed is reform zeal.

Lastly, awareness is required that fiscal performance is not homogeneous across the various regional governments. There are very compliant regions, while others systematically breach. Moreover, the motives underpinning these results are very different. In some instances, a financing shortfall is evident. In others, fiscal irresponsibility is more to blame. What we need to do is learn from the success stories and define individualised fiscal consolidation roadmaps and strategies. And when it comes to monitoring and encouraging target compliance, it would be a good idea to introduce a greater degree of automation in terms of the protocols triggered by non-performance and improve the administrative processes for closing the loopholes which lead to weak adherence to the fiscal austerity plans presented by the regional governments.

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Spanish electricity market reform: Positive effects but more competition needed

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Recently adopted reforms have helped to address some of the operating problems of the electricity sector in Spain. While these much-needed reforms represent a step forward, there is still room for improvement to increase competition necessary to bring down retail prices.

New regulation in the electricity sector (2013-2014) has modified the functioning of Spain's electricity market and addressed some of its traditional shortcomings. Specifically, two important changes have been introduced: i) the new system for calculating the cost of electricity for the final consumer, which leverages the availability of smart meters and is based on the hourly price at the pool; and, ii) the new incentive scheme for renewable generation. The new measures have solved some of the operating problems related to the consumer price setting system in the retail segment. In addition, the regulation introduced to amend the renewable energy incentive regime has proven effective in controlling the tariff deficit. However, additional measures should be considered to increase competition and bring down retail prices. Looking ahead, the introduction of measures aimed at achieving the Energy Union will be the key determinant factor to form a clear perspective on the future of the energy market.

The Spanish electricity system underwent profound transformation in the wake of the passage of Spanish Law 24/2013, of December 26th, 2013, the Electricity Sector Act (the Act). The Act essentially strives to ensure the system's sustainability, which had been jeopardised by the debt built up as a result of successive tariff deficits. To this end, the new legislation focuses on two major reforms that affect both the supply and demand sides of the electricity market: (i) the new electricity pricing system in the wake of Spanish Royal Decree 216/2014, which stipulates the method for calculating the Voluntary Price for Small Consumers; and, (ii) the renewable energy remuneration regime enacted by means of Royal Decree 413/2014.

The new regulations have modified how the market works to a substantial degree. In this article, we analyse the changes and impact that the new regulations have had in two key areas: control over the tariff deficit and the pricing system in the retail segment, linking this aspect with the level of effective competition among suppliers or retailers.

The characteristics of the electricity market, in which natural monopolies, such as distribution and transmission, live side by side with other activities that lend themselves to free competition, such as generation and retailing, warrant sector-specific regulation. The Electricity Sector Act continues to distinguish between regulated and non-

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regulated activities, as prescribed by European Community regulations. In the case of the system operator, Spain has opted for structural separation or ownership unbundling, forbidding generators from holding significant shareholdings in the transmission system operator. In contrast, the road taken vis-a-vis the distribution grid operators has been conduct-related redress, requiring costly supervisory measures that are not always effective in terms of fostering the optimal level of competition for pushing down the rates ultimately paid by end consumers.

Elsewhere, the regulations introduced in 2013 and 2014, amending the renewable energy incentive regime, have proven fairly effective in controlling the tariff deficit. The new system has entailed a reduction in subsidies but has also driven a drop in output from renewable sources.

The new consumer pricing regime introduced by means of Royal Decree 216/2014 and the progressive installation of smart meters have paved the way for new competitive tools for retailers. However, competition in the retail segment would not appear to have reached the ideal level, dampened by the presence in this segment of companies belonging to large vertically-integrated groups.

Taking a far longer-term perspective, the introduction of measures directed at energy union will surely be the key determinant of how the electricity market will look in the future. In 2015, the European Commission passed a series of measures designed to foster the development of interconnections which in the case of Spain will translate into increased interconnection capacity with France and, by extension, the rest of Europe. Elsewhere, the Multi-Regional Coupling (MRC) project for connecting Europe's wholesale markets lays the groundwork for unifying the market rules and uses a single algorithm (EUPHEMIA), in operation since 2014, as the precursor of a single market.

As a whole, the recent reforms have resolved some of the market's operating problems, specifically the tariff deficit and consumer price-setting system, although on the latter point there is room for improvement in striking the level of competition needed to bring end prices down in the retail segment.

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This article is structured as follows: Firstly, it analyses the general objectives of the Electricity Sector Act (Spanish Law 24/2013). Next, it outlines and assesses the trend in the tariff deficit. Finally, it examines the new electricity pricing system and the degree of real competition among retailers in the wake of introduction of Royal Decree 216/2014.

General objectives of the Spanish Electricity Sector Act

Electricity is a good whose output cannot be stored except on a very small scale; it is a basic necessity for the population as a whole; demand for electricity is relatively inelastic; and there are elements constituting natural barriers to entry that prevent free competition in the marketplace. In light of these characteristics, the preamble to the Electricity Sector Act establishes five major objectives for fulfilment over the ensuing five years: (1) guaranteeing electricity supply while maintaining the necessary quality standards; (2) fostering effective competition such that power is supplied to the end consumer at the lowest cost; (3) protecting consumers; (4) ensuring the system's financial sustainability; and, (5) duly protecting the environment.

This paper analyses how the new legislation is faring in terms of delivery of two of the abovelisted targets: reduction and control of the tariff deficit and delivery of a competitive pricing regime capable of fostering end prices that are in sync with retail consumer needs. Law 24/2013 repeals

82

Law 54/1997 (of November 27th, 1997), which was drafted to create the regulatory regime needed to implement Directive 96/92/EC, of the European Parliament and of the Council, of December 19th, 1992, concerning common rules for the internal market in electricity. The need to tackle new sector challenges prompted implementation of a new electricity system revenue and expense regime with the aim of correcting the then-existing financial imbalances (the so-called tariff deficit) and adapting the legal framework to the new market structure. The reforms undertaken affect both the demand and supply sides of the equation.

On the demand side, recent technological developments are enabling the implementation of smart meters. This paves the way for hourly pricing which will in turn allow consumers to observe how their consumption costs vary at different times of the day. This enables the retailers to introduce new competitive tools (tailored pricing packages) and could change the nature of demand on the daily market. Spanish Royal Decree 216/2014, of March 28th, 2014, establishing the methodology for calculating voluntary prices for small consumers and the related contracting regime, is the regulator's response to the need to systematise end consumer pricing. This opens the door to greater effective competition among the players by means of the various power supply contracting formulae and the possibility of switching supplier.

On the supply side, the significant increase in the tariff deficit and the resulting debt burden (close to 3% of GDP) called for the adoption of deficit-reduction measures against the backdrop of a sharp credit crunch. Specifically, the approach taken was to offer subsidies for the various renewable energy sources so as to guarantee a 'standard return'. Royal Decree 413/2014 (of June 6th, 2014), which regulates the production of electric power using renewable sources, co-generation and waste, legislates this approach. The goal of containing the deficit was attained in 2015. However, Spain also faces greenhouse gas emission targets that will require fine-tuning the power generation mix, an issue which has yet to be tackled.

Deregulation of the electricity market in Europe has been boosted by various European Community Directives and has been implemented in stages. Initially, Directive 1996/92/EC stipulated (i) full unbundling of ownership of generation and transmission network; (ii) creation of an independent system operator to guarantee non-discriminatory access to the transmission network by all participating agents; (iii) privatisation of the generation and retail businesses: and. (iv) creation of an independent market operator to set the prices and amounts consumed over a specific time horizon (hourly, half-hourly, guarter-hourly, etc.).

This legislative process marked radical changes for the vertically-integrated companies with a presence in both the generation and distribution businesses. The new rules obliged functional segregation of vertically-integrated activities albeit without forcing separate ownership of each. This has since been reinforced by the creation of regulatory bodies independent of the governments and, more recently, regulations that lay the foundations for integration of Europe's electricity markets. The European regulations have offered the various member states several options for deregulating. This, coupled with natural differences in market characteristics or objective circumstances in each country, has meant that the results of the deregulation process have been heterogeneous.

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Although the goal is to open up the segments whose market circumstances are most suited to free competition, the intrinsic characteristics of electricity require a certain degree of regulation. There are four major segments with different regulatory characteristics and needs: production or generation, transmission, distribution and retailing.

The power transmission and distribution activities are natural monopolies and this must be factored into market regulations. The transmission of electricity requires complex and costly infrastructure with considerable environmental ramifications as it comprises networks, transformers and other electric facilities with nominal voltages of 380 kV or above (primary network) and 220 kV (secondary network). The existence of more than one transmission network (one per company) would not only be environmentally unsustainable but also economically unviable and inefficient. This endows it with the characteristics of a natural monopoly and means that care is required to make sure that the transmission network operator invests enough in network maintenance and growth to ensure service supply and efficiency, while guaranteeing equal and non-discriminatory access to the network by all interested companies.

This situation in the distribution segment is somewhat similar, as this business consists of transmitting the power from the high-voltage networks to the points of consumption or other distribution networks. This requires power lines, stations, transformation equipment and electric facilities with voltages of less than 220 kV. This segment therefore presents analogous environmental and cost considerations warranting the existence of a single company or distribution grid per geographic region, preventing overlapping networks in the same region. It is also necessary to ensure efficient operations and sufficient investments in each regional network as well as the provision of grid access to all interested parties.

In contrast, the power generation and retail activities do not present objective or natural market conditions implying the need for a monopoly, which is why the retail and generation activities are termed *deregulated* activities, in contrast to the abovementioned transmission and distribution activities,

classified as regulated activities. In the strictest sense, all the activities are regulated: even in the production and retail segments, the existence of a staple good subject to technical complexities and, by extension, considerable safety considerations means that a prior business permit is required. Directive 2009/72/EC stipulates, however, that the requirements imposed in exchange for this permit do not go beyond those strictly necessary in order to ensure such safe and effective supply and do not add unnecessary burdens that limit access to the market for potential entrants. The Directive further stipulates that the process for obtaining the permit be neither protracted nor impose requirements other than those strictly necessary, as some countries have availed of measures of this kind as delay tactics or as a means to hinder the advent of potential entrants to these deregulated yet permit-restricted businesses.

Note that although the capital required to enter the market can be considerable for certain generation technologies, this is not the case in the retail business, an activity which only requires the purchase of energy for sale to consumers or other system users. The electricity retailers are intermediaries of which a sufficiently high number is advisable from the standpoint of introducing competition into this segment. Hence the importance of guaranteeing non-discriminatory access to the transmission and distribution grids, *i.e.* the provision of equal terms of access and information to all competitors.

In light of the characteristics of each of these activities, EC regulations also require the existence of an independent transmission system operator, known as the TSO (article 30 of the Act), *Red Eléctrica Española* (REE) in the case of Spain, which must moreover be the only operator to intervene in the network unless, exceptionally, the ministry authorises the operation of certain secondary transmission networks by the regional distributor so appointed (article 34). The functions of the distribution and transmission system operators are precisely to oversee that the systems work as intended so as to adequately satisfy demand at

all times and to invest in their upgrade so that it is technically feasible to provide access to them and, by extension, to provide more competitors access to the electricity market on equal terms. To this end it is crucial that the operators take their decisions independently and have no vested interests in any of the generators or distributors. If they did share interests, there would be a clear-cut risk of temptation to hinder the efforts of other companies in which they did not have a vested interest from approaching and accessing the market, so that they would not compete with the same information or therefore on equal terms, eventually harming competition in the market in guestion.² A vertically-integrated TSO or DSO would also be less motivated to upgrade or invest in its network as this would enable grid access by potential entrants that would then compete with the companies with which the operator had shared interests.³

The market structuring regulations are rounded out with the creation of the so-called 'market operator', in Spain OMIE for its acronym in Spanish, whose remit is to manage the deregulated purchase and sale of electric energy in the daily market... upholding the principles of transparency, objectivity and independence (article 29 of the Act). This independence is essential if we consider that this entity must organise the market for trading in energy among generators, distributors and retailers and guarantee satisfaction of effective demand at any point in time. Such independence presupposes a lack of vested interests in or relationships with the market's suppliers and bidders (producers, distributors and retailers). In its absence, all the market players might not have access to the same information, potentially adulterating the free interplay between supply and demand matching in the daily and intra daily energy markets. Regardless, for the system to work properly, it is necessary to guarantee a sufficient number of suppliers (generators) and bidders (distributors, retailers and direct consumers) with truly separate economic interests, *i.e.*, that do not form part of the same group of companies.⁴

In short, given existing market circumstances, particularly the need for a monopoly in the transmission and distribution activities, the ideal or most competitive market structure among the

The ideal or most competitive market structure among the available options is to limit vertical integration or at least the scope for carrying out regulated as well as deregulated activities.

available options is to limit vertical integration or at least the scope for carrying out regulated as well as deregulated activities (production and retailing). This is why the European Electricity Directive mandates the legal separation (ownership unbundling) of the system operators (TSOs) from the other activities and the same for their distribution system counterparts (DSOs). The transmission and distribution networks cannot be controlled by one of more companies that engage in the other activities.⁵ The reason is that if they remained bundled, the distortionary effects of the natural

² Note, by way of example, resolutions issued by the energy sector regulator, the CNC for its acronym in Spanish (CNC Resolutions 24/2/2012 and 11/6/2012), which outline how the two main vertically-integrated groups of companies use information derived from their position as distributors to reduce rival retailers' potential market.

³ "Prospects for the internal gas and electricity market," Communication from the Commission to the European Council and the European Parliament dated 10/1/2007 and "An energy policy for Europe," Communication from the Commission to the European Council and the European Parliament dated 10/1/2007. Consideration 9 of the prevailing Directive 2009/72/EC addresses "effective separation."

⁴ Note in this respect what happened in December 2013 when the CNMC annulled the twenty-fifth CESUR (last-resort suppliers) auction.

⁵ By way of example, see CNC Resolutions 8/11/2011, 20/9/2011 and 21/2/2012.

monopoly would be extended to the rest of the activities in which competition can exist,⁶ which is why sector regulations stipulate effective separation of regulated and deregulated activities and of transmission and distribution activities.⁷

The following sections look at the recent regulations in more detail and some of the implications for how the sector works in relation to the tariff deficit and the establishment of a competitive pricing system that meets the needs of end users.

Trend in the tariff deficit in the wake of Law 24/2013

The financial sustainability of the electricity system required, first and foremost, controlling the tariff deficit and then financing the debt accumulated in recent years. The tariff deficit is the result of several years in which the regulated costs recognised in the Spanish electricity system exceeded the revenue generated. The resulting deficit is a debt owed by the electricity system to the generation companies which ended up having to finance it temporarily.

The tariff deficit was largely driven by the subsidies awarded for the generation of energy from renewable sources, which were included within system costs (see Ciarreta, Espinosa, and Pizarro-Irizar, 2014; Ciarreta, Pizarro-Irizar, 2014).

The accumulated debt gets transferred to future generations of consumers via the recognition of collection rights. Royal Decree-Law 6/2010 (of April 9th, 2010) created the electricity deficit amortisation fund (FADE for its acronym in Spanish) with the goal of financing and amortising

the debt accumulated by the public system in respect of the settlements owed to the generators (maximum fund size: 26 billion euros). The deficit holders ultimately transferred their collection rights to the FADE which transformed them into fixed-income securities suitable for trading in the securities markets (securitisation), see De los Llanos (2013) for a more detailed study of the incorporation, workings and performance of the FADE.

One of the key objectives laid down in the Electricity Sector Act was to put an end to the tariff deficit. The Act's recitals state that "one of the main reasons for the reforms was the accumulation during the past decade of imbalances every year between the electricity system's revenue and costs, giving rise to the apparition of a structural deficit. The roots of the imbalances lie with the excessive growth in certain cost items due to energy policy decisions made without guaranteeing corresponding revenue for the system. All of which aggravated by a lack of growth in demand for electricity, due mainly to the economic crisis. Although access tolls increased by 22% between 2004 and 2012, putting electricity prices in Spain well above the European Union average, this was insufficient to cover system costs." The financial sustainability of the system entails ensuring that it is financed for the most part by the grid access tolls and other charges and only exceptionally from state budget allocations. Corrective mechanisms - somewhat automatic – were introduced to offset the potential generation of temporary mismatches.

Passage of the Electricity Sector Act largely reduced the scope for earmarking public financing

⁶ On the economic consequences of vertical integration, see Zurimendi, *Las restricciones verticales a la libre competencia* [Vertical restrictions on free competition], Madrid (2006), pages 67 to 103, and earlier references. And more concretely, López Milla, *La integración vertical de los negocios de gas y electricidad: posibles efectos sobre la competencia en los mercados afectados* [Vertical integration in the gas and power businesses: potential effects on competition in the affected markets], *Tendencias y aspectos administrativos*, no. 364, pages 129 and 130.

⁷ So aims the European Union: "Prospects for the internal gas and electricity market," Communication from the Commission to the European Council and the European Parliament dated 10/1/2007, and "An energy policy for Europe", Communication from the Commission to the European Council and the European Parliament dated 10/1/2007. Consideration 9 of the prevailing Directive 2009/72/EC addresses "effective separation."

SEFO - Spanish Economic and Financial Outlook

to the deficit while limiting the mismatches triggered by revenue shortfalls in a given year to 2% of estimated revenue for that year and the debt accumulated to finance prior-year mismatches to 5% of estimated revenue for that year. Note that any mismatches that do arise (within the above-mentioned thresholds) between costs and revenue will be corrected by means of automatic revisions of tolls and charges and any amounts not offset in this manner will be financed by all the settlement system parties in proportion to each one's collection rights. This means that any deficit generated in the future will no longer have to be borne exclusively by the five major players, as was the case until 2013. In addition, the possibility of selling these tariff deficit collection rights to the FADE was eliminated from 2013.

In its definitive settlements for 2014 and 2015, the CNMC (Spain's anti-trust authority and the energy sector regulator) reported surpluses of 550 million euros and 251 million euros, respectively, thereby breaking the trend of prior years' deficits. However, at December 31st, 2015, the electricity system's debt still amounted to 25.0 billion euros, down

7.01% from the year-end 2014 balance (26.95 billion), and in 2015, the total annual sum payable

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in respect of securitised tariff deficit collection rights amounted to 2.89 billion euros; the annual payment due in respect of 2016 based on year-end 2015 information is estimated at 2.87 billion euros.

Exhibit 1 summarises the trend in the tariff deficit between 2000 and 2015. It is worth highlighting its persistence and absolute size until the legislative reforms were pushed through, evidencing how it jeopardised the financial stability of the electricity system as a whole by increasing the system's debt burden.

Exhibit 1

Tariff deficit as per definitive settlements, 2000-2015



Source: Authors' elaboration using CNMC data.

The increase in revenue and reduction in system costs in the wake of the reforms are accountable for this trend. Relative to 2013, demand fell slightly in both 2014 and 2015 (-0.2%) despite renewed economic growth (+1.4%). In parallel, the average daily market price fell (-4.8%). As a result, the improvement was driven primarily by the cost side of the equation: costs have fallen considerably, particularly capacity payments and renewable energy subsidies. Generation from wind power and combined heat and power (CHP) plants fell by 6.8% and 20.1% year-on-year, respectively, in 2014, unlocking considerable savings in subsidies.

In 2015, demand firmed by 1.9% year-on-year, in line with the broader economic recovery (+2%). In tandem, demand growth pushed the average daily market price higher (+19.4%), sparking clear-cut recovery in electricity system revenue. As for the generation mix, power generation from coal-fired stations rose sharply that year (+25%), as wind power (-5%) and CHP generation (-12.62%) fell, translating into significant savings in subsidies.

In short, the cost savings achieved in 2014 and 2015 are attributable to a reduction in subsidies but also to a reduced share in the generation mix of renewable energies. Accordingly, although the effect of the Act on the tariff deficit has been undoubtedly beneficial, the longer-term impact will be a reduced contribution by renewable sources of energy to the overall mix.

Lastly, it is worth noting that the use intended in the Act for revenue surpluses, namely repayment of the electricity system's debt, which stood at

The use intended in the Act for revenue surpluses, namely repayment of the electricity system's debt, has yet to be implemented.

25.06 billion euros, has yet to be implemented (CNMC, Report on the proposed ministerial order establishing electric energy access tolls for 2016).

The new electricity pricing regime and competition among retailers. Royal Decree 216/2014

The new electricity pricing regime

On December 20th, 2013, the Secretary of State for Energy (under the Ministry of Industry, Tourism and Energy) proceeded to annul the outcome of the twenty-fifth CESUR auction (auction of electricity for consumption during peak and offpeak hours) convened on November 20th, 2013, which meant that the result of this auction was not to be included in determining the estimated cost of the wholesale contracts. The reason for cancelling the results was *evident manipulation* on the part of the participants in an attempt to boost electricity prices (abuse of dominant position).

The so-called CESUR auctions had been running since 2009, defining each quarter close to 40% of the end price used to determine the electricity bills of consumers. The auction system has since been replaced by a new system articulated around daily consumption and the electricity price on the wholesale market. Royal Decree 216/2014 (of March 28th, 2014) stipulated the precise methodology for calculating the so-called *Voluntary Price for Small Consumers*.

Article 17 of the Act defines the Voluntary Price for Small Consumers as the maximum price that the 'benchmark retailers' (retailers that sell electricity at the various regulated tariffs) can charge consumers signed up for this regime. Unless expressly stated otherwise by the consumer, this voluntary price is the default contracting formula with the benchmark retailers. The Act also defines the 'vulnerable consumer' concept, related to certain social, consumption and purchasing power characteristics, stipulating the adoption of the opportune measures for guaranteeing adequate protection of these consumers. Specifically, article 45 and Transitional Provision Ten of the Act define who these consumers are and stipulate their entitlement to a rate that is lower than the Voluntary Price for Small Consumers. This reduced price, coined the 'social voucher', is calculated by discounting 25% from all the elements comprising the Voluntary Price. As for how it is financed, article 45 of the Act states that the cost of the social voucher shall be borne by the parent companies of the various groups or, as warranted, the companies that engage simultaneously in electric power generation, distribution and retailing activities.

Elsewhere, Royal Decree 216/2014, regulates the legal framework governing the benchmark retailers and establishes the rate calculation methodology and the associated contracting regime. This system took effect on April 1st, 2014. Article 10 of Royal Decree 216/2014 stipulates that the average hourly price (P_h) shall be calculated as the average (weighted by quantities) of the average daily price, P_h^D , and the outcome of the various intraday market sessions, P_h^i :

$$P_{h} = \frac{P_{h}^{D}Q_{h}^{D} + \sum_{i \in I}P_{h}^{i}Q_{h}^{i}}{Q_{h}^{D} + \sum_{i \in I}Q_{h}^{i}}$$
[i]

The total acquisition cost during the billing period shall be the sum of the following concepts: (i) acquisition cost in the daily market; (ii) the cost of adjustment services (the cost of overcoming technical restrictions) and capacity payments; and (iii) the access tolls set by the authorities. Accordingly, the total acquisition cost per megawatt hour (MWh) during a given billing period ($_p$) is the weighted average of the average hourly price, $P_{h'}$, the cost of adjustment services per MWh, $SA_{p,h'}$ and the loss coefficients, $LOSS_{p,h}$:

$$AC_{p} = \frac{\sum_{h=l}^{H} \left(\left(P_{h} + SA_{p,h} \right) \left(l + LOSS_{p,h} \right) \right) Q_{p,h}}{\sum_{h=l}^{H} Q_{p,h}}$$
[ii]

H being the number of hours during the billing period.

Prior to effectiveness of Royal Decree 216/2014, the CNMC issued a report dated February 25th, 2014 (CNMC, 2014) on the decree, indicating some of the advantages and disadvantages of the new system. The main advantage identified was the fact that it transmits to end consumers a price signal (hourly cost of consumption), helping them become more energy efficient by planning and scheduling their consumption over the course of the day. It also allows the development of new and more efficient demand management mechanisms by the retailers. Among the stated disadvantages, the fact that although prices are known the day before, they are not readily accessible.⁸ Secondly, consumer price variability is higher as a result of variability in the hourly pool price.

Exhibit 2 depicts the trend in the average monthly Voluntary Price built in accordance with (i) and the trend in the daily market price (PO) in 2014 and 2015.



Source: Authors' elaboration using OMIE data.

Exhibit 2 yields three main conclusions: (1) as expected, the two price variables are closely correlated; (2) the Voluntary Price (PVPC) is always

⁸ Against this backdrop, the market operator, OMIE, publishes hourly daily and intraday market prices on its website. And the TSO, REE, publishes the hourly energy price curve for consumers taking advantage of the Voluntary Price for Small Consumers on its website.

higher than the daily market price (P0), by €1/MWh on average; and (3) after a sharp spike of 101% between April (when the new system became effective) and June 2014, prices have been more stable.

Competition in the electricity retail segment

One of the ways of measuring the level of competition in the electricity market is the elasticity of demand to changes in prices. The deployment of smart meters and the new hourly pricing system are expected to spark more intense rivalry among the retailers which can now articulate price regimes around end users' hourly usage profiles. Consumer sensitivity to the prices offered by the various retailers should imply switching between one price proposition and another. In its Oversight of Retailer Switches report, the CNMC discloses a quarterly supplier switching rate, an indicator of potential relevance as a measure of the level of competition among retailers in the retail market. In 4Q15, the supplier switching rate was 2.8%, i.e., 2.8% of users applied to switch, a notable figure considering it refers to just one quarter.9 If these applications to switch retailer were indicative of demand price elasticity and evidence that the retailers are rolling out lower price packages in order to win new customers, these figures would be encouraging in terms of assessing the level of competition. However, according to the regulator, they are not accompanied by significant changes in the prices on offer for basic electricity services, suggesting that the high switching rates may be associated with a high level of customer dissatisfaction with these services, as suggested by the Market Consumer Scoreboard figures.

As for the cost of switching, in addition to the costs associated with the process and paperwork, it is important to factor in the time taken to execute the switch. According to the regulator's figures, electricity supplier switch lag times averaged 13.1 days in 2015. The number of switch requests

submitted by the aspiring retailers and received by the distributors, which are tasked with approving the applications, was 913,067. The retailers submitting the highest numbers of switch requests were: Endesa Energía (271,102 applications submitted to the distributors), Iberdrola Clientes (267,324) and Gas Natural Servicios (136,714). The distributors can reject a switch on several grounds. The rejection rate was 8.4% in 4Q15; the distributor rejection rate was 8.7% when the candidate retailer did not belong to the same vertically-integrated group of companies, 8% when it did belong to the same group and 9.3% in the case of independent retailers.

Elsewhere, the number of distributors is high (> 300), as is the number of retailers (> 250), potentially indicating a high level of market competition. However, the market shares commanded by those belonging to a vertically-integrated group are very high (Table 1).

Although the market share of the electricity acquisition units belonging to the major verticallyintegrated companies has been declining gradually, these groups still commanded 77% of

Although the market share of the electricity acquisition units belonging to the major vertically-integrated firms has been declining gradually, these groups still commanded 77% of the market in 2015.

the market in 2015. In addition to the number of competitors and their market share, which provide us with a static snapshot at a given moment of time, it is important to look at how easy or difficult it is to enter or exit the market. An indicator commonly used to measure the level of competition resulting from the lack of market entry and exit barriers looks at changes in the

⁹ The regulator's reports on power and gas supplier switches date back to the fourth quarter of 2014 and are available at :

https://www.cnmc.es/es-es/energ%C3%ADa/cambiodecomercializador/informessupervisi%C3%B3ncambioscomercializador.aspx

	ENDESA	IBERDROLA	GAS NATURAL +UNION FENOSA	EDP HC	Total
2008	37.93	29.73	17.80	6.60	92.06
2009	37.85	27.64	15.88	6.27	87.64
2010	36.64	26.73	15.60	6.36	85.33
2011	36.92	27.19	14.83	6.26	85.20
2012	35.97	26.45	14.64	5.62	82.68
2013	34.56	24.81	14.08	5.92	79.37
2014	34.34	22.86	14.58	6.55	78.33
2015	33.35	22.89	14.58	6.41	77.23

Table 1 Market shares of the main electricity acquisition units

Source: Authors' elaboration using OMIE data (2015).

companies' market shares over time; it is called the market share *Instability Index:*

$$I_{t} = \frac{1}{2} \sum_{i=1}^{n} \left| s_{i,t} - s_{i,t-1} \right|$$

where $s_{i,t}$ represents the market share of company *i* during period *t*. Stability is at its highest level when the index reading is zero. Building $s_{i,t}$ using the market shares of each company (considering all the units belonging to a the same corporate group), the results for 2009 to 2015 are summarised in Table 2.

As shown in Table 2, the I_t reading is steady at levels that are fairly close to zero, indicating that despite high switch rates among retailers, detailed above, market shares are very stable. This suggests that the smaller retailers are encountering difficulties in picking up market share. These difficulties may be associated with the brand image of the vertically-integrated groups as well as a differential treatment by the distributors depending on whether or not aspiring retailers belong to their corporate group.

Table 2

Electricity retailing in Spain. Instability Index

Year t	Instability Index I _t
2009	0.041
2010	0.052
2011	0.021
2012	0.061
2013	0.101
2014	0.049
2015	0.066

Source: Authors' elaboration using CNMC data.

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— Ministerial Order IET/1045/2014, of June 16, 2014, enacting the standard facility remuneration parameters applicable to certain electricity-producing facilities that use co-generation, renewable energy sources or waste.

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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)

Bank of Spain Circular determining the content and format of the *SME*-*Financial Information* document and specifying the risk classification methodology provided for in Law 5/2015 (Circular 6/2016, published in the Official State Gazette (BOE) of July 11th)

Under Law 5/2015, either at the customer's request or when a credit institution decides to cancel or reduce the flow of financing to SMEs and self-employed individuals (which requires three months' prior notice), it must deliver a document to them called *SME-Financial Information* which will include detailed information on their financial situation and payment record.

The purpose of this Circular is (i) to specify the content and format of the document called *SME-Financial Information*, and the template/ model for transferring this information; and (ii) to develop the methodology and the template/model for the preparation of a standardised report on **risk quality assessment**, which will also form part of the *SME-Financial Information* document.

The **main aspects** covered in the Circular are summarised as follows:

In general, the Circular will be applicable to:
(i) credit institutions formed in Spain, (ii) activities

carried out in Spain by credit institutions formed in other countries; and (iii) credit financial institutions formed in Spain.

- The minimum content of the SME-Financial Information document will be divided into the following sections and will be adapted to the formats and notes specified in the annexes of the Circular: (i) statements to the Bank of Spain Central Credit Register, (ii) data reported by the institution to companies providing information services on capital adequacy and credit, (iii) borrower's credit history (last five years), (iv) extract of transactions made over the last year in the borrower's financing flow contracts; and (v) classification of borrower's risk.
- Risk will be classified into the following categories depending on the borrower's capacity to meet its financial obligations: low, medium-low, medium-high, high risk or unavailable. To this end, the institutions will analyse the borrower's financial situation and a series of qualitative and behavioural variables, taking into account the criteria set out in the Circular.
- In addition, the institution will provide the borrower, along with the borrower's risk classification, with information on its relative position in the sector in which it carries out its activities for the most recent financial year for which information is available.

The institutions **must retain for six years** (i) the documentation justifying the data used to prepare the *SME-Financial Information* document; and (ii) the documentation accrediting receipt by the borrower of the above-mentioned document, or that this has been made available to it.

The transitional provision of the Circular provides that until five years of declarations of data to the Bank of Spain Central Credit Register with the content and format established in Circular 1/2013 of May 24th are available, the *SME*-*Financial Information* document will include the declarations of data beginning from the data corresponding to June 30th, 2015, inclusive, with the content and format established in Annex 3 of Circular 1/2013.

Draft Bank of Spain Circular establishing the accounting regime that banking foundations must apply and amending the Accounting Circular and the Circular on the Central Credit Register

The draft Circular establishes the financial reporting rules and models of the banking foundations governed by Law 26/2013 and specifies the functions allocated to the Bank of Spain with respect to banking foundations within the framework of its powers as the authority responsible for supervising the investee credit institution. The regulation also adapts the accounting standards that are applicable because of their foundation status to the specific characteristics of the obligations involved due to their participation in credit institutions.

The draft Circular specifies the accounting regime to be applied by banking foundations in their **individual and consolidated financial statements** and sets out the additional information that must be included in the notes thereto. It provides that the regime for individual financial statements will be that established in Royal Decree 1491/2011 in general, except for the specific items indicated in this draft, and on a supplementary basis the National Chart of Accounts (Royal Decree 1514/2007). Consolidated financial statements will be governed by Royal Decree 1159/2010, with the exceptions provided for in this draft Circular.

With regard to the institutions that have to set up a **reserve fund**, they will have to identify in their internal accounting the composition and materialisation of said reserve fund.

In addition, the content of the **notes** to both individual and consolidated financial statements is specified. The submission of reserved individual financial statements and public accounts to the Bank of Spain is also detailed.

The draft Circular also makes amendments to:

- The Accounting Circular (Bank of Spain Circular 4/2004) to specify the content of certain rules and financial statements, and to simplify the reporting obligations of credit institutions; and
- The Circular on the Central Credit Register (Bank of Spain Circular 1/2013) to update the rules applicable to the situation of holders of risk, to improve information on restructured and refinanced transactions and to define certain concepts.

94

SEFO - Spanish Economic and Financial Outlook

Spanish economic forecasts panel: September 2016¹

Funcas Economic Trends and Statistics Department

The growth forecast for 2016 increases to 3.1%, up from the last Panel forecast of 2.9%

The Spanish economy registered growth of 0.8% in the second quarter of the year, greater than the previous Panel forecast. Domestic demand eased on the back of the drop in public consumption and private consumption also slowed. The loss of momentum in domestic demand was mitigated by a higher contribution to growth by foreign trade, driven by very significant growth in exports - goods and services alike, particularly those not related to tourism.

As a result of the stronger than forecast growth in exports, all of the Panel participants have revised their growth forecasts upwards, so that the average forecast for GDP growth in 2016 currently stands at 3.1%, up from the prior Panel estimate of 2.9%. This puts the consensus Panel forecast above the forecasts of all the public and international organisations. However, the revised numbers mask a shift in the composition of growth: forecast growth in domestic demand has been shaved by 0.2 percentage points to 3.0%, so that it is now expected to make a smaller contribution to GDP growth, while the forecast contribution by foreign demand has been increased to +0.2 percentage points.

The forecast for 2017: Unchanged at 2.3%

The consensus forecast for GDP growth in 2017 remains unchanged at 2.3%, implying a more pronounced slowdown than previously anticipated. The slowdown is attributable above all to domestic demand and, to a lesser extent, a reduced contribution by foreign trade compared to this year, albeit remaining in positive territory (+0.1 percentage points).

In quarter-on-quarter terms, growth is expected to range between 0.5% and 0.6% in the second half of this year and 2017.

Inflation edging its way out of negative territory

The inflation rate firmed to -0.1% in August, compared to a low of -1.1% last April. This increase is attributable to a slower pace of decline in energy prices. Core inflation, meanwhile, has been hovering at around 0.7% since April, below the readings observed during the first few months of the year.

The forecast for headline inflation for all of 2016 has been reduced by 0.1 percentage points to

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

-0.3%, with inflation in December forecast at 0.7% year-on-year (Table 3). For 2017, the Panel is forecasting an average headline rate of 1.2%, with inflation ending the year at 1.3% year-on-year. The forecasts for core inflation stand at 0.8% for this year and 0.9% for 2017.

Healthy job readings

According to the Quarterly National Accounts, the pace of job creation slowed in the second quarter. Although the rate of growth in social security affiliates, adjusted for seasonality, was somewhat slower month-on-month in July and August than in previous months, it remains relatively strong.

The forecast for job creation in 2016 is now 2.8% – up from the last Panel forecast of 2.6% – and the forecast for 2017 has been increased by 0.1 percentage points to 2.1%. Using the consensus forecasts for growth in GDP, job creation and wage compensation yields implied forecasts for growth in labour productivity and unit labour costs: for productivity, the numbers point to growth of around 0.3% in 2016 and 0.2% in 2017, respectively, and for ULC, 0.4% and 0.9% in 2016 and 2017, respectively.

Current account surplus set to rise in 2016

The current account surplus to June stood at 6.3 billion euros, up from 1 billion euros for the same period in 2015. The improvement has been driven by a strong trade surplus in goods and services coupled with a narrower income deficit.

The current consensus forecast is for a surplus of 1.8% of GDP in 2016 as a whole and a surplus of 1.6% in 2017, in both cases up 10 basis points from the last Panel forecasts.

On track for delivery of the public deficit target this year

In the first five months of the year, the deficit at all levels of government except for the local corporations stood at 24.6 billion euros, up 1.6 billion euros year-on-year. The deterioration is attributable to higher deficits at the central government level, resulting from a drop in personal income tax and, more particularly, corporate income tax receipts, and the social security regime. The regional governments have reined in their deficit by 1.3 billion euros thanks to growth in revenue from the regional financing system.

Panellists have revised their forecasts for the overall deficit in 2016 and 2017 significantly higher to 4.5% and 3.6% of GDP, respectively. However, because the deficit targets have been similarly revised upwards to 4.6% and 3.1%, it looks as if the target will be met this year. The same cannot be said of the 2017 target.

No major changes in the outlook for global growth

Financial markets have stabilised in the aftermath of the turbulence caused by Brexit at the end of June and the outlook for the global economy is largely unchanged since the last Panel was published. Recent economic indicators in the US point to a slowdown in growth and expectations are now for the Federal Reserve to push back its next rate hike. The European economy continues to grow slowly (+0.3% in the second quarter), albeit in line with expectations. Nor has there been much of a shift in the outlook for the emerging economies.

When asked for their view on the international context, including the EU and the rest of the world, most panellists see the situation as neutral and expect it to remain that way for the coming months.

Low long-term rates

Short-term rates (3-month Euribor) have fallen slightly in the last two months from -0.28% to -0.30%. Panellists continue to believe that rates are and will remain low over the coming months in relation to the state of the Spanish economy. Long-term rates (10-year Spanish bond yields) have also fallen in the last couple of months, from 1.15% to around 1% in recent weeks, driven by a simultaneous reduction in the country risk premium. Most panellists continue to view this level as very low and expect long-term rates to remain stable at current levels.

The euro weakens

In August, the euro made up some of the ground lost in the wake of Brexit, at around 1.115 dollars in the first few days of September. Most panellists are expecting exchange rates to remain stable in the coming months.

Exhibit 1

Change in forecasts (Consensus values) Percentage annual change



Source: Funcas Panel of forecasts.

Fiscal policy remains expansionary

The view is that fiscal policy is expansionary. Most panellists believe that it should be shifted to neutral or even restrictive. As for monetary policy, there is virtual consensus that it is expansive and that this is as it should be.

97

Table 1

Economic Forecasts for Spain – September 2016 Average year-on-year change, as a percentage, unless otherwise stated

	G	DP	Hous consu	ehold mption	Pub consur	olic nption	Gros ca form	s fixed pital nation	GFCF n nery and goo	nachi- capital ds	GF Consti	CF ruction	Dom dem	estic and
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Analistas Financieros Internacionales (AFI)	3.2	2.3	3.5	2.5	1.2	0.9	4.1	3.7	7.4	5.6	2.7	3.1	3.0	2.2
Axesor	3.2	2.6	3.3	2.1	0.3	-0.4	4.2	5.2	7.4	5.2	2.8	6.4	3.0	2.3
Banco Bilbao Vizcaya Argentaria (BBVA)	3.1	2.3	3.3	1.9	0.8	1.8	3.9	3.5	7.0	3.9	2.3	3.0	3.0	2.2
Bankia	3.2	2.5	3.4	2.5	1.5	1.2	4.4	4.6	8.1	7.6	2.7	3.3	3.3	2.7
CaixaBank	3.1	2.4	3.4	2.4	0.1	0.1	3.9	3.2	7.0	3.2	2.3	3.4	3.0	2.1
Cemex	3.1	2.4	3.4	2.6	1.6	0.9	4.0	4.3	7.0	4.8	2.1	4.0	3.2	2.6
Centro de Estudios Economía de Madrid (CEEM-URJC)	3.0	2.3	3.2	2.5	1.9	1.3	4.5	3.7	5.9	4.2	3.4	3.5	3.1	2.4
Centro de Predicción Económica (CEPREDE- UAM)	2.9	1.9	3.1	1.6	0.9	1.2	3.9	3.9	6.8	3.5	2.4	4.0	2.9	2.0
CEOE	3.1	2.3	3.4	2.4	0.9	0.8	4.2	3.1	7.5	4.9	2.5	2.2	3.1	2.1
Funcas	3.1	2.3	3.3	2.2	0.6	0.6	4.2	4.8	7.7	7.1	2.4	3.7	3.1	2.4
Instituto Complutense de Análisis Económico (ICAE- UCM)	3.0	2.4	3.2	2.5	1.0	1.2	4.9	4.0	6.7	5.0	2.8	3.0	3.0	2.5
Instituto de Estudios Económicos (IEE)	3.1	2.3	3.4	2.9	-0.6	-0.7	4.5	5.2	7.9	8.3	2.4	3.3	2.5	2.4
Instituto Flores de Lemus (IFL-UC3M)	3.1	2.1	3.4	3.1	1.0	-1.5	3.9	3.3	7.4	6.1	2.1	1.8	3.0	2.1
Intermoney	3.0	2.0	3.2	2.1	1.2	1.2	3.7	2.5	6.8	3.4	2.0	1.6	3.0	2.0
Repsol	3.2	2.6	3.4	2.6	0.5	1.0	4.2	5.0	7.6	6.6	2.5	4.2	3.1	2.8
Santander	3.1	2.2	3.3	2.4	0.5	0.7	4.1	3.9	7.3	3.1	2.4	4.8	3.0	2.4
Solchaga Recio & asociados	3.0	2.2	3.4	2.4	1.0	0.7	4.4	3.7	7.6	5.2	3.1	3.6	3.1	2.3
CONSENSUS (AVERAGE)	3.1	2.3	3.3	2.4	0.8	0.6	4.2	4.0	7.2	5.2	2.5	3.5	3.0	2.3
Maximum	3.2	2.6	3.5	3.1	1.9	1.8	4.9	5.2	8.1	8.3	3.4	6.4	3.3	2.8
Minimum	2.9	1.9	3.1	1.6	-0.6	-1.5	3.7	2.5	5.9	3.1	2.0	1.6	2.5	2.0
Change on 2 months earlier ¹	0.2	0.0	0.0	0.0	-1.0	-0.4	0.2	0.1	0.6	0.4	-0.2	-0.1	-0.2	-0.1
- Rise ²	17	7	9	6	1	3	8	6	14	8	6	8	3	4
- Drop ²	0	3	5	7	15	11	5	9	2	6	9	9	10	10
Change on 6 months earlier ¹	0.4	0.0	0.4	0.0	-0.5	-0.5	-0.6	-0.2	0.6	0.0	-1.4	-0.3	0.1	-0.2
Memorandum ítems:														
Government (April 2016)	2.7	2.4	3.2	2.6	1.0	0.9	5.6	4.6	8.2	5.4	4.5	4.7	3.2	2.7
Bank of Spain (April 2016)	2.7	2.3	2.9	2.0	1.0	0.5	5.0	5.4	8.3 ⁽³⁾	7.3 ⁽³⁾	3.5	4.9		
EC (May 2016)	2.6	2.5	3.0	2.3	1.0	1.0	4.7	5.0	7.7 ⁽³⁾	6.5 ⁽³⁾	3.5	5.1	3.0	2.6
IMF (April 2016)	2.6	2.1												
OECD (June 2016)	2.8	2.3	3.1	2.1	1.5	1.2	4.6	3.8					3.1	2.3

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

² Number of panelists revising their forecast upwards (or downwards) since two months earlier.

³ Investment in capital goods.

Table 1 (Continued)

Economic Forecasts for Spain – September 2016

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

	Exp of go & se ce	orts oods ervi- es	lmpo goo serv	rts of ds & vices	C (anı av	PI nual v.)	Cord (an a	e CPI nual v.)	Lab cos	Labour costs ³		Labour costs ³		Labour Jobs ⁴ costs ³		Jobs⁴		Unempl. (% labour force)		C/A bal. of payments (% of GDP)⁵		Gen. gov. bal. (% of GDP) ⁷	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017					
Analistas Financieros Internacionales (AFI)	5.4	4.2	5.5	4.4	-0.4	1.4	0.8	1.1	0.9	1.3	2.9	2.1	19.7	17.9	1.9	1.8	-4.7	-3.5					
Axesor	5.3	4.1	4.8	3.2	-0.2	1.5	1.0	1.4	0.4	0.8	2.6	2.0	20.1	18.4	1.9	1.5	-4.5	-3.8					
Banco Bilbao Vizcaya Argentaria (BBVA)	5.6	4.5	5.3	4.5	-0.3	1.7	0.8	1.1	1.0	1.5	2.9	1.9	19.6	18.5	1.5	1.9	-4.4	-3.6					
Bankia	5.5	4.7	6.1	5.6	-0.3	1.4	0.8	1.0	0.7	1.1	2.8	2.2	19.8	18.2	2.0	1.8							
CaixaBank	5.7	5.2	5.4	4.6	-0.2	1.8	0.9	1.1	0.5	0.9	2.7	2.0	19.8	18.4	1.8	1.6	-4.6	-3.8					
Cemex	5.1	4.5	5.8	5.4	-0.4	1.3	0.7	0.7			3.0	2.5	19.5	18.5	2.0	1.5	-4.6	-3.1					
Centro de Estudios Economía de Madrid (CEEM-URJC)	4.7	4.2	5.3	4.9	-0.3	1.3	0.9	0.8			2.3	1.8	20.0	18.5	1.6	1.4	-4.6	-3.5					
Centro de Predicción Económica (CEPREDE- UAM)	5.5	4.7	5.6	5.2	-0.5	1.1	0.9	1.0	0.8	1.4	2.5	1.2	20.1	19.6	1.5	0.7	-4.1	-3.6					
CEOE	5.9	5.7	6.1	5.6	-0.2	1.3	0.7	0.7	0.4	0.5	2.9	2.2	19.6	17.8	2.0	1.8	-4.6	-3.6					
Funcas	5.1	4.2	5.8	4.9	-0.3	1.3	0.8	0.9	0.6	1.1	2.7	1.9	20.0	18.5	2.0	1.9	-4.6	-3.6					
Instituto Complutense de Análisis Económico (ICAE-UCM)	5.6	5.5	5.7	5.5	-0.2	1.3	0.9	1.0			2.7	2.1	19.8	18.5	1.7	1.5	-4.3	-3.0					
Instituto de Estudios Económicos (IEE)	7.4	4.9	6.5	5.9	-0.5	0.6	0.8	0.9	0.7	1.1	2.8	2.0	19.7	17.9	1.7	1.7	-4.6	-4.0					
Instituto Flores de Lemus (IFL-UC3M)	5.0	4.8	5.2	5.1	-0.3	1.2	0.8	0.5			2.8	3.2	19.8	18.1									
Intermoney	5.1	3.8	5.1	4.0	-0.4	1.2	0.8	0.9			2.9	1.8	19.7	18.3	1.6	1.5	-4.5	-4.0					
Repsol	7.6	6.6	7.8	7.6	-0.3	1.2	0.8	0.9	0.8	1.0	3.2	2.7	19.8	18.0	1.8	1.7	-4.6	-3.1					
Santander	5.5	3.8	5.4	4.7	-0.6	0.7			1.0	1.5	2.5	1.7	19.7	18.0	1.5	1.3	-4.6	-3.2					
Solchaga Recio & asociados	5.1	4.6	5.8	5.3	-0.5	0.8	0.8	1.1			2.8	2.3	20.0	18.1	2.0	1.8	-4.8	-4.1					
CONSENSUS (AVERAGE)	5.6	4.7	5.7	5.1	-0.3	1.2	0.8	0.9	0.7	1.1	2.8	2.1	19.8	18.3	1.8	1.6	-4.5	-3.6					
Maximum	7.6	6.6	7.8	7.6	-0.2	1.8	1.0	1.4	1.0	1.5	3.2	3.2	20.1	19.6	2.0	1.9	-4.1	-3.0					
Minimum	4.7	3.8	4.8	3.2	-0.6	0.6	0.7	0.5	0.4	0.5	2.3	1.2	19.5	17.8	1.5	0.7	-4.8	-4.1					
Change on 2 months earlier ¹	1.7	0.2	0.6	-0.2	-0.1	-0.1	-0.2	0.0	-0.1	0.0	0.2	0.1	-0.1	-0.2	0.1	0.1	-0.4	-0.4					
- Rise ²	15	10	13	7	1	5	1	3	3	2	12	7	3	1	8	9	2	4					
- Drop ²	1	5	2	9	10	6	6	4	3	4	3	2	11	11	1	1	13	9					
Change on 6 months earlier ¹	0.6	-0.1	-0.2	-0.6	-0.3	-0.1			-0.3	0.0	0.4	0.0	-0.4	-0.4	0.4	0.4	-1.0	-0.9					
Memorandum items:																							
Government (April 2016)	5.3	5.7	7.0	6.7							2.5	2.2	19.9	17.9	1.7	1.5	-4.6 (8)	-3.1 ⁽⁸⁾					
Bank of Spain (April 2016)	4.4	5.2	5.3	5.9	-0.1	1.6					2.3	1.9	20.3	18.9	1.9 ⁽⁶⁾	1.5 ⁽⁶⁾							
EC (May 2016)	4.5	5.2	5.8	5.8	-0.1	1.4			0.8	1.0	3.0	2.5	20.0	18.1	1.5	1.3	-3.9	-3.1					
IMF (Aprirl 2016)																							
OECD (June 2016)	4.8	5.0	5.5	5.2	-0.5	1.0			0.7	1.1	2.9	2.1	19.8	18.4	1.1	0.9	-3.7	-2.7					

¹ Difference in percentage points between the current month's average and that of two

months earlier (or six months earlier).

² Number of panellists revising their forecast upwards (or downwards) since two months

earlier.

³ Average earnings per full-time equivalent job.

⁴ In National Accounts terms: full-time equivalent jobs.

⁵ Current account balance, according to Bank of Spain estimates.

6 Net lending position vis-à-vis rest of world.

⁷ Excluding financial entities bail-out expenditures.

⁸ Target July 2016.

Vol. 5, N.º 5 (September 2016)

Table 2 **Quarterly Forecasts - September 2016¹**

Quarter-on-quarter change (percentage)

	16-I Q	16-II Q	16-III Q	16-IV Q	17-I Q	17-II Q	17-III Q	<u>17-IV Q</u>
GDP ²	0.8	0.8	0.6	0.5	0.5	0.6	0.6	0.6
Household consumption ²	1.0	0.7	0.6	0.5	0.6	0.6	0.6	0.5

¹ Average of forecasts by private institutions listed in Table 1.

² According to series corrected for seasonality and labour calendar.

Table 3

Vol. 5, N.º 5 (September 2016)

CPI Forecasts – September 2016¹

		Monthly o		Year-on-year change (%)				
	Sep-16	Oct-16	Nov-16	Dec-16	Dec-16	Dec-17		
100	0.0	0.5	0.4	0.2	0.7	1.3		

¹ Average of forecasts by private institutions listed in Table 1.

Table 4 Opinions – September 2016 Number of responses

		Currently	/	Trend	for next six	months
	Favourable	Neutral	Unfavourable	Improving	Unchanged	Worsening
International context: EU	2	11	4	0	13	4
International context: Non-EU	0	14	3	1	12	4
	Low ¹	Normal ¹	High ¹	Increasing	Stable	Decreasing
Short-term interest rate ²	16	1	0	1	15	1
Long-term interest rate ³	15	2	0	2	13	2
	Overvalued ⁴	Normal ⁴	Undervalued ⁴	Appreciation	Stable	Depreciation
Euro/dollar exchange rate	3	11	3	2	8	7
		Is being	l		Should be	
	Restrictive	Neutral	Expansionary	Restrictive	Neutral	Expansionary
Fiscal policy assessment ¹	1	1	15	8	7	2
Monetary policy assessment ¹	1 0 0		17	0	1	16

¹ In relation to the current state of the Spanish economy.

³ Yield on Spanish 10-year public debt. ⁴ Relative to theoretical equilibrium rate.

² Three-month Euribor.

KEY FACTS:

ECONOMIC INDICATORS Page 102

FINANCIAL SYSTEM INDICATORS Page 151

KEY FACTS: ECONOMIC INDICATORS

Table 1

National accounts: GDP and main expenditure components SWDA* (ESA 2010, Base 2010) (1)

Forecasts in blue

					Gross fixed capital formation								Net
		GDP	Private	Public			Constru	ction		Exports	Imports	Domestic	exports
		001	consumption	consumption	Total	Total	Housing	Other construction	Equipment & other products	Exporto	mpono	Demand (a)	(a)
				Chain-li	inked v	volumes	, annual	percentage	changes				
2009		-3.6	-3.6	4.1	-16.9	-16.1	-20.3	-11.4	-18.3	-11.0	-18.3	-6.4	2.8
2010		0.0	0.3	1.5	-4.9	-10.1	-11.6	-8.5	5.4	9.4	6.9	-0.5	0.5
2011		-1.0	-2.4	-0.3	-6.9	-11.7	-13.3	-10.2	0.9	7.4	-0.8	-3.1	2.1
2012		-2.6	-3.5	-4.5	-7.1	-8.3	-5.4	-10.7	-5.3	1.1	-6.2	-4.7	2.1
2013		-1.7	-3.1	-2.8	-2.5	-7.1	-7.2	-7.1	3.5	4.3	-0.3	-3.1	1.4
2014		1.4	1.2	0.0	3.5	-0.2	-1.4	0.8	7.7	5.1	6.4	1.6	-0.2
2015		3.2	3.1	2.7	6.4	5.3	2.4	7.5	7.5	5.4	7.5	3.7	-0.5
2016		3.1	3.3	0.6	4.2	2.4	3.0	2.0	6.1	5.1	5.8	3.1	-0.1
2017		2.3	2.2	0.6	4.8	3.7	4.1	3.4	6.0	4.2	4.9	2.4	-0.1
2015	1	2.7	2.5	1.5	6.1	6.2	2.9	8.8	6.0	5.8	7.6	3.1	-0.4
	II	3.2	2.9	2.5	6.3	5.2	2.6	7.3	7.5	6.0	7.4	3.4	-0.2
	III	3.4	3.5	3.0	6.7	5.2	2.1	7.6	8.2	4.5	7.2	4.1	-0.7
	IV	3.5	3.5	3.7	6.4	4.6	2.2	6.4	8.4	5.3	7.7	4.1	-0.6
2016	1	3.4	3.7	2.4	5.1	3.1	3.3	2.8	7.2	3.8	5.4	3.8	-0.4
		3.2	3.6	0.1	4.0	2.1	2.2	2.1	5.9	6.8	6.6	3.0	0.2
	111	2.9	3.1	0.1	4.0	2.2	3.0	1.6	5.8	4.7	4.8	2.8	0.1
	IV	2.6	2.8	-0.2	3.9	2.4	3.4	1.6	5.6	5.0	6.5	3.0	-0.3
2017		2.4	2.3	-0.7	4.7	3.4	3.2	3.6	6.1	5.6	6.3	2.5	-0.1
		2.1	2.2	1.2	4.6	3.5	4.4	2.7	5.7	2.4	4.4	2.6	-0.6
		2.3	2.1	1.0	4.7	3.7	4.2	3.2	5.7	4.2	4.6	2.3	0.0
	IV	2.6	2.2	0.9	5.3	4.2	4.5	3.9	6.5	4.7	4.2	2.3	0.3
0045			Chain-lin	ked volumes	s, quar	ter-on-q	uarter p	ercentage ch	nanges, at ann	ual rate	10 -	5.0	4.0
2015		3.7	3.2	8.0	6.4	5.2	0.5	8.9	7.6	4.1	10.7	5.6	-1.9
		3.9	3.2	3.0	9.5	7.7	4.2	10.4	11.4	5.8	0.3	3.9	0.0
	111	3.3	4.0	2.2	5.2	2.9	1.7	3.9	7.0	7.0	13.1	4.0	-1.4
2010	1	3.2	3.0	1.7	4.7	2.5	2.4	2.7	0.0	3.0	1.1	2.3	0.9
2016		3.1	4.0	2.0	1.U 5 1	-0.0	0.0	-5.0	2.9	-1.5	1.0	4.1	-1.0
		3.3	2.7	-0.1	5.1	3.0	-0.2	7.0	0.4	10.0	F 4	0.9	2.4
	111	2.1	2.5	2.0	0.2	3.3 2.1	3.0	2.0	7.Z E 9	-0.8	5.4 7.0	3.3	-1.2
2017	11	2.1	2.0	0.5	4.5	3.1	4.0	2.5	5.0	0.8	7.9	2.4	-0.3
2017		2.0	2.0	1.0	4.2	3.4	4.0	3.0	5.0	0.0	0.9	2.1	-0.1
		2.1	2.0	1.5	4.J	1.5	4.5	3.5 4.0	5.1	4.0	6.1	2.2	-0.1
	111	3.1	2.4	1.0	7 1	4.2 5.0	4.J	4.0	0.0	6.0	6.1	2.1	0.4
	10	Current prices	2.7	0.0	7.1	0.0	5.0	5.0	0.1	0.5	0.1	2.0	0.0
		(EUR billions)				Per	rcentage	of GDP at cu	urrent prices				
2009		1,079.0	56.1	20.5	24.3	16.2	8.1	8.1	8.2	22.7	23.8	101.2	-1.2
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		1,042.9	58.6	19.7	20.1	11.3	5.2	6.2	8.7	30.6	29.1	98.5	1.5
2013		1,031.3	58.0	19.6	19.2	10.3	4.5	5.7	9.0	32.0	28.7	96.8	2.1
2014		1,041.2	58.3	19.4	19.6	10.1	4.4	5.7	9.5	32.5	30.1	97.5	2.5
2015		1,081.2	57.6	19.3	20.4	10.4	4.5	5.9	10.0	33.1	30.7	97.5	2.5
2016		1,118.4	57.2	18.9	20.8	10.4	4.6	5.8	10.4	33.3	30.7	97.4	2.6
2017		1,155.6	57.3	18.6	21.4	10.6	4.7	5.9	10.8	34.0	31.8	97.7	2.3

*Seasonally and Working Day Adjusted.

(a) Contribution to GDP growth.

(1) Recently, the National Statistics Institute (INE in its Spanish initials) has published a revision of the annual National Accounts, but the revised figures have not been published on a quarterly basis. Therefore the figures in this table are not consistent with the new annual ones. Sources: INE (Quarterly National Accounts) and Funcas (Forecasts).

Vol. 5, N.º 5 (September 2016)



Table 2

National accounts: Gross value added by economic activity SWDA* (ESA 2010, Base 2010) (1) Forecasts in blue

							Gross value adde	d at basic prices						
									Services					
		Total	Agriculture, forestry and fishing	Manufacturing, energy and utilities	Construction	Total	Trade, transport, accommodation and food services	Information and communication	Finance and insurance	Real estate	Professional, business and support services	Public administration, education, health and social work	Arts, entertainment and other services	subsidies on products
					Chain-	linked	l volumes, ar	nual perce	ntage c	hanges	5			
2009		-3.4	-3.6	-10.0	-7.6	-1.0	-3.7	0.6	-6.1	3.4	-3.7	2.3	0.7	-5.9
2010		0.0	2.1	3.6	-14.5	1.3	1.5	3.9	-3.3	2.0	-1.4	2.4	1.4	0.1
2011		-0.6	4.4	-0.2	-12.8	0.7	-0.1	-0.2	-2.4	2.8	2.3	0.9	-0.2	-5.6
2012		-2.5	-11.0	-4.9	-14.3	-0.4	-0.6	2.2	-3.6	2.0	-1.3	-0.8	-1.4	-4.4
2013		-1.6	16.5	-5.2	-9.8	-0.6	0.1	0.7	-7.8	1.6	-1.9	-1.1	-0.7	-2.9
2014		1.4	-3.7	1.2	-2.1	1.9	3.2	4.7	-1.0	1.2	3.4	-0.4	4.4	0.8
2015		3.3	1.9	3.4	5.2	3.1	4.8	4.7	-0.9	0.8	5.8	1.7	4.2	2.8
2016		3.0	2.3	2.7	1.6	3.2	4.4	5.0	0.8	1.1	6.1	1.8	3.9	3.3
2017		2.4	1.6	2.2	2.5	2.4	3.4	2.7	0.8	1.7	5.1	0.8	2.2	2.1
2015	I.	2.7	-4.0	3.0	5.9	2.7	4.1	4.4	-2.3	1.0	6.2	0.9	4.5	2.3
	II	3.2	2.0	3.6	5.8	3.0	4.6	5.0	-0.4	0.9	6.5	1.1	3.9	2.6
	Ш	3.5	3.7	3.8	5.1	3.3	5.1	5.0	-1.1	0.7	5.7	2.2	4.0	2.7
	IV	3.5	6.2	3.4	4.0	3.4	5.3	4.6	0.2	0.8	4.9	2.4	4.5	3.6
2016	1	3.4	5.5	2.7	2.8	3.6	4.9	6.0	2.2	0.8	5.6	2.3	4.5	3.0
	II	3.4	3.5	2.6	2.2	3.6	5.2	5.2	-0.3	1.0	5.6	2.3	4.9	2.2
	Ш	2.9	1.2	2.7	1.1	3.2	4.3	4.7	1.0	1.2	6.7	1.6	3.5	2.9
	IV	2.4	-0.9	2.9	0.3	2.6	3.2	4.2	0.5	1.5	6.3	0.8	2.7	5.1
2017	1	2.2	0.5	2.5	0.9	2.3	3.1	2.6	-1.1	2.1	5.4	0.7	2.3	3.9
	Ш	1.9	2.0	1.9	2.4	1.9	2.0	2.6	1.1	1.6	4.7	0.7	1.9	3.4
	Ш	2.3	2.0	2.0	3.1	2.3	3.2	2.6	1.4	1.4	4.9	0.6	2.2	2.7
	IV	3.0	2.0	2.3	3.6	3.2	5.2	3.0	1.7	1.6	5.2	1.2	2.5	-1.4
				Chain-linke	ed volume	es, qua	arter-on-quar	ter percent	age cha	anges,	at annual ra	te		
2015	I.	3.7	-1.3	5.9	4.9	3.3	5.8	3.0	-0.6	-1.0	5.2	3.3	3.7	3.7
	II	4.1	4.1	4.8	-0.4	4.3	7.2	5.8	2.4	2.3	7.6	1.0	2.7	1.5
	III	3.5	11.4	1.8	5.5	3.5	5.7	5.2	-3.8	2.1	0.7	3.3	6.9	1.0
	IV	2.7	11.3	1.0	6.2	2.6	2.5	4.5	2.8	-0.2	6.3	2.1	4.8	8.3
2016	I	3.3	-3.8	3.0	0.2	3.8	4.4	8.4	7.7	-0.8	7.9	2.5	3.4	1.5
	II	3.9	-3.7	4.7	-2.6	4.4	8.5	2.9	-7.1	3.3	7.8	1.4	4.4	-1.9
	Ш	1.9	2.0	1.9	1.0	2.0	2.0	3.0	1.0	2.5	5.0	0.5	1.5	4.0
	IV	0.6	2.0	1.8	2.5	0.1	-1.6	2.5	1.0	1.0	4.5	-1.0	1.5	17.8
2017	I.	2.6	2.0	1.6	2.8	2.8	3.9	2.0	1.0	1.5	4.5	2.0	2.0	-3.0
	Ш	2.7	2.0	2.2	3.3	2.8	4.0	2.8	1.5	1.6	5.0	1.5	2.5	-4.0
	Ш	3.3	2.0	2.5	3.6	3.5	6.8	3.2	2.0	1.7	5.5	0.0	2.7	1.5
	IV	3.6	2.0	2.8	4.4	3.8	6.0	4.0	2.5	1.8	6.0	1.5	3.0	0.1
	Cu	rrent price	5				Percentage	of value ad	ded at	basic p	rices			
2000	(=)	10.0	10.6	70.4	22.0	4.4	E 7	0.0	7.0	10.0	4.0	7.0
2009		1,000.1	2.3	10.0	10.0	70.4	22.0	4.4	5.7	0.9	7.3	10.2	4.0	1.2
2010		909.9	2.0	17.4	0.0	71.4	22.0	4.4	4.4	10.2	7.4	10.7	4.1	9.2
2011		903.7	2.5	17.4	1.5	74.0	22.9	4.3	4.2	11.9	7.4	10.7	4.2	0.0
2012		957.1	2.5	17.2	0.3	74.0	23.0	4.4	4.3	11.0	7.4	10.0	4.2	9.0
2013		941.3	2.0	17.1	5.0 E 4	75.4	23.0	4.3	3.0	12.0	7.0	19.0	4.2	9.0
2014		948.3	2.5	17.0	5.4 E E	75.1	24.1	4.3	4.1	12.0	7.4	10.0	4.3	9.8
2015		1 016 4	2.5	16.6	5.5	75.4	24.0	4.2	3.9	11.7	7.0	10.7	4.4	10.1
2010		1,010.4	2.5	16.6	5.5	75.4	24.1	4.5	4.0	11.0	7.0	10.7	4.4	10.0
2011		1.049.1	2.0	10.0	3.5	13.4	44.4	4.0	4.4	11.4	0.0	10.0	4.4	10.1

*Seasonally and Working Day Adjusted.

(1) Recently, the National Statistics Institute (INE in its Spanish initials) has published a revision of the annual National Accounts, but the revised figures have not been published on a quarterly basis. Therefore the figures in this table are not consistent with the new annual ones. Sources: INE (Quarterly National Accounts) and Funcas (Forecasts).



Chart 2.3.- GVA, services (II) Annual percentage change









Table 3a

National accounts: Productivity and labour costs (I) (ESA 2010, Base 2010) (1)

Forecasts in blue

				Total ec	onomy			Manufacturing industry						
	c	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	, 2000 = 1	00, SWDA						
2009		124.5	117.1	106.4	144.4	135.7	101.2	100.1	82.2	121.8	152.6	125.3	99.0	
2010		124.5	114.0	109.3	145.9	133.5	99.4	100.1	78.9	126.9	155.6	122.6	97.7	
2011		123.3	110.8	111.3	147.1	132.2	98.4	98.8	75.9	130.1	159.0	122.1	95.3	
2012		120.1	105.4	113.9	146.2	128.4	95.5	93.5	70.8	132.1	161.4	122.1	95.6	
2013		118.1	101.7	116.1	148.7	128.1	94.8	92.3	67.8	136.2	163.7	120.2	94.2	
2014		119.7	102.8	116.4	147.9	127.0	94.3	94.3	67.8	139.1	166.3	119.5	93.9	
2015		123.5	105.8	116.7	148.7	127.4	94.0	97.8	69.8	140.2	166.0	118.4	92.7	
2016		127.3	108.7	117.1	149.6	127.8	94.0	101.5						
2017		130.3	110.7	117.6	151.3	128.6	93.7	103.8						
2014	Ш	120.0	103.1	116.4	148.0	127.2	94.4	94.4	68.0	138.8	166.7	120.1	94.6	
	IV	120.8	103.8	116.3	147.9	127.1	94.3	95.3	68.3	139.6	167.2	119.8	94.2	
2015	I	121.9	104.6	116.6	148.8	127.7	94.4	96.2	68.9	139.5	166.2	119.1	93.2	
	Ш	123.1	105.5	116.6	148.4	127.3	94.1	97.5	70.0	139.4	166.5	119.5	93.1	
	Ш	124.1	106.3	116.7	148.2	127.0	93.6	98.5	70.1	140.4	166.0	118.2	92.7	
	IV	125.0	106.9	116.9	149.2	127.6	94.0	99.2	70.0	141.7	165.5	116.8	91.6	
2016	Т	126.0	107.9	116.7	148.7	127.4	94.2	100.3	71.0	141.2	166.5	117.9	93.0	
	Ш	127.0	108.6	117.0	149.6	127.8	94.0	101.3	71.5	141.7	167.1	117.9	92.5	
						Annual p	ercentag	e changes						
2009		-3.6	-6.1	2.7	4.4	1.6	1.4	-10.9	-12.4	1.8	2.2	0.5	0.5	
2010		0.0	-2.7	2.7	1.1	-1.6	-1.8	0.0	-4.0	4.2	1.9	-2.1	-1.3	
2011		-1.0	-2.8	1.8	0.9	-0.9	-1.0	-1.3	-3.8	2.6	2.2	-0.4	-2.4	
2012		-2.6	-4.9	2.4	-0.6	-2.9	-3.0	-5.3	-6.8	1.5	1.5	0.0	0.3	
2013		-1.7	-3.5	1.9	1.7	-0.2	-0.8	-1.4	-4.3	3.1	1.5	-1.5	-1.4	
2014		1.4	1.1	0.3	-0.6	-0.8	-0.4	2.2	0.1	2.1	1.5	-0.6	-0.3	
2015		3.2	3.0	0.2	0.5	0.3	-0.3	3.7	2.9	0.8	-0.1	-1.0	-1.3	
2016		3.1	2.7	0.3	0.6	0.3	-0.1	3.7						
2017		2.3	1.9	0.5	1.1	0.6	-0.3	2.2						
2014	III	1.7	1.7	0.0	-0.7	-0.7	-0.5	2.2	1.5	0.7	1.3	0.6	0.5	
	IV	2.1	2.4	-0.3	-0.5	-0.2	0.1	2.6	1.8	0.7	1.7	0.9	0.8	
2015	I	2.7	2.9	-0.2	0.7	0.9	0.3	2.8	2.6	0.2	0.8	0.7	0.1	
	II	3.2	2.9	0.3	0.3	0.1	-0.5	3.8	3.2	0.6	0.1	-0.5	-0.8	
	III	3.4	3.1	0.3	0.1	-0.2	-0.8	4.3	3.1	1.1	-0.4	-1.5	-2.0	
	IV	3.5	3.0	0.5	0.9	0.4	-0.3	4.1	2.5	1.5	-1.0	-2.4	-2.7	
2016	I	3.4	3.2	0.1	-0.1	-0.2	-0.2	4.3	3.1	1.2	0.2	-1.0	-0.2	
	11	3.2	2.9	0.4	0.8	0.4	0.0	3.9	2.2	1.7	0.4	-1.3	-0.7	

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

(1) Recently, the National Statistics Institute (INE in its Spanish initials) has published a revision of the annual National Accounts, but the revised figures have not been published on a quarterly basis. Therefore the figures in this table are not consistent with the new annual ones. Sources: INE (Quarterly National Accounts) and Funcas (Forecasts).




Chart 3a.2.- Real ULC, total economy

Chart 3a.3.- Nominal ULC, manufacturing industry Index, 2000=100



Chart 3a.4.- Real ULC, manufacturing industry Index, 2000=100



Table 3b

National accounts: Productivity and labour costs (II) (ESA 2010, Base 2010) (1)

Forecasts in blue

				Const	ruction					S	ervices		
		Gross value added, 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	, 2000 = 1	00, SWDA					
2009		109.4	99.1	110.4	170.0	154.0	93.6	135.8	133.6	101.6	137.7	135.5	96.9
2010		93.5	85.2	109.7	172.1	156.9	99.2	137.5	132.0	104.2	139.1	133.4	96.7
2011		81.5	72.2	112.8	169.6	150.3	98.0	138.5	130.5	106.1	140.2	132.2	97.2
2012		69.9	58.7	119.1	170.6	143.2	97.9	138.0	126.1	109.4	138.6	126.7	95.6
2013		63.0	50.4	124.9	172.1	137.8	97.9	137.1	122.8	111.7	141.1	126.4	93.9
2014		61.7	48.9	126.3	172.5	136.6	97.1	139.7	124.8	112.0	139.9	124.9	92.7
2015		64.9	51.8	125.3	171.6	137.0	96.8	144.1	128.4	112.2	140.9	125.6	91.8
2016		66.0	52.6	125.4				148.7	132.3	112.5			
2017		67.6	53.9	125.5				152.4	134.9	112.9			
2014	Ш	61.9	49.3	125.7	172.4	137.2	98.3	140.2	125.2	112.0	139.9	125.0	92.3
	IV	63.5	50.6	125.6	172.6	137.4	98.3	141.0	126.2	111.7	139.6	124.9	92.8
2015	1	64.3	51.4	125.1	171.4	137.0	95.6	142.1	126.9	112.0	141.1	126.0	91.8
	Ш	64.2	52.0	123.6	171.3	138.6	97.7	143.6	127.9	112.3	140.6	125.2	92.3
	Ш	65.1	51.8	125.7	173.2	137.8	97.9	144.9	129.0	112.3	140.4	124.9	91.8
	IV	66.1	52.2	126.7	170.4	134.5	96.0	145.8	129.9	112.2	141.8	126.3	91.5
2016	1	66.1	51.9	127.4	168.2	132.0	92.3	147.2	131.3	112.1	141.3	126.0	91.9
	П	65.7	52.5	125.0	168.2	134.5	94.2	148.8	132.1	112.6	142.1	126.2	90.8
						Annual p	ercentage	e changes					
2009		-7.6	-21.7	18.0	9.8	-6.9	-8.6	-1.0	-2.4	1.5	4.0	2.5	0.7
2010		-14.5	-14.0	-0.6	1.3	1.9	6.0	1.3	-1.2	2.5	1.0	-1.5	-0.2
2011		-12.8	-15.3	2.9	-1.4	-4.2	-1.2	0.7	-1.1	1.8	0.8	-0.9	0.5
2012		-14.3	-18.8	5.5	0.6	-4.7	-0.1	-0.4	-3.4	3.1	-1.2	-4.2	-1.6
2013		-9.8	-14.0	4.9	0.9	-3.8	0.0	-0.6	-2.7	2.1	1.9	-0.2	-1.7
2014		-2.1	-3.1	1.1	0.2	-0.8	-0.8	1.9	1.7	0.2	-0.9	-1.1	-1.3
2015		5.2	6.0	-0.8	-0.5	0.3	-0.3	3.1	2.9	0.2	0.8	0.5	-0.9
2016		1.6	1.5	0.1				3.2	3.0	0.2			
2017		2.5	2.4	0.1				2.4	2.0	0.4			
2014	Ш	0.2	-0.2	0.4	0.7	0.3	0.1	2.1	2.1	0.0	-1.1	-1.0	-1.2
	IV	3.1	3.7	-0.5	-0.1	0.4	0.1	2.5	2.8	-0.3	-1.0	-0.7	-1.2
2015	I	5.9	8.1	-2.1	-0.7	1.4	0.8	2.7	3.0	-0.3	0.6	0.9	-1.1
	П	5.8	7.9	-2.0	-0.6	1.4	0.6	3.0	2.6	0.4	0.5	0.1	-0.6
	Ш	5.1	5.1	0.0	0.4	0.4	-0.3	3.3	3.0	0.3	0.3	0.0	-0.5
	IV	4.0	3.1	0.8	-1.2	-2.1	-2.3	3.4	3.0	0.4	1.6	1.1	-1.5
2016	1	2.8	0.9	1.8	-1.9	-3.7	-3.5	3.6	3.4	0.1	0.2	0.0	0.1
	Ш	2.2	1.1	1.2	-1.8	-2.9	-3.5	3.6	3.3	0.3	1.1	0.8	-1.7

(a) Nominal ULC deflated by GVA deflator.

(1) Recently, the National Statistics Institute (INE in its Spanish initials) has published a revision of the annual National Accounts, but the revised figures have not been published on a quarterly basis. Therefore the figures in this table are not consistent with the new annual ones. Sources: INE (Quarterly National Accounts) and Funcas (Forecasts).



Chart 3b.1.- Nominal ULC, construction

Chart 3b.3.- Nominal ULC, services Index, 2000=100



Chart 3b.2.- Real ULC, construction Index, 2000=100

Chart 3b.4.- Real ULC, services Index, 2000=100

(1) Nominal ULC deflated by GVA deflator.



National accounts: National income, distribution and disposition (ESA 2010, Base 2010) (1)

Forecasts in blue

	Gi don pro	ross nestic oduct	Compen- sation of employees	Gross operating surplus	Taxes on production and imports less subsi- dies	Income payments to the rest of the world, net	Gross national product	Current transfers to the rest of the world, net	Gross national income	Final national consumption	Gross national saving (a)	Compen- sation of employees	Gross operating surplus	Taxes on production and imports less subsidies
	1=2	+3+4	2	3	4	5	6=1+5	7	8=6+7	9	10=8-9	11	12	13
				EUR Bill	ions, 4-qua	rter cum	ulated tr	ansaction	s			Perc	entage o	f GDP
2009	1,07	9.0	549.2	455.2	74.7	-19.8	1,059.2	-14.3	1,045.0	826.4	218.6	50.9	42.2	6.9
2010	1,08	80.9	541.5	445.9	93.6	-15.2	1,065.8	-12.7	1,053.0	840.5	212.6	50.1	41.3	8.7
2011	1,07	0.4	531.0	449.4	90.0	-18.6	1,051.9	-14.1	1,037.7	838.5	199.2	49.6	42.0	8.4
2012	1,04	2.9	498.6	450.0	94.2	-7.3	1,035.5	-12.6	1,023.0	816.6	206.3	47.8	43.2	9.0
2013	1,03	31.3	486.6	444.7	99.9	-4.8	1,026.5	-13.1	1,013.4	800.8	212.6	47.2	43.1	9.7
2014	1,04	1.2	490.8	446.4	103.9	-4.2	1,036.9	-11.5	1,025.5	809.3	216.2	47.1	42.9	10.0
2015	1,08	31.2	509.9	460.2	111.1	-0.9	1,080.3	-10.9	1,069.4	830.9	238.5	47.2	42.6	10.3
2016	1,11	8.4	528.2	474.5	115.7	5.0	1,123.4	-11.1	1,112.3	851.0	261.3	47.2	42.4	10.3
2017	1,15	5.6	544.6	489.7	121.3	8.8	1,164.4	-11.3	1,153.1	876.2	277.0	47.1	42.4	10.5
2014	III 1,03	86.6	488.1	446.0	102.5	-6.3	1,030.2	-11.7	1,018.5	808.2	210.4	47.1	43.0	9.9
	IV 1,04	1.2	490.8	446.4	103.9	-4.2	1,036.9	-11.5	1,025.5	809.3	216.2	47.1	42.9	10.0
2015	I 1,04	9.2	495.1	450.1	104.0	-3.6	1,045.7	-11.5	1,034.2	813.0	221.2	47.2	42.9	9.9
	II 1,05	9.7	499.5	452.9	107.2	-1.6	1,058.1	-11.3	1,046.8	818.9	227.9	47.1	42.7	10.1
	III 1,07	0.5	504.3	457.6	108.6	-1.0	1,069.5	-10.9	1,058.6	824.9	233.7	47.1	42.7	10.1
	IV 1,08	31.2	509.9	460.2	111.1	-0.9	1,080.3	-10.9	1,069.4	830.9	238.5	47.2	42.6	10.3
2016	I 1,08	89.7	514.1	463.3	112.2	-0.3	1,089.4	-10.6	1,078.8	835.8	243.0	47.2	42.5	10.3
	II 1,10	0.9	519.2	469.8	111.9					840.0		47.2	42.7	10.2
					Annual pe	ercentage	change	s				Difference	e from or	ie year ago
2009	-	-3.3	-1.9	-2.2	-18.1	-33.9	-2.5	-9.1	-2.4	-2.0	-3.9	0.7	0.5	-1.3
2010		0.2	-1.4	-2.0	25.3	-23.4	0.6	-10.9	0.8	1.7	-2.8	-0.8	-0.9	1.7
2011		-1.0	-1.9	0.8	-3.8	22.5	-1.3	11.2	-1.5	-0.2	-6.3	-0.5	0.7	-0.2
2012		-2.6	-6.1	0.1	4.7	-60.5	-1.6	-11.0	-1.4	-2.6	3.6	-1.8	1.2	0.6
2013		-1.1	-2.4	-1.2	6.0	-34.7	-0.9	4.3	-0.9	-1.9	3.0	-0.6	0.0	0.7
2014		1.0	0.9	0.4	4.0	-11.7	1.0	-12.7	1.2	1.1	1.7	0.0	-0.2	0.3
2015		3.8	3.9	3.1	6.9	-79.6	4.2	-4.5	4.3	2.7	10.3	0.0	-0.3	0.3
2016		3.4	3.6	3.1	4.1	-679.6	4.0	1.5	4.0	2.4	9.6	0.1	-0.1	0.1
2017		3.3	3.1	3.2	4.9	77.1	3.7	1.5	3.7	3.0	6.0	-0.1	-0.1	0.2
2014	III	0.6	0.6	-0.3	3.9	51.7	0.3	-11.1	0.5	1.1	-1.9	0.0	-0.4	0.3
	IV	1.0	0.9	0.4	4.0	-11.7	1.0	-12.7	1.2	1.1	1.7	0.0	-0.2	0.3
2015	I.	1.8	2.1	1.2	2.9	5.7	1.8	-15.1	2.0	1.4	4.0	0.2	-0.3	0.1
	Ш	2.6	2.8	1.6	5.8	-73.0	3.0	-13.5	3.2	1.7	8.9	0.1	-0.4	0.3
	Ш	3.3	3.3	2.6	6.0	-84.1	3.8	-7.1	3.9	2.1	11.1	0.0	-0.3	0.3
	IV	3.8	3.9	3.1	6.9	-79.6	4.2	-4.5	4.3	2.7	10.3	0.0	-0.3	0.3
2016	I	3.9	3.8	2.9	7.9	-92.5	4.2	-7.5	4.3	2.8	9.9	0.0	-0.4	0.4
	Ш	3.9	3.9	3.7	4.4					2.6		0.0	-0.1	0.0

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

(1) Recently, the National Statistics Institute (INE in its Spanish initials) has published a revision of the annual National Accounts, but the revised figures have not been published on a quarterly basis. Therefore the figures in this table are not consistent with the new annual ones. Sources: INE (Quarterly National Accounts) and Funcas (Forecasts).



Chart 4.3.- Components of National income Annual percentage change





Chart 4.4.- Functional distribution of income Percentage of GDP, 4-quarter moving averages



National accounts: Net transactions with the rest of the world (ESA 2010, Base 2010) (1)

Forecasts in blue

			Goods a	nd services			Ourset	Quarant	Qualitat	Net lending/	Savi	ng-Investmen	t-Deficit
		Total	Goods	Tourist services	Non-tourist services	Income	transfers	account	transfers	borrowing with rest of the world	Gross national saving	Gross capital formation	Current account deficit
		1=2+3+4	2	3	4	5	6	7=1+5+6	8	9=7+8	10	11	12=7=10-11
					EUR E	Billions, 4	-quarter c	umulated	transact	tions			
2009		-12.4	-41.5	22.4	6.6	-19.8	-14.3	-46.5	4.5	-42.0	218.6	265.1	-46.5
2010		-14.1	-47.8	23.0	10.7	-15.2	-12.7	-42.0	5.9	-36.1	212.6	254.5	-42.0
2011		-2.6	-44.5	26.2	15.6	-18.6	-14.1	-35.3	4.4	-30.9	199.2	234.5	-35.3
2012		15.3	-29.3	27.1	17.5	-7.3	-12.6	-4.6	5.4	0.8	206.3	211.0	-4.6
2013		33.1	-14.2	28.3	18.9	-4.8	-13.1	15.2	7.8	22.9	212.6	197.4	15.2
2014		26.0	-22.5	28.8	19.7	-4.2	-11.5	10.3	6.1	16.4	216.2	205.9	10.3
2015		26.9	-21.6	28.6	20.0	-0.9	-10.9	15.1	7.9	23.1	238.5	223.4	15.1
2016		29.4	-24.0	30.4	23.0	5.0	-11.1	23.3	7.1	30.4	261.3	238.0	23.3
2017		26.2	-30.2	32.4	24.0	8.8	-11.3	23.7	7.3	31.0	277.0	253.2	23.7
2014	Ш	25.5	-22.2	28.7	19.0	-6.3	-11.7	7.5	7.1	14.5	210.4	202.9	7.5
	IV	26.0	-22.5	28.8	19.7	-4.2	-11.5	10.3	6.1	16.4	216.2	205.9	10.3
2015	I	27.4	-21.1	28.7	19.8	-3.6	-11.5	12.3	5.3	17.6	221.2	208.8	12.3
	Ш	27.5	-21.2	28.6	20.2	-1.6	-11.3	14.7	5.8	20.5	227.9	213.2	14.7
	Ш	27.2	-21.7	28.4	20.5	-1.0	-10.9	15.3	7.2	22.5	233.7	218.4	15.3
	IV	26.9	-21.6	28.6	20.0	-0.9	-10.9	15.1	7.9	23.1	238.5	223.4	15.1
2016	Т	26.4	-22.1	28.2	20.3	-0.3	-10.6	15.5	7.8	23.4	243.0	227.5	15.5
	П	30.7	-19.4	28.3	21.7								
					Percenta	ge of GDI	P, 4-quarte	er cumula	ted trans	actions			
2009		-1.2	-3.8	2.1	0.6	-1.8	-1.3	-4.3	0.4	-3.9	20.3	24.6	-4.3
2010		-1.3	-4.4	2.1	1.0	-1.4	-1.2	-3.9	0.5	-3.3	19.7	23.5	-3.9
2011		-0.2	-4.2	2.4	1.5	-1.7	-1.3	-3.3	0.4	-2.9	18.6	21.9	-3.3
2012		1.5	-2.8	2.6	1.7	-0.7	-1.2	-0.4	0.5	0.1	19.8	20.2	-0.4
2013		3.2	-1.4	2.7	1.8	-0.5	-1.3	1.5	0.8	2.2	20.6	19.1	1.5
2014		2.5	-2.2	2.8	1.9	-0.4	-1.1	1.0	0.6	1.6	20.8	19.8	1.0
2015		2.5	-2.0	2.6	1.8	-0.1	-1.0	1.4	0.7	2.1	22.1	20.7	1.4
2016		2.6	-2.1	2.7	2.1	0.4	-1.0	2.1	0.6	2.7	23.4	21.3	2.1
2017		2.3	-2.6	2.8	2.1	0.8	-1.0	2.1	0.6	2.7	24.0	21.9	2.1
2014	Ш	2.5	-2.1	2.8	1.8	-0.6	-1.1	0.7	0.7	1.4	20.3	19.6	0.7
	IV	2.5	-2.2	2.8	1.9	-0.4	-1.1	1.0	0.6	1.6	20.8	19.8	1.0
2015	1	2.6	-2.0	2.7	1.9	-0.3	-1.1	1.2	0.5	1.7	21.1	19.9	1.2
	П	2.6	-2.0	2.7	1.9	-0.1	-1.1	1.4	0.5	1.9	21.5	20.1	1.4
	Ш	2.5	-2.0	2.7	1.9	-0.1	-1.0	1.4	0.7	2.1	21.8	20.4	1.4
	IV	2.5	-2.0	2.6	1.8	-0.1	-1.0	1.4	0.7	2.1	22.1	20.7	1.4
2016	I	2.4	-2.0	2.6	1.9	0.0	-1.0	1.4	0.7	2.1	22.3	20.9	1.4
	Ш	28	-1.8	2.6	2.0								

(1) Recently, the National Statistics Institute (INE in its Spanish initials) has published a revision of the annual National Accounts, but the revised figures have not been published on a quarterly basis. Therefore the figures in this table are not consistent with the new annual ones. Sources: INE (Quarterly National Accounts) and Funcas (Forecasts).



Chart 5.1.- Balance of goods and services



Chart 5.3.- Net lending or borrowing Percentage of GDP, 4-quarter moving averages



Chart 5.4.- Saving, investment and current account balance



National accounts: Household income and its disposition (ESA 2010, Base 2010) (1)

Forecasts in blue

			Gr	oss disposab	le income (GDI)				Saving				Not londing
		Total	Compen- sation of employees (received)	Mixed income and net property income	Social benefits and other current transfers (received)	Social contri- butions and other current transfers (paid)	Per- sonal income taxes	Final con- sumption expen- diture	Gross saving (a)	rate (gross saving as a percentage of GDI)	Net capital transfers	Gross capital formation	Net lending (+) or borro- wing (-)	or borrowing as a per- centage of GDP
		1=2+3+4- 5-6	2	3	4	5	6	7	8=1-7	9=8/1	10	11	12=8+10-11	13
					EUR	Billions, 4-qu	arter c	umulated	operatio	ons				
2009		698.9	549.9	199.1	235.9	209.8	76.2	605.3	93.6	13.4	6.7	69.0	31.3	2.9
2010		688.4	542.3	196.3	239.3	209.7	79.9	618.8	69.5	10.1	7.6	63.0	14.2	1.3
2011		694.2	531.9	212.1	242.9	210.3	82.4	618.9	74.7	10.8	5.2	53.8	26.1	2.4
2012		672.1	499.9	210.9	247.3	202.4	83.6	611.4	58.8	8.7	5.0	38.4	25.4	2.4
2013		666.6	488.7	211.0	249.5	199.2	83.4	598.4	66.2	9.9	3.7	26.9	43.0	4.2
2014		672.5	492.9	218.5	240.4	195.3	83.9	606.8	64.6	9.6	4.5	29.3	39.9	3.8
2015		688.3	512.0	218.0	241.5	199.8	83.4	622.2	64.4	9.4	1.4	29.1	36.7	3.4
2016		707.1	530.4	220.4	243.8	203.6	83.9	639.8	65.7	9.3	1.2	30.3	36.6	3.3
2017		729.9	546.8	228.9	250.2	209.4	86.6	661.8	66.6	9.1	1.1	32.3	35.4	3.1
2014	Ш	665.1	488.3	212.3	244.6	196.8	83.3	602.4	61.4	9.2	3.4	27.6	37.1	3.6
	Ш	667.8	490.2	216.0	240.8	195.3	83.9	605.2	61.3	9.2	3.3	27.9	36.7	3.5
	IV	672.5	492.9	218.5	240.4	195.3	83.9	606.8	64.6	9.6	4.5	29.3	39.9	3.8
2015	I	676.0	497.1	217.4	241.1	195.9	83.7	609.3	65.2	9.6	4.2	28.3	41.0	3.9
	II	680.4	501.6	219.4	241.2	197.8	84.0	613.3	65.8	9.7	3.2	27.7	41.3	3.9
	Ш	682.8	506.4	217.8	241.7	198.8	84.3	618.4	62.9	9.2	3.2	28.2	37.9	3.5
	IV	688.3	512.0	218.0	241.5	199.8	83.4	622.2	64.4	9.4	1.4	29.1	36.7	3.4
2016	Т	691.5	515.9	218.4	240.4	200.1	83.0	626.3	64.4	9.3	1.4	30.9	34.9	3.2

		Annu	al percenta	ige change	es, 4-quarte	r cumulate	d operatio	ons		ce from one year ago	Annual լ 4-գւ	percentage Jarter cumu operations	change: lated	s, Difference from one year ago
2009		1.9	-1.9	-6.6	8.7	-4.6	-10.1	-4.5	64.4	5.1	8.3	-23.5		5.3
2010		-1.5	-1.4	-1.4	1.4	-0.1	4.8	2.2	-25.8	-3.3	13.8	-8.7		-1.6
2011		0.8	-1.9	8.0	1.5	0.3	3.2	0.0	7.5	0.7	-32.3	-14.6		1.1
2012		-3.2	-6.0	-0.5	1.8	-3.7	1.5	-1.2	-21.3	-2.0	-3.1	-28.6		0.0
2013		-0.8	-2.3	0.0	0.9	-1.6	-0.3	-2.1	12.7	1.2	-26.5	-29.9		1.7
2014		0.9	0.9	3.6	-3.7	-1.9	0.7	1.4	-2.4	-0.3	23.2	8.6		-0.3
2015		2.3	3.9	-0.2	0.5	2.3	-0.6	2.5	-0.3	-0.2	-70.2	-0.6		-0.4
2016		2.7	3.6	1.1	1.0	1.9	0.6	2.8	1.9	-0.1	-11.0	4.1		-0.1
2017		3.2	3.1	3.9	2.6	2.8	3.2	3.4	1.4	-0.2	-8.0	6.8		-0.2
2014	П	-0.6	-0.2	0.1	-2.2	-1.6	1.4	0.0	-5.4	-0.5	-17.5	-16.9		0.1
	Ш	0.4	0.7	2.4	-3.6	-1.9	1.0	0.9	-4.1	-0.4	-10.8	-9.3		0.0
	IV	0.9	0.9	3.6	-3.7	-1.9	0.7	1.4	-2.4	-0.3	23.2	8.6		-0.3
2015	I	1.8	2.1	2.3	-2.2	-1.2	0.1	1.7	2.2	0.0	26.3	3.6		0.1
	П	2.3	2.7	3.3	-1.4	0.5	0.8	1.8	7.3	0.4	-7.0	0.2		0.3
	Ш	2.2	3.3	0.9	0.4	1.8	0.5	2.2	2.6	0.0	-2.6	1.1		0.0
	IV	2.3	3.9	-0.2	0.5	2.3	-0.6	2.5	-0.3	-0.2	-70.2	-0.6		-0.4
2016	I.	2.3	3.8	0.5	-0.3	2.2	-0.8	2.8	-1.2	-0.3	-66.0	9.3		-0.7

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

(1) Recently, the National Statistics Institute (INE in its Spanish initials) has published a revision of the annual National Accounts, but the revised figures have not been published on a quarterly basis. Therefore the figures in this table are not consistent with the new annual ones.

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



Chart 6.1.- Households: Gross disposable income EUR Billions, 4-quarter cummulated

Chart 6.2.- Households: Gross saving EUR Billions, 4-quarter cummulated



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

Chart 6.3.- Households: Income, consumption and saving

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



Chart 6.4.- Households: Saving, investment and deficit

Percentage of GDP, 4-quarter moving averages



National accounts: Non-financial corporations income and its disposition (ESA 2010, Base 2010) (1) Forecasts in blue

		Gross value added	Compen- sation of emplo- yees and net taxes on pro- duction (paid)	Gross ope- rating surplus	Net property income	Net current trans- fers	Income taxes	Gross saving	Net capital trans- fers	Gross capital formation	Net lending (+) or borro- wing (-)	Net lending or bo- rrowing as a per- centage of GDP	Profit share (per- cen- tage)	Investment rate (percen- tage)
		1	2	3=1-2	4	5	6	7=3+4+5-6	8	9	10=7+8-9	11	12=3/1	13=9/1
					E	UR Billio	ons, 4-qua	arter cumula	ated ope	rations				
2009		590.7	354.4	236.3	-59.9	-13.3	19.0	144.2	11.4	130.1	25.4	2.4	40.0	22.0
2010		581.8	346.0	235.8	-49.2	-8.6	16.2	161.8	10.2	132.0	40.0	3.7	40.5	22.7
2011		573.0	340.2	232.8	-63.4	-8.8	15.8	144.9	8.9	131.8	22.0	2.1	40.6	23.0
2012		557.4	320.9	236.5	-60.7	-9.7	19.8	146.4	6.4	139.9	12.9	1.2	42.4	25.1
2013		546.0	309.3	236.7	-43.6	-9.0	18.0	166.2	5.1	140.7	30.6	3.0	43.4	25.8
2014		550.9	314.4	236.6	-49.5	-6.6	18.6	161.9	4.6	150.9	15.6	1.5	42.9	27.4
2015		575.7	328.6	247.0	-39.6	-5.2	21.2	181.1	7.0	162.5	25.6	2.4	42.9	28.2
2016		597.2	343.4	253.8	-32.6	-5.3	16.1	199.8	7.0	177.7	29.1	2.6	42.5	29.8
2017		616.9	356.6	260.3	-27.5	-5.6	19.7	207.6	7.0	190.1	24.5	2.1	42.2	30.8
2014	П	547.4	310.0	237.4	-47.9	-7.7	19.4	162.3	4.9	143.4	23.9	2.3	43.4	26.2
	Ш	548.6	311.6	236.9	-49.8	-7.2	19.2	160.8	4.8	145.3	20.2	2.0	43.2	26.5
	IV	550.9	314.4	236.6	-49.5	-6.6	18.6	161.9	4.6	150.9	15.6	1.5	42.9	27.4
2015	1	556.3	317.4	238.9	-45.2	-6.3	18.0	169.3	4.0	154.3	19.0	1.8	42.9	27.7
	П	562.2	320.7	241.5	-44.1	-6.0	19.1	172.4	4.9	160.3	16.9	1.6	43.0	28.5
	Ш	569.6	324.4	245.2	-41.4	-5.5	20.0	178.3	6.0	161.0	23.3	2.2	43.1	28.3
	IV	575.7	328.6	247.0	-39.6	-5.2	21.2	181.1	7.0	162.5	25.6	2.4	42.9	28.2
2016	Т	580.5	332.0	248.5	-39.2	-4.8	20.8	183.7	7.0	165.1	25.6	2.4	42.8	28.4
			Annua	al percent	age chan	ges, 4-qu	arter cur	nulated ope	rations			Differenc	e from o	ne year ago
2009		-2.4	-4.1	0.4	-23.9	50.6	-25.4	17.8	-5.3	-27.2		6.3	1.1	-7.5
2010		-1.5	-2.4	-0.2	-17.9	-34.9	-15.0	12.2	-9.8	1.5		1.3	0.5	0.7
2011		-1.5	-1.7	-1.2	29.0	1.4	-2.4	-10.5	-13.0	-0.2		-1.6	0.1	0.3
2012		-2.7	-5.7	1.6	-4.3	10.4	25.3	1.0	-27.7	6.2		-0.8	1.8	2.1
2013		-2.0	-3.6	0.1	-28.2	-6.8	-9.2	13.6	-20.5	0.5		1.7	0.9	0.7
2014		0.9	1.6	-0.1	13.6	-27.0	3.5	-2.6	-10.9	7.2		-1.5	-0.4	1.6
2015		4.5	4.5	4.4	-20.1	-21.5	13.9	11.9	53.7	7.7		0.9	0.0	0.8
2016		3.7	4.5	2.7	-17.6	3.5	-24.2	10.3	0.0	9.3		0.2	-0.4	1.5
2017		3.3	3.8	2.6	-15.6	4.0	22.4	3.9	0.0	7.0		-0.5	-0.3	1.1
2014	Ш	-0.6	-1.0	-0.2	-7.7	-16.2	-1.2	3.3	-26.1	1.8		0.1	0.2	0.6
	Ш	-0.1	0.2	-0.4	8.5	-19.4	4.4	-2.5	-22.2	1.8		-0.8	-0.2	0.5
	IV	0.9	1.6	-0.1	13.6	-27.0	3.5	-2.6	-10.9	7.2		-1.5	-0.4	1.6
2015	I	2.0	2.9	0.8	3.2	-23.5	-0.6	1.5	-26.5	7.5		-1.0	-0.5	1.4
	Ш	2.7	3.4	1.8	-8.0	-22.6	-1.8	6.2	-1.6	11.8		-0.7	-0.4	2.3
	Ш	3.8	4.1	3.5	-16.8	-22.9	4.4	10.9	24.6	10.8		0.2	-0.1	1.8
	IV	4.5	4.5	4.4	-20.1	-21.5	13.9	11.9	53.7	7.7		0.9	0.0	0.8
2016	1	43	4.6	4.0	-13.3	-24.2	15.2	8.5	75.5	7.0		0.5	-0.1	0.7

(1) Recently, the National Statistics Institute (INE in its Spanish initials) has published a revision of the annual National Accounts, but the revised figures have not been published on a quarterly basis. Therefore the figures in this table are not consistent with the new annual ones. Sources: INE (Quarterly National Accounts) and Funcas (Forecasts).



Chart 7.1.- Non-financial corporations: Gross operating surplus

Chart 7.3.- Non-financial corporations: Saving, investment and deficit

Percentage of GDP, 4-quarter moving averages



Chart 7.2.- Non-financial corporations: GVA, GOS and saving

Annual percentage change, 4-quarter moving averages



Chart 7.4.- Non-financial corporations: Profit share and investment rate



Percentage of non-financial corporations GVA, 4-quarter moving averages Vol. 5, N.º 5 (September 2016)

117

Table 8 National accounts: Public revenue, expenditure and deficit (ESA 2010, Base 2010) (1)

Forecasts in blue

		Gross value added	Taxes on produc- tion and imports receiva- ble	Taxes on income and weath receiva- ble	Social contribu- tions receiva- ble	Com- pen- sation of emplo- yees	Interests and other capital incomes payable (net)	Social be- nefits paya- ble	Sub- sidies and net current transfers payable	Gross disposable income	Final consump- tion expendi- ture	Gross saving	Net capital expendi- ture	Net len- ding(+)/ net borro- wing(-)	Net lending(+)/ net borrowing (-) excluding financial entities bail-out
		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 E	Billions, 4-	quarter	cumulate	d operation	S				
2009		151.0	91.9	101.6	139.7	125.6	8.0	155.1	23.9	171.7	221.0	-49.3	68.9	-118.2	-118.9
2010		152.0	110.1	100.6	138.6	124.9	10.8	162.7	21.4	181.5	221.7	-40.2	61.3	-101.4	-102.2
2011		150.3	106.2	102.0	137.8	122.6	16.2	164.2	22.6	170.7	219.7	-49.0	53.9	-102.9	-99.4
2012		142.2	108.2	106.3	131.9	113.9	20.3	168.5	18.7	167.1	205.2	-38.1	70.8	-108.9	-70.6
2013		142.9	114.6	105.0	128.2	114.7	24.1	170.6	20.5	160.8	202.4	-41.5	29.7	-71.2	-68.2
2014		143.1	118.9	105.4	130.1	114.9	25.7	170.7	20.5	165.6	202.4	-36.8	24.5	-61.3	-60.3
2015		147.1	126.1	109.5	132.3	118.7	24.6	170.3	21.8	179.5	208.7	-29.2	25.8	-55.0	-54.1
2016		149.8	130.8	104.5	135.3	120.9	24.4	171.9	21.9	181.1	211.2	-30.1	21.7	-51.7	-51.8
2017		152.2	136.6	111.7	139.4	122.7	23.4	176.2	22.2	195.4	214.4	-19.0	22.1	-41.1	-41.1
2014	П	142.7	117.0	105.9	128.6	114.5	24.9	169.8	22.5	162.5	202.5	-40.0	25.9	-65.9	-65.6
	Ш	143.0	118.0	106.2	129.2	114.8	24.9	169.1	21.3	166.3	203.0	-36.6	23.7	-60.3	-59.5
	IV	143.1	118.9	105.4	130.1	114.9	25.7	170.7	20.5	165.6	202.4	-36.8	24.5	-61.3	-60.3
2015	I	144.1	119.7	106.1	130.2	115.9	26.1	170.6	21.6	165.9	203.7	-37.8	24.1	-61.9	-61.5
	П	145.0	122.6	107.6	131.1	116.8	25.7	170.6	20.8	172.4	205.6	-33.3	24.5	-57.7	-56.1
	Ш	145.5	124.5	109.0	131.5	117.2	25.4	170.7	21.1	176.0	206.6	-30.5	27.2	-57.7	-56.1
	IV	147.1	126.1	109.5	132.3	118.7	24.6	170.3	21.8	179.5	208.7	-29.2	25.8	-55.0	-54.1
2016	1	147.1	126.7	107.3	133.0	118.7	24.0	170.8	20.6	179.9	209.4	-29.4	26.5	-55.9	-54.6
						Percenta	ge of GDF	, 4-quart	ter cumul	ated operat	ions				
2009		14.0	8.5	9.4	12.9	11.6	0.7	14.4	2.2	15.9	20.5	-4.6	6.4	-11.0	-11.0
2010		14.1	10.2	9.3	12.8	11.6	1.0	15.1	2.0	16.8	20.5	-3.7	5.7	-9.4	-9.5
2011		14.0	9.9	9.5	12.9	11.5	1.5	15.3	2.1	15.9	20.5	-4.6	5.0	-9.6	-9.3
2012		13.6	10.4	10.2	12.6	10.9	1.9	16.2	1.8	16.0	19.7	-3.7	6.8	-10.4	-6.8
2013		13.9	11.1	10.2	12.4	11.1	2.3	16.5	2.0	15.6	19.6	-4.0	2.9	-6.9	-6.6
2014		13.7	11.4	10.1	12.5	11.0	2.5	16.4	2.0	15.9	19.4	-3.5	2.4	-5.9	-5.8
2015		13.6	11.7	10.1	12.2	11.0	2.3	15.8	2.0	16.6	19.3	-2.7	2.4	-5.1	-5.0
2016		13.4	11.7	9.3	12.1	10.8	2.2	15.4	2.0	16.2	18.9	-2.7	1.9	-4.6	-4.6
2017		13.2	11.8	9.7	12.1	10.6	2.0	15.3	1.9	16.9	18.6	-1.6	1.9	-3.6	-3.6
2014	П	13.8	11.3	10.3	12.4	11.1	2.4	16.4	2.2	15.7	19.6	-3.9	2.5	-6.4	-6.4
	Ш	13.8	11.4	10.2	12.5	11.1	2.4	16.3	2.1	16.0	19.6	-3.5	2.3	-5.8	-5.7
	IV	13.7	11.4	10.1	12.5	11.0	2.5	16.4	2.0	15.9	19.4	-3.5	2.4	-5.9	-5.8
2015	1	13.7	11.4	10.1	12.4	11.0	2.5	16.3	2.1	15.8	19.4	-3.6	2.3	-5.9	-5.9
	П	13.7	11.6	10.2	12.4	11.0	2.4	16.1	2.0	16.3	19.4	-3.1	2.3	-5.4	-5.3
	Ш	13.6	11.6	10.2	12.3	10.9	2.4	15.9	2.0	16.4	19.3	-2.8	2.5	-5.4	-5.2
	IV	13.6	11.7	10.1	12.2	11.0	2.3	15.8	2.0	16.6	19.3	-2.7	2.4	-5.1	-5.0
2016	1	13.5	11.6	9.8	12.2	10.9	2.2	15.7	1.9	16.5	19.2	-2.7	2.4	-5.1	-5.0

(1) Recently, the National Statistics Institute (INE in its Spanish initials) has published a revision of the annual National Accounts, but the revised figures have not been published on a quarterly basis. Therefore the figures in this table are not consistent with the new annual ones. Sources: INE (Quarterly National Accounts) and Funcas (Forecasts).



Chart 8.1.- Public sector: Revenue, expenditure

(a) Excluding financial entities bail-out expenditures.



Chart 8.3.- Public sector: Main expenditures Percentage of GDP, 4-quarter moving averages

Chart 8.2.- Public sector: Main revenues Percentage of GDP, 4-quarter moving averages



Chart 8.4.- Public sector: Saving, investment and deficit (a)

Percentage of GDP, 4-quarter moving averages



expenditures. (b) Including net capital transfers.

Table 9Public sector balances, by level of Government

Forecasts in blue

				Deficit					Debt		
		Central Government (a)	Regional Governments	Local Governments	Social Security	TOTAL Government (a)	Central Government	Regional Governments	Local Governments	Social Security	TOTAL Government (consolidated)
		EUR Billi	ons, 4-quarter	cumulated op	erations			EUR I	Billions, end of	period	
2009		-99.1	-21.7	-5.9	7.8	-118.9	487.7	92.4	34.7	17.2	568.7
2010		-52.5	-40.2	-7.1	-2.4	-102.2	551.6	123.4	35.5	17.2	649.3
2011		-35.0	-54.8	-8.5	-1.1	-99.4	624.2	145.1	36.8	17.2	743.5
2012		-44.3	-19.4	3.3	-10.2	-70.6	761.9	188.4	44.0	17.2	890.7
2013		-46.2	-16.2	5.7	-11.5	-68.2	837.9	209.8	42.1	17.2	966.0
2014		-37.2	-18.2	5.9	-10.9	-60.3	895.7	236.8	38.3	17.2	1,033.7
2015		-27.3	-18.0	4.8	-13.6	-54.1	940.5	261.5	35.1	17.2	1,072.2
2016		-30.5	-8.9	3.4	-15.7	-51.8					1,122.9
2017		-23.0	-6.9	2.9	-14.1	-41.1					1,168.0
2014	II	-39.0	-18.3	5.4	-13.8	-65.6	885.1	228.2	42.0	17.2	1,012.5
	Ш	-39.0	-18.2	6.0	-8.3	-59.5	891.8	232.1	40.8	17.2	1,020.2
	IV	-37.2	-18.2	5.9	-10.9	-60.3	895.7	236.8	38.3	17.2	1,033.7
2015	I	-39.0	-17.1	6.0	-11.5	-61.5	912.9	240.4	38.3	17.2	1,051.8
	П	-32.8	-16.5	6.8	-13.7	-56.1	922.7	249.9	37.7	17.2	1,057.2
	Ш	-29.9	-17.9	5.4	-13.6	-56.1	938.8	253.2	36.9	17.2	1,067.3
	IV	-27.3	-18.0	4.8	-13.6	-54.1	940.5	261.5	35.1	17.2	1,072.2
2016	I	-27.0	-17.5	4.4	-14.5	-54.6	962.1	264.2	35.1	17.2	1,095.1
		Percentage of	of GDP, 4-quar	ter cumulated	operation	15		Per	centage of GDF	•	
2009		-9.2	-2.0	-0.5	0.7	-11.0	45.2	8.6	3.2	1.6	52.7
2010		-4.9	-3.7	-0.7	-0.2	-9.5	51.0	11.4	3.3	1.6	60.1
2011		-3.3	-5.1	-0.8	-0.1	-9.3	58.3	13.6	3.4	1.6	69.5
2012		-4.2	-1.9	0.3	-1.0	-6.8	73.1	18.1	4.2	1.6	85.4
2013		-4.5	-1.6	0.6	-1.1	-6.6	81.3	20.3	4.1	1.7	93.7
2014		-3.6	-1.7	0.6	-1.0	-5.8	86.0	22.7	3.7	1.7	99.3
2015		-2.5	-1.7	0.4	-1.3	-5.0	87.0	24.2	3.3	1.6	99.2
2016		-1.9	-0.8	0.3	-1.4	-3.8					99.5
2017		-1.4	-0.6	0.3	-1.2	-3.0					99.5
2014	II	-3.8	-1.8	0.5	-1.3	-6.4	85.7	22.1	4.1	1.7	98.0
		-3.8	-1.8	0.6	-0.8	-5.7	86.0	22.4	3.9	1.7	98.4
	IV	-3.6	-1.7	0.6	-1.0	-5.8	86.0	22.7	3.7	1.7	99.3
2015	1	-3.7	-1.6	0.6	-1.1	-5.9	87.0	22.9	3.6	1.6	100.2
	1	-3.1	-1.6	0.6	-1.3	-5.3	87.1	23.6	3.6	1.6	99.8
	111	-2.8	-1./	0.5	-1.3	-5.2	٥/./ ٩٦ ٥	23.0 24.2	3.4	1.0	99.7
2016	1	-2.7	-1.6	0.5	-1.2	-5.0	88.3	24.3	3.2	1.0	100.5

(a) Excluding financial entities bail-out expenditures.

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



Chart 9.1.- Government deficit Percent of GDP, 4-quarter cumulated operations

Chart 9.2.- Government debt Percent of GDP



Table 10 General activity and industrial sector indicators (a)

			General acti	vity indicators				Industrial se	ector indicators		
		Economic Senti- ment Index	Composite PMI index	Social Security affiliates (f)	Electricity consumption (temperature adjusted)	Industrial pro- duction index	Social Secu- rity affiliates in industry	Manufacturing PMI index	Industrial confidence index	Turnover index deflated	Industrial orders
		Index	Index	Thousands	1000 GWH (smoothed)	2010=100	Thou- sands	Index	Balance of responses	2010=100 (smoothed)	Balance of responses
2009		82.6	40.9	17,657	256.9	99.2	2,411	40.9	-30.8	96.5	-55.1
2010		93.1	50.0	17,244	263.8	100.0	2,295	50.6	-13.8	100.0	-36.7
2011		93.1	46.6	16,970	261.3	98.4	2,232	47.3	-12.5	101.1	-30.8
2012		88.4	43.1	16,335	255.7	91.9	2,114	43.8	-17.5	97.0	-37.1
2013		92.5	48.3	15,855	250.2	90.5	2,022	48.5	-13.9	93.8	-30.7
2014		102.4	55.1	16,111	249.7	91.6	2,023	53.2	-7.1	95.1	-16.3
2015		108.8	56.7	16,642	253.9	94.7	2,067	53.6	-0.3	96.5	-5.4
2016 (b)		106.4	54.9	17,060	169.6	98.5	2,113	52.8	-2.8	97.7	-5.4
2014	IV	103.9	54.6	16,289	62.7	91.8	2,033	53.7	-4.6	95.3	-15.3
2015	1	107.3	56.6	16,434	63.0	93.2	2,045	54.4	-2.5	95.8	-12.6
	П	109.3	57.7	16,602	63.3	94.7	2,061	54.9	-0.4	96.4	0.2
	Ш	109.1	57.2	16,697	63.5	95.2	2,074	52.9	0.4	96.6	-4.0
	IV	109.6	55.4	16,828	63.5	95.7	2,089	52.5	0.0	96.7	-5.3
2016	1	107.3	55.0	16,951	63.4	95.7	2,104	54.3	-1.2	96.6	-7.6
	II	106.1	55.3	17,068	63.4	96.0	2,117	52.5	-2.7	96.5	-2.9
	III (b)	105.3	54.3	17,189	42.2	96.1	2,128	51.0	-4.1		-5.9
2016	Jun	106.5	55.7	17,120	21.1	95.9	2,121	52.2	-3.3	96.5	-3.5
	Jul	106.0	53.7	17,171	21.1	96.1	2,126	51.0	-3.8		-5.5
	Aug	104.5	54.8	17,208	21.1		2,130	51.0	-4.4		-6.2
					Perc	entage chan	ges (c)				
2009				-6.2	-4.7	-15.8	-10.6			-19.6	
2010				-2.3	2.7	0.8	-4.8			3.6	
2011				-1.6	-0.9	-1.6	-2.7			1.1	
2012				-3.7	-2.2	-6.7	-5.3			-4.1	
2013				-2.9	-2.2	-1.6	-4.4			-3.3	
2014				1.6	-0.2	1.3	0.1			1.4	
2015				3.3	1.7	3.4	2.2			1.5	
2016 (d)				3.0	-0.4	1.7	2.8			0.0	
2014	IV			3.2	0.8	0.9	1.4			-0.4	
2015	I			3.6	1.8	6.0	2.5			1.8	
	П			4.1	1.9	6.6	3.1			2.6	
	III			2.3	1.3	2.3	2.5			1.0	
	IV			3.2	-0.1	1.9	2.9			0.2	
2016	I			2.9	-0.4	0.1	3.0			-0.3	
	II			2.8	-0.2	1.2	2.4			-0.4	
	III (e)			2.9	-0.3	0.5	2.1				
2016	Jun			0.3	0.0	0.2	0.2			-0.1	
	Jul			0.3	0.0	0.2	0.2				
	Aug			0.2	0.0		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-profesional caregivers.

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



Index I II III IV 1 11 111 Economic Sentiment (left) Composite PMI (right)

Chart 10.2.- General activity indicators (II)

Chart 10.3.- Industrial sector indicators (I) Annualized percent change from previous period



Chart 10.4.- Industrial sector indicators (II)



Table 11 Construction and services sector indicators (a)

				Construction in	dicators				Se	rvice sector	indicators		
		Social Security affiliates in construction	Consump- tion of cement	Industrial pro- duction index construction materials	Cons- truction confiden- ce 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	Million Tons	2010=100 (smoothed)	Balance of res- ponses	EUR Billions (smoothed)	Million m ²	Thousands	2010=100 (smoothed)	Index	Million (smoo- thed)	Million (smoothed)	Balance of res- ponses
2009		1,800	28.9	115.9	-32.3	39.6	19.4	12,247	99.2	41.0	251.0	186.3	-29.6
2010		1,559	24.5	100.0	-29.7	26.2	16.3	12,186	100.0	49.3	267.2	191.7	-22.4
2011		1,369	20.4	91.6	-55.4	13.7	14.1	12,176	98.9	46.5	286.8	203.3	-20.8
2012		1,136	13.6	66.9	-54.9	7.4	8.5	11,907	92.8	43.1	280.7	193.2	-21.5
2013		997	10.7	63.1	-55.6	9.2	6.8	11,728	91.0	48.3	286.0	186.5	-15.3
2014		980	10.8	62.1	-41.4	13.1	6.9	11,995	93.3	55.2	295.3	194.9	9.9
2015		1,027	11.4	66.9	-25.3	9.4	9.9	12,432	97.8	57.3	308.2	206.6	19.4
2016	(b)	1,047	5.5	70.3	-37.8	9.5	13.7	12,779	98.2	55.1	316.4	221.2	17.9
2014	IV	995	2.8	61.8	-22.6	3.0	1.5	12,148	94.7	54.3	74.6	49.3	14.0
2015	1	1,015	2.8	63.9	-23.3	2.8	2.1	12,280	95.9	56.7	75.2	49.9	17.5
	II	1,027	2.9	66.2	-27.7	2.5	2.5	12,392	97.2	58.3	76.2	50.8	20.1
	Ш	1,029	2.8	68.0	-28.5	2.2	2.5	12,475	98.2	58.1	77.7	52.1	19.7
	IV	1,036	2.9	69.0	-21.7	2.0	2.7	12,578	99.1	55.9	79.5	53.6	20.2
2016	1	1,042	2.8	68.8	-31.7	2.1	3.4	12,683	99.9	54.6	81.2	55.1	18.8
	II	1,048	2.7	68.0	-40.4	2.5	3.5	12,781	100.8	55.5	82.5	56.3	17.5
1	ll (b)	1,054		67.4	-43.1	0.9		12,877		55.0	27.7	19.0	16.9
2016	Jun	1,051	0.9	67.7	-43.7	0.9		12,822	101.1	56.0	27.6	18.9	17.0
	Jul	1,053		67.4	-40.5	0.9		12,862		54.1	27.7	19.0	18.8
	Aug	1,055			-45.6			12,893		56.0			14.9
						Percer	ntage cha	anges (c)					
2009		-23.1	-32.3	-25.2		-0.4	-56.8	-3.1	-13.4		-6.5	-7.9	
2010		-13.4	-15.4	-13.7		-33.9	-16.1	-0.5	0.8		6.4	2.9	
2011		-12.2	-16.4	-8.4		-47.9	-13.2	-0.1	-1.1		7.3	6.0	
2012		-17.0	-33.6	-27.0		-45.5	-39.9	-2.2	-6.1		-2.1	-5.0	
2013		-12.2	-20.9	-5.7		23.2	-20.3	-1.5	-2.0		1.9	-3.5	
2014		-1.7	0.8	-1.4		42.6	2.2	2.3	2.6		3.2	4.6	
2015		4.7	5.7	7.7		-28.2	42.6	3.6	4.8		4.4	6.0	
2016	(d)	2.4	-2.3	3.6		-13.5	53.6	3.2	4.7		8.9	11.6	
2014	IV	5.0	-1.6	3.9		2.1	-8.0	3.5	4.4		3.5	4.2	
2015	1	8.5	7.5	14.3		-16.7	23.6	4.4	5.2		3.7	5.1	
	Ш	4.8	12.3	15.4		-25.9	37.3	3.7	5.3		5.3	7.6	
	III	0.5	-16.0	11.5		-33.7	31.9	2.7	4.4		7.9	10.1	
	IV	2.9	24.3	5.5		-33.3	85.9	3.4	3.5		9.7	12.0	
2016	1	2.3	-12.6	-0.8		-22.7	60.2	3.4	3.3		9.0	11.7	
	П	2.5	-14.5	-4.6		-1.8	38.7	3.1	3.7		6.4	9.4	
1	ll (e)	2.3		-3.5		21.1		3.1			3.1	5.3	
2016	Jun	0.4	3.3	-0.4		8.5		0.3	0.3		0.4	0.7	
	Jul	0.2		-0.4		21.1		0.3			0.4	0.6	
	Aug	0.2						0.2					

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

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



100 80 60 40 20 0 -20 -40 -60 -80 020304050607 12/13/14 2015 2016 h8h9 101 Official tenders Housing permits

Chart 11.3.- Services indicators (I) Percentage changes from previous period



Chart 11.4.- Services indicators (II) Index



Chart 11.2.- Construction indicators (II) Annualized percentage changes from previous period

Table 12 Consumption and investment indicators (a)

				Consumption in	dicators		In	vestment in equipment	t indicators
		Retail sales deflated	Car registrations	Consumer confi- dence index	Hotel overnight stays by residents in Spain	Industrial orders for consumer goods	Cargo vehicles registrations	Industrial orders for investment goods	Import 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)
2009		101.8	971.2	-28.2	109.8	-40.2	142.1	-50.8	66.2
2010		100.0	1,000.1	-20.9	113.2	-26.7	152.1	-31.1	70.3
2011		94.4	808.3	-17.1	111.5	-21.7	142.0	-23.0	68.0
2012		87.4	710.6	-31.7	102.1	-24.2	107.7	-38.6	60.6
2013		84.0	742.3	-25.3	100.6	-21.8	107.6	-33.5	68.9
2014		84.9	890.1	-8.9	104.7	-9.2	137.5	-16.5	81.6
2015		87.9	1,094.0	0.3	110.3	-3.1	180.3	0.2	93.3
2016	(b)	89.5	779.1	-3.5	64.3	-2.0	111.1	1.6	95.6
2014	IV	85.9	241.5	-9.6	26.6	-10.2	37.8	-11.3	85.7
2015	1	86.6	255.1	-0.6	27.0	-4.9	41.3	-9.1	90.0
	П	87.4	266.1	1.6	27.3	-5.1	44.2	5.7	93.0
	III	88.3	276.9	-1.3	27.6	-3.4	45.8	-0.7	94.1
	IV	89.2	287.9	1.6	27.8	1.0	46.3	4.9	94.1
2016	1	90.1	297.3	-2.5	28.2	0.8	46.1	-2.3	95.7
	II	90.9	305.1	-3.2	28.5	-4.3	46.2	1.9	98.7
1	III (b)	92.2	103.2	-5.5	9.6	-2.7	15.5	7.1	
2016	Jun	91.4	102.5	-2.4	9.5	-6.9	15.4	-5.1	99.8
	Jul	91.8	103.2	-5.8	9.6	-1.9	15.5	3.6	
	Aug			-5.2		-3.6		10.6	
					Percentage	e changes (c)			
2009		-5.4	-18.1		-3.0		-40.0		-26.4
2010		-1.7	3.0		3.2		7.0		6.1
2011		-5.6	-19.2		-1.5		-6.6		-3.2
2012		-7.4	-12.1		-8.4		-24.2		-10.9
2013		-3.9	4.5		-1.4		-0.1		13.7
2014		1.1	19.9		4.1		27.8		18.4
2015		3.6	22.9		5.3		31.1		14.4
2016	(d)	4.2	13.3		4.9		3.7		6.3
2014	IV	4.3	25.9		6.4		36.1		7.8
2015	1	3.0	24.6		5.6		41.8		14.1
	11	4.0	18.4		5.0		30.8		21.4
	III	4.2	17.1		3.4		16.1		14.0
_	IV	4.2	17.0		3.6		4.5		4.7
2016	I	3.7	13.6		5.2		-1.8		0.3
	11	4.0	11.0		4.4		0.7		6.6
	III (e)	5.5	6.0		2.8		2.0		13.1
2016	Jun	0.4	0.7		0.3		0.3		1.2
	Jul	0.4	0.7		0.3		0.3		
	Aug								

(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 12.2.- Investment indicators Percent change from previous period and balance of responses



Table 13a

Labour market (I)

Forecasts in blue

									Participation	Employment	ι	Jnemploymer	nt rate (c)	
		Population	Labo	ur force	Emple	oyment	Unemp	loyment	rate 16-64 (a)	rate 16-64 (b)	Total	Aged 16-24	Spanish	Foreign
		ugeu to of	Original	Seasonally adjusted	Original	Seasonally adjusted	Original	Seasonally adjusted		Sea	asonally ad	justed		
		1	2=4+6	3=5+7	4	5	6	7	8	9	10=7/3	11	12	13
				Milli	on					1	Percenta	ge		
2009		31.2	23.3		19.1		4.2		74.1	60.8	17.9	37.7	16.0	28.2
2010		31.1	23.4		18.7		4.6		74.6	59.7	19.9	41.5	18.1	29.9
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	22.9		18.3		4.6		75.5	60.3	20.0			
2017		30.0	22.8		18.6		4.2		75.6	61.6	18.5			
2014	III	30.3	22.9	22.9	17.5	17.4	5.4	5.5	75.2	57.3	24.1	53.5	22.7	33.8
	IV	30.3	23.0	23.0	17.6	17.6	5.5	5.4	75.5	57.6	23.7	51.8	22.4	33.3
2015	I	30.2	22.9	22.9	17.5	17.6	5.4	5.3	75.4	57.3	23.1	50.3	21.9	32.1
	Ш	30.2	23.0	23.0	17.9	17.8	5.1	5.1	75.6	58.7	22.4	48.7	21.2	31.1
	III	30.2	22.9	22.9	18.0	17.9	4.9	4.9	75.4	59.4	21.6	47.7	20.5	29.9
	IV	30.1	22.9	22.9	18.1	18.1	4.8	4.8	75.3	59.5	20.9	46.3	19.9	28.5
2016	I	30.1	22.8	22.9	18.0	18.2	4.8	4.7	75.5	59.4	20.3	45.6	19.3	28.2
	II	30.1	22.9	22.8	18.3	18.3	4.6	4.6	75.4	60.3	20.0	45.9	19.0	27.5
			P	ercentage (changes ((d)				Difference	from one	year ago		
2009		0.4	0.8		-6.7		60.0		0.3	-4.6	6.6	13.3	5.8	10.8
2010		-0.1	0.4		-2.0		11.7		0.4	-1.2	2.0	3.8	2.1	1.7
2011		-0.2	0.3		-1.6		8.0		0.4	-0.9	1.5	4.7	1.4	2.7
2012		-0.5	0.0		-4.3		15.9		0.4	-2.3	3.4	6.7	3.5	3.3
2013		-1.1	-1.1		-2.8		4.1		0.0	-0.9	1.3	2.6	1.5	1.1
2014		-0.9	-1.0		1.2		-7.3		0.0	1.2	-1.7	-2.3	-1.4	-2.5
2015		-0.5	-0.1		3.0		-9.9		0.2	1.9	-2.4	-4.9	-2.1	-4.0
2016		-0.4	-0.3		2.4		-9.6		0.0	1.6	-2.1			
2017		-0.3	-0.1		1.8		-7.7		0.1	1.3	-1.5			
2014	III	-0.8	-1.0	-0.4	1.6	1.7	-8.7	-6.9	-0.2	1.3	-2.0	-1.7	-1.6	-3.7
	IV	-0.6	-0.2	1.4	2.5	3.5	-8.1	-4.8	0.3	1.7	-2.0	-3.1	-1.8	-3.2
2015	1	-0.4	0.1	-1.1	3.0	1.9	-8.2	-10.4	0.3	1.8	-2.2	-4.1	-1.8	-4.1
	II	-0.5	0.2	0.7	3.0	4.6	-8.4	-11.6	0.4	1.9	-2.1	-3.9	-1.9	-3.2
	III	-0.5	-0.1	-1.4	3.1	2.6	-10.6	-14.4	0.2	2.1	-2.5	-5.8	-2.2	-3.9
	IV	-0.5	-0.7	-0.7	3.0	2.9	-12.4	-12.9	-0.2	1.9	-2.8	-5.5	-2.5	-4.8
2016	1	-0.5	-0.3	0.2	3.3	3.0	-12.0	-9.9	0.1	2.1	-2.8	-4.8	-2.6	-3.9
	Ш	-0.4	-0.6	-0.6	2.4	1.2	-11.2	-7.4	-0.2	1.6	-2.4	-2.9	-2.2	-3.5

(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.

Sources: INE (Labour Force Survey) and Funcas.



Chart 13a.1.- Labour force, Employment and Unemployment, SA Annual / annualized quarterly growth rates and percentage of active population





Table 13b Labour market (II)

		Employe	d by sector			Employed	l by professi	onal situation		Employed by duration of the working				
						Emp	oloyees							
			Construc-			В	y type of co	ntract	Self- emplo-			Part-time employ-		
	Agriculture	Industry	tion	Services	Total	Temporary	Indefinite	Temporary employment rate (a)	yed	Full-time	Part-time	ment rate (b)		
	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	12.5		
2010	0.79	2.65	1.65	13.64	15.59	3.86	11.73	24.7	3.13	16.29	2.44	13.0		
2011	0.76	2.60	1.40	13.66	15.39	3.87	11.52	25.1	3.03	15.92	2.50	13.6		
2012	0.74	2.48	1.16	13.24	14.57	3.41	11.16	23.4	3.06	15.08	2.55	14.5		
2013	0.74	2.36	1.03	13.02	14.07	3.26	10.81	23.1	3.07	14.43	2.71	15.8		
2014	0.74	2.38	0.99	13.23	14.29	3.43	10.86	24.0	3.06	14.59	2.76	15.9		
2015	0.74	2.48	1.07	13.57	14.77	3.71	11.06	25.1	3.09	15.05	2.81	15.7		
2016 (c)	0.77	2.49	1.05	13.85	15.06	3.82	11.24	25.4	3.10	15.35	2.82	15.5		
2014 I	I 0.74	2.36	0.98	13.28	14.32	3.43	10.89	24.0	3.04	14.51	2.84	16.4		
I	I 0.67	2.43	1.02	13.39	14.41	3.55	10.86	24.6	3.09	14.88	2.62	15.0		
IV	/ 0.73	2.44	1.03	13.37	14.48	3.51	10.97	24.2	3.09	14.75	2.82	16.1		
2015	I 0.72	2.44	1.06	13.24	14.39	3.40	11.00	23.6	3.06	14.62	2.84	16.3		
I	I 0.74	2.51	1.09	13.53	14.76	3.70	11.06	25.1	3.10	15.05	2.82	15.8		
I	I 0.71	2.52	1.08	13.74	14.95	3.91	11.04	26.2	3.10	15.30	2.75	15.2		
IV	/ 0.78	2.46	1.06	13.79	14.99	3.85	11.14	25.7	3.11	15.25	2.84	15.7		
2016	I 0.78	2.48	1.03	13.74	14.94	3.74	11.19	25.0	3.09	15.20	2.83	15.7		
I	I 0.76	2.50	1.08	13.97	15.19	3.91	11.28	25.7	3.11	15.50	2.80	15.3		

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 (d)		5.5	0.6	-2.1	3.5	3.3	7.7	1.9	1.0	0.7	3.5	-0.4	-0.5	
2014	III	-4.8	3.5	-0.5	1.8	2.0	4.6	1.3	0.6	-0.5	1.8	0.4	-0.2	
	IV	-6.2	4.2	4.0	2.6	2.8	5.3	2.0	0.6	1.4	2.6	2.4	0.0	
2015	I	-11.3	6.2	12.6	2.6	3.3	5.4	2.7	0.5	1.3	2.9	3.3	0.1	
	Ш	0.1	6.4	11.6	1.9	3.1	8.0	1.6	1.1	2.3	3.7	-0.9	-0.6	
	Ш	6.5	3.8	5.9	2.6	3.7	10.1	1.6	1.5	0.3	2.8	4.8	0.2	
	IV	7.0	1.0	2.7	3.2	3.5	9.5	1.6	1.4	0.6	3.4	0.8	-0.3	
2016	I	8.4	1.7	-2.7	3.8	3.8	10.1	1.8	1.4	1.1	4.0	-0.2	-0.6	
	Ш	2.7	-0.4	-1.4	3.2	2.9	5.5	2.0	0.6	0.3	3.0	-0.6	-0.5	
2016	1	8.4	1.7	-2.7	3.8	3.8	10.1	1.8	1.4	1.1	4.0	-0.2	-0.6	

(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 13b.1.- Employment by sector Annual percentage changes

Chart 13b.2.- Employment by type of contract



Index of Consumer Prices

Forecasts in blue

			Total excluding food and		Excluding unprocessed	I food and en	ergy	Upprocessed		
		Total	energy	Total	Non-energy industrial goods	Services	Processed food	food	Energy	Food
% of to in 201	otal 16	100.0	67.06	82.12	26.94	40.13	15.06	6.45	11.42	21.50
					Indexes, 2011 = 100					
2011		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2012		102.4	101.3	101.6	100.8	101.5	103.1	102.3	108.9	102.8
2013		103.9	102.4	103.0	101.4	102.9	106.2	105.9	108.9	106.1
2014		103.7	102.3	103.1	101.0	103.1	106.6	104.6	108.0	106.0
2015		103.2	102.9	103.7	101.3	103.8	107.6	106.4	98.3	107.3
2016		102.9	103.7	104.5	101.8	104.9	108.6	109.7	88.9	109.0
2017		104.3	104.6	105.5	102.1	106.1	110.1	112.8	91.7	110.9
				Ann	ual percentage chang	jes				
2011		3.2	1.3	1.7	0.6	1.8	3.8	1.8	15.7	3.2
2012		2.4	1.3	1.6	0.8	1.5	3.1	2.3	8.9	2.8
2013		1.4	1.1	1.4	0.6	1.4	3.1	3.6	0.0	3.2
2014		-0.2	0.0	0.0	-0.4	0.1	0.4	-1.2	-0.8	-0.1
2015		-0.5	0.5	0.6	0.3	0.7	0.9	1.8	-9.0	1.2
2016		-0.3	0.8	0.8	0.5	1.0	0.9	3.1	-9.5	1.6
2017		1.3	0.9	0.9	0.4	1.2	1.3	2.8	3.1	1.8
2016	Jan	-0.3	0.8	0.9	0.5	1.0	1.4	3.3	-10.3	1.9
	Feb	-0.8	1.0	1.0	0.5	1.3	1.3	0.8	-14.1	1.2
	Mar	-0.8	1.0	1.1	0.5	1.4	1.3	2.2	-14.8	1.5
	Apr	-1.1	0.7	0.7	0.5	0.8	1.2	3.2	-15.1	1.8
	May	-1.0	0.6	0.7	0.4	0.8	1.1	2.6	-14.0	1.6
	Jun	-0.8	0.6	0.6	0.3	0.7	1.0	2.3	-11.7	1.4
	Jul	-0.6	0.6	0.7	0.4	0.9	0.8	5.7	-12.0	2.3
	Aug	-0.1	0.9	0.9	0.7	1.1	0.7	3.7	-9.1	1.6
	Sep	0.4	0.9	0.8	0.6	1.1	0.6	3.7	-4.2	1.5
	Oct	0.4	0.9	0.8	0.4	1.2	0.5	2.3	-3.1	1.1
	Nov	0.4	0.9	0.8	0.3	1.2	0.5	3.2	-3.9	1.3
	Dec	0.7	0.8	0.8	0.4	1.2	0.6	4.0	-1.7	1.6
2017	Jan	1.5	0.9	0.9	0.5	1.2	0.8	3.3	4.9	1.5
	Feb	1.9	0.9	0.9	0.5	1.2	1.0	3.8	8.1	1.8
	Mar	1.6	0.7	0.8	0.5	0.9	1.0	3.9	6.3	1.9
	Apr	1.8	1.1	1.1	0.5	1.5	1.1	3.7	6.2	1.9
	May	1.4	0.9	1.0	0.4	1.2	1.2	3.2	3.9	1.8
	Jun	1.0	0.9	1.0	0.4	1.2	1.3	2.9	0.5	1.8
	Jul	1.1	0.9	1.0	0.5	1.2	1.5	1.3	1.5	1.4
	Aug	1.2	0.8	0.9	0.2	1.1	1.6	2.2	2.7	1.8
	Sep	1.0	0.8	1.0	0.3	1.2	1.6	2.4	0.5	1.8
	Oct	1.1	0.8	1.0	0.3	1.2	1.7	2.4	0.8	1.9
	Nov	1.1	0.8	1.0	0.3	1.2	1.7	2.4	0.9	1.9
	Dec	1.1	0.8	1.0	0.3	1.2	1.7	2.4	1.0	1.9
Sources:	INE a	nd Funcas (I	Forecasts).							





Table 15Other prices and costs indicators

			Industri p	al producer rices	Housi	ng prices				Wage increa-		
		GDP deflator (a)	Total	Excluding energy	Housing Price Index (INE)	M ² average price (M. Public Works)	Urban land prices (M. Public Works)	Total labour costs per worker	Wage costs per worker	Other cost per worker	Total labour costs per hour worked	wage increa- ses agreed in collective bargaining
		2010=100	201	10=100		2007=100			2000=10	00		
2009		99.8	96.4	98.2	91.9	93.2	85.8	142.3	139.2	151.8	150.0	
2010		100.0	100.0	100.0	90.1	89.6	74.8	142.8	140.4	150.2	151.5	
2011		100.0	106.9	104.2	83.4	84.6	69.8	144.5	141.9	152.5	154.8	
2012		100.1	111.0	105.9	72.0	77.2	65.4	143.6	141.1	151.3	154.7	
2013		100.6	111.7	106.7	64.3	72.7	55.1	143.8	141.1	152.1	155.2	
2014		100.2	110.2	105.9	64.5	71.0	52.6	143.3	140.9	150.7	155.5	
2015		100.9	107.9	106.2	66.8	71.7	54.9	144.2	142.5	149.6	156.5	
2016	(b)	101.0	103.1	105.5	69.3	72.9	56.6	140.3	137.3	149.7	147.5	
2014	IV	100.4	109.1	105.8	65.0	71.2	55.9	149.1	149.2	149.0	162.2	
2015	I	100.7	107.7	105.9	64.6	70.9	53.8	140.6	137.2	151.1	147.1	
	II	100.7	109.2	106.5	67.3	71.8	55.0	146.5	145.4	149.7	154.5	
	Ш	101.0	108.5	106.6	67.8	71.8	56.1	138.8	135.5	149.0	160.0	
	IV	101.1	106.1	105.7	67.7	72.5	54.5	151.0	151.7	148.6	164.4	
2016	I	100.7	102.3	105.2	68.7	72.6	56.6	140.3	137.3	149.7	147.5	
		101.2	103.4	105.6	69.9	73.3	56.6					
	III (b)		105.0	106.2								
2016	May		103.0	105.5								
	Jun		105.0	105.9								
	Jul		105.0	106.2								
					4	Annual percent	changes (c)					
2009		0.3	-3.4	-2.3	-6.7	-7.4	-5.8	3.5	3.2	4.3	5.1	2.3
2010		0.2	3.7	1.8	-2.0	-3.9	-12.8	0.4	0.0	-1.1	0.0	1.5
2011		0.0	6.9	4.2	-7.4	-5.6	-6.7	12	1.0	1.1	22	2.0
2012		0.0	3.8	1.7	-13.7	-8.7	-6.4	-0.6	-0.6	-0.8	-0.1	1.0
2013		0.6	0.6	0.7	-10.6	-5.8	-15.7	0.2	0.0	0.6	0.3	0.5
2014		-0.4	-1.3	-0.8	0.3	-2 4	-4.6	-0.3	-0.1	-1.0	0.2	0.5
2015		0.6	-2.1	0.3	3.6	1.1	13	0.6	1 1	-0.7	0.6	0.8
2016	(d)	0.3	-5.1	-0.8	5.0	2.4	4.0	-0.2	0.1	-0.9	0.3	1.1
2014	(u) IV	-0.1	-2.1	-0.1	1.8	-0.3	52	-0.5	-0.2	-1.5	-0.2	0.5
2015		0.6	_1.0	0.1	1.5	-0.1	5.9	0.5	1.4	-1.0	0.8	0.7
2013		0.0	-1.3	0.2	1.5	-0.1	4.7	0.0	0.6	-1.3	0.0	0.7
		0.0	-1.2	0.7	4.0	1.2	4.7	0.4	0.0	-0.2	-0.1	0.7
	111	0.7	-2.4	0.5	4.5	1.4	9.7	1.2	0.5	-0.5	-0.1	0.0
0040	10	0.0	-2.0	-0.1	4.2	1.0	-2.4	1.2	1.7	-0.3	1.4	0.0
2016		-0.2	-5.1	-0.7	6.3	2.4	5.3	-0.2	0.1	-0.9	0.3	1.1
	11	0.7	-5.4	-0.9	3.9	2.0	2.9					1.1
	III (e)		-4.6	-0.5								1.1
2016	May		-5.6	-1.0								1.1
	Jun		-4.5	-0.7								1.1
	Jul		-4.6	-0.5								1.1

(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 15.1.- Housing and Urban land prices Index (2007=100)

Table 16 External trade (a)

		Exports of goods			Imp	Imports of goods			Exports to	Total	Balance	Balance of	
		Nominal	Prices	Real	Nominal	Prices	Real	Exports to EU countries (monthly average)	non-EU countries (monthly average)	Balance of goods (monthly average)	of goods excluding energy (monthly average)	goods with EU countries (monthly average)	
		2	005=100		2	005=100		EUR Billions					
2010		120.5	103.4	116.6	103.0	100.9	102.2	10.5	5.0	-4.4	-1.5	-0.4	
2011		138.9	108.4	128.1	113.0	109.5	103.2	11.9	6.1	-4.0	-0.3	0.3	
2012		145.9	110.6	131.9	110.7	114.6	96.6	11.9	6.9	-2.7	1.2	1.0	
2013		152.1	110.4	137.7	108.3	109.8	98.7	12.3	7.3	-1.4	2.1	1.4	
2014		155.2	109.4	141.9	114.0	107.2	106.3	12.7	7.3	-2.1	1.1	0.9	
2015		163.0	110.0	148.1	118.6	104.5	113.5	13.5	7.3	-2.0	0.3	0.7	
2016	(b)	163.4	107.7	151.7	115.0	99.5	115.6	14.3	6.8	-1.3	0.3	1.2	
2014	III	158.8	109.4	145.2	116.1	108.1	107.3	12.9	7.4	-2.1	1.2	1.1	
	IV	158.7	109.8	144.6	114.1	107.9	105.8	12.8	7.6	-1.7	1.3	0.8	
2015	I.	158.1	110.0	143.7	115.3	104.6	110.2	13.2	7.0	-2.0	0.4	0.7	
	Ш	162.8	110.6	147.2	119.6	105.4	113.4	13.5	7.4	-2.3	0.2	0.7	
	III	163.9	109.4	149.8	120.2	104.4	115.1	13.5	7.5	-2.2	0.1	0.6	
	IV	164.9	109.9	150.1	118.0	103.9	113.6	13.7	7.4	-1.7	0.3	0.7	
2016	I	160.3	107.7	148.9	114.9	99.4	115.6	13.9	6.6	-1.7	-0.1	1.1	
	П	166.5	107.7	154.5	117.2	100.3	116.8	14.2	7.2	-1.3	0.3	1.0	
2016	Apr	166.7	107.2	155.4	115.7	99.7	116.1	14.3	7.0	-1.0	0.7	1.2	
	May	165.5	107.8	153.6	116.9	100.0	116.9	13.9	7.3	-1.4	0.2	0.7	
	Jun	167.3	108.3	154.5	119.0	101.3	117.5	14.3	7.2	-1.6	0.1	1.1	
				Percenta	ge change	es (c)			Percentage of			f GDP	
2010		16.8	1.6	15.0	16.5	4.6	11.3	14.3	22.5	-4.9	-1.7	-0.4	
2011		15.3	4.8	9.9	9.7	8.5	1.0	12.7	20.5	-4.5	-0.4	0.3	
2012		5.0	2.0	3.0	-2.0	4.7	-6.4	0.5	14.1	-3.1	1.4	1.2	
2013		4.2	-0.2	4.4	-2.2	-4.2	2.2	3.1	6.3	-1.6	2.5	1.7	
2014		2.0	-0.9	3.1	5.3	-2.4	7.7	3.5	-0.4	-2.4	1.3	1.0	
2015		4.3	0.6	3.7	3.7	-2.5	6.4	6.0	0.5	-2.2	0.3	0.8	
2016 ((d)	2.3	-2.4	4.8	-0.5	-4.9	4.6	5.7	-3.8				
2014		10.5	1.3	8.5	10.7	3.8	6.6	13.2	5.9	-2.4	1.3	1.3	
	IV	-0.2	1.4	-1.8	-6.8	-1.0	-5.5	-5.2	9.0	-1.9	1.4	0.9	
2015		-1.5	0.9	-2.4	4.2	-11.6	17.5	15.5	-25.9	-2.3	0.4	0.8	
		12.4	2.1	10.1	15.9	3.1	12.1	7.5	22.0	-2.5	0.3	0.8	
	111	2.7	-4.4	7.3	1.8	-3.9	0.1	-0.1	7.4	-2.4	0.1	0.7	
2016	IV	2.4	1.8	0.8	-0.9	-1.9	-5.1	8.0	-7.1	-1.8	0.3	0.7	
2010		-10.5	-1.1	-3.2 15.0	-10.0	-10.1	1.2	5.3	-35.Z	-1.8	-0.1	1.2	
2016	Apr	2.2	-0.3	2.4	0.2	2.0	4.2	1.0	4.6	-1.4	0.4	1.1	
2010	May	-0.7	-0.5	-1.2	-0.0	2.9	-3.4	-2.6	+.0				
	Jun	1.1	0.5	0.6	1.7	1.3	0.5	2.3	-1.2				

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



Chart 16.1.- External trade (real)





Balance of Payments (according to IMF manual)

(Net transactions)

			Cu	rrent acco	unt				Financial account						
							Capital	Current and	Fina	ancial accoun	t, excluding E	Bank of Sp	ain		Errors and
		Total	Goods	Services	Primary Income	Secondary Income	account	capital accounts	Total	Direct investment	Porfolio investment	Other invest- ment	Financial derivatives	Bank of Spain	omissions
		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 bi	illions						
2008		-103.25	-87.04	29.82	-30.49	-15.55	4.67	-98.58	-69.23	-1.53	0.96	-75.72	7.07	-30.22	-0.86
2009		-46.19	-41.47	29.54	-19.62	-14.64	3.33	-42.86	-40.70	1.94	-44.04	-4.66	6.05	-10.46	-8.31
2010		-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		15.57	-14.20	47.65	-4.75	-13.14	6.78	22.35	-81.94	-14.40	-34.53	-34.05	1.04	117.08	12.79
2014		10.24	-22.51	48.47	-4.16	-11.56	4.45	14.69	-5.56	9.36	-6.10	-9.93	1.11	26.66	6.42
2015		15.15	-22.32	48.02	-0.92	-9.63	5.97	21.12	73.59	22.85	7.77	44.37	-1.41	-40.16	12.30
2014	II	0.18	-5.14	12.08	-4.06	-2.70	1.68	1.86	-6.79	0.69	-28.64	22.32	-1.16	16.04	7.38
	III	5.22	-6.61	17.11	-3.29	-1.99	0.35	5.57	4.63	-7.62	33.44	-21.41	0.22	-2.76	-3.70
	IV	8.09	-5.09	10.81	4.87	-2.50	0.81	8.90	-22.20	11.10	-29.03	-5.51	1.23	25.87	-5.23
2015	I	-1.59	-4.31	8.41	-1.11	-4.58	0.82	-0.76	14.22	1.70	-1.09	14.41	-0.79	-14.79	0.19
	II	2.55	-5.35	12.16	-2.06	-2.19	2.20	4.75	17.98	14.55	5.06	-1.06	-0.57	-8.82	4.41
	III	6.00	-7.01	16.87	-2.69	-1.17	1.96	7.95	10.05	5.96	-0.85	5.02	-0.08	0.24	2.34
	IV	8.09	-5.61	10.42	4.97	-1.69	0.99	9.08	18.94	1.86	-2.44	19.34	0.18	-16.79	-6.93
2016	1	-1.14	-4.72	8.43	-0.46	-4.38	0.74	-0.40	4.27	4.72	12.00	-11.03	-1.42	-7.36	-2.69
			Good Ser	ds and vices	Prim Second	ary and ary Income									
2016	Apr	2.64	3	.16		0.52	0.04	2.67	0.60	-0.80	5.71	-4.45	0.14	10.17	8.10
	May	2.84	4	.27		1.43	0.28	3.12	35.27	0.53	11.70	23.36	-0.31	-36.34	-4.19
	Jun	2.00	3	.46	-	1.46	0.71	2.70	2.32	0.73	-5.97	7.48	0.07	-8.73	-9.11
							Pe	ercentag	je of GDP						
2008		-9.3	-7.8	2.7	-2.7	-1.4	0.4	-8.8	-6.2	-0.1	0.1	-6.8	0.6	-2.7	-0.1
2009		-4.3	-3.8	2.7	-1.8	-1.4	0.3	-4.0	-3.8	0.2	-4.1	-0.4	0.6	-1.0	-0.8
2010		-3.9	-4.4	3.1	-1.4	-1.2	0.5	-3.5	-2.5	-0.1	-2.6	1.0	-0.8	-1.5	-0.5
2011		-3.2	-4.2	4.0	-1.7	-1.3	0.4	-2.8	7.4	0.9	2.5	3.9	0.2	-10.2	0.0
2012		-0.2	-2.8	4.3	-0.7	-1.1	0.5	0.3	16.3	-2.0	5.3	13.9	-0.8	-16.2	-0.1
2013		1.5	-1.4	4.6	-0.5	-1.3	0.7	2.2	-7.9	-1.4	-3.3	-3.3	0.1	11.4	1.2
2014		1.0	-2.2	4.7	-0.4	-1.1	0.4	1.4	-0.5	0.9	-0.6	-1.0	0.1	2.6	0.6
2015		1.4	-2.1	4.4	-0.1	-0.9	0.6	2.0	6.8	2.1	0.7	4.1	-0.1	-3.7	1.1
2014	II	0.1	-1.9	4.6	-1.5	-1.0	0.6	0.7	-2.6	0.3	-10.8	8.4	-0.4	6.1	2.8
	III	2.0	-2.6	6.7	-1.3	-0.8	0.1	2.2	1.8	-3.0	13.0	-8.4	0.1	-1.1	-1.4
	IV	3.0	-1.9	4.0	1.8	-0.9	0.3	3.3	-8.2	4.1	-10.7	-2.0	0.5	9.6	-1.9
2015	I	-0.6	-1.7	3.3	-0.4	-1.8	0.3	-0.3	5.5	0.7	-0.4	5.6	-0.3	-5.7	0.1
	II	0.9	-1.9	4.4	-0.8	-0.8	0.8	1.7	6.5	5.3	1.8	-0.4	-0.2	-3.2	1.6
		2.2	-2.6	6.3	-1.0	-0.4	0.7	3.0	3.8	2.2	-0.3	1.9	0.0	0.1	0.9
	IV	2.9	-2.0	3.7	1.8	-0.6	0.4	3.2	6.7	0.7	-0.9	6.9	0.1	-6.0	-2.5
2016	I	-0.4	-1.8	3.2	-0.2	-1.6	0.3	-0.2	1.6	1.8	4.5	-4.1	-0.5	-2.8	-1.0
Sourc	e: Ba	nk of Spain													









Table 18 State and Social Security System budget

					State			Social Security System (b)						
		Nation	al account	ts basis		Revenue, cas	h basis (a)			Accr	rued income	penditure		
		Surplus or deficit	Revenue	Expenditure	Total	Direct taxes	Indirect taxes	Others	Surplus or deficit	Total	of which, social contributions	Total	of which, pensions	
		1=2-3	2	3	4=5+6+7	5	6	7	8=9-11	9	10	11	12	
					I	EUR billions	s, 12-mon	th cumu	lated					
2009		-99.7	134.0	233.6	162.5	87.5	55.7	19.3	8.8	123.7	107.3	114.9	92.0	
2010		-50.6	161.2	211.8	175.0	86.9	71.9	16.3	2.4	122.5	105.5	120.1	97.7	
2011		-32.0	168.1	200.1	177.0	89.6	71.2	16.1	-0.5	121.7	105.4	122.1	101.5	
2012		-44.1	173.0	217.1	215.4	96.2	71.6	47.7	-5.8	118.6	101.1	124.4	105.5	
2013		-45.4	169.7	215.1	191.1	94.0	73.7	23.3	-8.9	121.3	98.1	130.2	111.1	
2014		-40.2	174.3	214.5	205.9	95.6	78.2	32.1	-14.0	119.3	99.2	133.3	114.4	
2015		-30.0	181.0	211.0	217.5	97.8	82.7	37.0	-16.7	123.7	100.5	140.4	117.8	
2016	(c)	-29.8	94.2	124.0	118.0	48.6	53.6	15.8	-5.7	74.0	60.1	79.7	69.0	
2016	Мау	-31.4	177.1	208.6	208.2	94.5	84.1	29.7	-17.4	124.6	101.5	142.0	119.0	
	Jun	-29.7	177.8	207.5	208.1	93.9	84.5	29.7	-17.3	122.0	101.8	139.3	119.3	
	Jul	-34.9	174.1	209.0	209.6	94.7	85.1	29.8	-18.0	121.8	102.1	139.9	119.8	
	Annual percentage changes													
2009			-19.3	17.8	-13.9	-14.2	-21.2	20.4		-0.5	-1.3	4.7	5.9	
2010			20.3	-9.3	7.7	-0.7	29.1	-15.7		-1.0	-1.7	4.5	6.2	
2011			4.2	-5.6	1.1	3.1	-0.9	-0.8		-0.7	-0.1	1.7	3.9	
2012			3.0	8.5	21.7	7.3	0.5	195.9		-2.5	-4.0	1.9	3.9	
2013			-1.9	-0.9	-11.3	-2.2	3.0	-51.1		2.3	-3.0	4.6	5.3	
2014			2.7	-0.3	7.7	1.6	6.1	37.6		-1.6	1.1	2.4	3.0	
2015			3.8	-1.6	5.7	2.3	5.8	15.3		3.7	1.3	5.4	3.0	
2016	(d)		-6.9	-1.6	-6.3	-6.0	4.6	-31.3		-2.5	2.8	-0.7	3.0	
2016	Мау		1.1	-1.4	-1.4	1.4	5.8	-22.9		5.3	2.0	5.7	2.9	
	Jun		0.8	-2.0	-6.5	-4.7	1.8	-27.8		0.1	2.3	1.0	2.9	
	Jul		-2.5	-1.2	-3.6	-1.9	4.7	-24.6		-0.3	2.5	1.0	2.9	
					Per	centage of	GDP, 12-m	nonth cu	mulated					
2009		-9.2	12.4	21.7	15.1	8.1	5.2	1.8	0.8	11.5	9.9	10.6	8.5	
2010		-4.7	14.9	19.6	16.2	8.0	6.7	1.5	0.2	11.3	9.8	11.1	9.0	
2011		-3.0	15.7	18.7	16.5	8.4	6.7	1.5	0.0	11.4	9.8	11.4	9.5	
2012		-4.2	16.6	20.8	20.7	9.2	6.9	4.6	-0.6	11.4	9.7	11.9	10.1	
2013		-4.4	16.5	20.9	18.5	9.1	7.1	2.3	-0.9	11.8	9.5	12.6	10.8	
2014		-3.9	16.7	20.6	19.8	9.2	7.5	3.1	-1.3	11.5	9.5	12.8	11.0	
2015		-2.8	16.7	19.5	20.1	9.0	7.7	3.4	-1.5	11.4	9.3	13.0	10.9	
2016	May	-2.7	8.6	11.4	10.8	4.5	4.9	1.5	-0.5	6.8	5.5	7.3	6.3	
	Jun	-2.9	16.3	19.1	19.1	8.7	7.7	2.7	-1.6	11.4	9.3	13.0	10.9	
	Jul	-2.7	16.3	19.0	19.1	8.6	7.8	2.7	-1.6	11.2	9.3	12.8	10.9	

(a) Including the regional and local administrations share in direct and indirect taxes. (b) Not included unemployment benefits and wage guarantee fund (c) Cummulated since January. (d) Percent change over the same period of the previous year.

Sources: M. of Economy and M. of Labour.

140



Chart 18.2.- Social Security System: Revenue, expenditure and deficit EUR Billions, 12-month cumulated



Table 19Monetary and financial indicators

			Interest ra	ites (percent	tage rates)			Credit stock				
		10 year Bonds	Spread with German Bund (basis points)	Housing credit to households	Consumer credit to households	Credit to non-financial corporations (less than 1 million)	TOTAL	Government	Non- financial corporations	Households	Contribution of Spanish MFI to Eurozone M3	Stock market (IBEX-35)
			Averag	ge of perio	od data				End of p	period data	l	
2009		3.98	75.7	3.4	10.0	4.7	2,715.6	568.7	1,246.5	900.4		11,940.0
2010		4.25	150.8	2.6	8.1	4.3	2,788.5	649.3	1,244.0	895.2		9,859.1
2011		5.44	283.3	3.5	8.0	5.1	2,805.5	743.5	1,194.0	867.9		8,563.3
2012		5.85	435.1	3.4	8.6	5.6	2,821.3	890.7	1,099.7	830.9		8,167.5
2013		4.56	299.2	3.2	9.0	5.5	2,760.0	966.0	1,011.0	783.0		9,916.7
2014		2.72	156.0	3.1	8.9	4.9	2,724.8	1,033.7	942.5	748.5		10,279.5
2015		1.74	124.0	2.5	8.0	3.8	2,714.4	1,072.2	918.2	724.0		9,544.2
2016 (a)	1.47	132.6	2.4	7.8	3.3	2,734.5	1,107.3	900.9	718.2		8,716.8
2014	Ш	2.43	143.7	3.1	8.9	4.8	2,747.3	1,020.2	970.7	756.4		10,825.5
	IV	1.99	129.0	2.8	8.6	4.3	2,724.8	1,033.7	942.5	748.5		10,279.5
2015	I	1.43	112.3	2.6	8.1	4.2	2,743.6	1,051.8	951.4	740.4		11,521.1
	Ш	1.77	126.0	2.5	7.9	3.7	2,733.6	1,057.2	934.6	741.8		10,769.5
	Ш	2.03	132.5	2.5	8.1	3.7	2,723.9	1,067.3	927.8	728.8		9,559.9
	IV	1.71	118.4	2.4	7.8	3.5	2,714.4	1,072.2	918.2	724.0		9,544.2
2016	I	1.67	135.5	2.3	8.0	3.4	2,718.7	1,095.1	905.5	718.0		8,723.1
	Ш	1.52	139.9	2.3	7.6	3.2	2,734.5	1,107.3	901.6	725.6		8,163.3
2016	Jun	1.48	145.9	2.3	7.7	3.2	2,734.5	1,107.3	901.6	725.6		8,163.3
	Jul	1.17	125.6	2.6	8.0	3.3			900.9	718.2		8,587.2
	Aug	1.01	108.7									8,716.8
							Percenta	age change	from same	period pre	evious year	(b)
2009							4.1	29.3	-1.4	-0.3	-0.8	29.8
2010							3.4	14.2	0.7	0.2	-2.2	-17.4
2011							1.7	14.5	-2.0	-2.4	-1.6	-13.1
2012							1.3	19.8	-6.4	-3.8	0.1	-4.6
2013							-1.1	8.5	-5.9	-5.1	-4.4	21.4
2014							-0.2	7.0	-4.4	-3.6	3.4	3.7
2015							0.5	3.7	-0.8	-2.3	5.2	-7.2
2016 (a)						1.1	4.7	-0.7	-1.7	7.9	-15.0
2014	Ш						-0.8	6.2	-4.7	-4.1	0.5	-0.9
	IV						-0.2	7.0	-4.4	-3.6	3.4	-5.0
2015	I						0.2	5.6	-2.5	-3.2	4.5	12.1
	Ш						0.0	4.4	-2.5	-2.6	3.6	-6.5
	Ш						0.1	4.6	-2.6	-2.5	4.6	-11.2
	IV						0.5	3.7	-0.8	-2.3	5.2	-0.2
2016	I.						0.3	4.1	-2.1	-2.0	5.5	-8.6
	II						1.1	4.7	-0.7	-1.7	7.8	-6.4
2016	Jun						1.1	4.7	-0.7	-1.7	7.8	-9.6
	Jul								-1.2	-1.7	7.9	5.2
	Aug											1.5

(a) Period with available data. (b) Percent change from preceeding period.

Source: Bank of Spain.


Chart 19.2.- Credit stock growth Annual percentage change



Table 20 Competitiveness indicators in relation to EMU

		Relative Unit Labour Costs in industry (Spain/EMU)			Harmor	Harmonized Consumer Prices			Producer price	es	Real Effective Exchange	
		Relative productivity	Relative wages	Relative ULC	Spain	EMU	Spain/EMU	Spain	EMU	Spain/EMU	to developed countries	
			1998=100			2015=	100		2010=100		1999 I =100	
2009		108.3	97.8	110.8	92.2	91.8	100.4	96.2	97.0	99.2	114.0	
2010		107.4	94.4	113.8	94.1	93.3	100.9	100.0	100.0	100.0	112.8	
2011		106.4	94.9	112.1	96.9	95.8	101.2	106.5	105.2	101.2	113.1	
2012		105.2	95.2	110.4	99.3	98.2	101.1	110.1	107.9	102.0	111.6	
2013		103.5	93.1	111.1	100.8	99.5	101.3	110.0	107.4	102.4	113.4	
2014		102.3	93.2	109.7	100.6	99.8	100.8	108.4	105.8	102.4	112.4	
2015		100.9	92.8	108.8	100.0	100.0	100.0	106.8	104.0	102.7	109.0	
2016 (a)				102.7	101.1	101.5	99.1	99.9	99.2	108.2	
2014	III				109.3	106.0	103.0	100.3	100.0	100.4	111.7	
	IV				107.7	105.3	102.3	100.7	100.1	100.7	111.8	
2015	1				106.6	104.2	102.3	98.8	99.2	99.6	108.7	
	Ш				108.0	104.9	103.0	101.2	100.5	100.6	109.6	
	III				107.4	104.0	103.2	99.8	100.0	99.7	108.6	
	IV				105.2	102.8	102.4	100.3	100.2	100.0	109.0	
2016	1				101.9	100.8	101.1	98.0	99.2	98.8	107.7	
	Ш				102.8	101.2	101.6	100.1	100.4	99.7	109.1	
2016	May				100.2	100.5	99.7	102.5	101.2	101.3	108.2	
	Jun				100.6	100.7	99.9	104.2	101.8	102.4	109.0	
	Jul				99.3	100.1	99.1	104.3	101.9	102.4	109.0	

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		Annua	l percentage	e changes			Differential	Annual ch	percentage anges	Differential	percentage changes	
2009		-2.4	7.1	-8.9	-0.2	0.3	-0.5	-3.3	-4.5	1.2	-0.4	
2010		-1.4	-7.2	6.3	2.0	1.6	0.4	3.9	3.1	0.9	-1.0	
2011		-0.8	-2.2	1.4	3.0	2.7	0.3	6.5	5.2	1.3	0.2	
2012		-2.4	0.4	-2.8	2.4	2.5	-0.1	3.4	2.6	0.8	-1.3	
2013		-1.6	1.3	-2.9	1.5	1.3	0.2	-0.1	-0.4	0.4	1.5	
2014		-0.5	1.0	-1.5	-0.2	0.3	-0.5	-1.5	-1.5	0.0	-0.9	
2015		-0.5	1.0	-1.5	-0.6	0.2	-0.8	-1.5	-1.7	0.3	-3.0	
2016 (b)				-4.5	-3.3	-1.2	-0.9	0.0	-0.9	-0.6	
2014	Ш				-0.9	-1.2	0.3	-0.4	0.4	-0.7	-1.4	
	IV				-1.7	-1.5	-0.2	-0.6	0.2	-0.8	-1.9	
2015	I.				-1.3	-2.1	0.9	-1.1	-0.3	-0.8	-3.4	
	Ш				-0.6	-1.2	0.6	-0.3	0.2	-0.5	-3.3	
	Ш				-1.7	-1.9	0.2	-0.6	0.1	-0.7	-2.8	
	IV				-2.3	-2.4	0.1	-0.5	0.2	-0.6	-2.6	
2016	I.				-4.4	-3.2	-1.1	-0.8	0.0	-0.8	-1.0	
	П				-4.8	-3.5	-1.3	-1.0	-0.1	-1.0	-0.5	
2016	May				-1.1	-0.1	-1.0	-4.9	-3.5	-1.4	-0.6	
	Jun				-0.9	0.1	-0.9	-4.1	-3.0	-1.1	-0.8	
	Jul				-0.7	0.2	-0.8	-4.1	-2.8	-1.4	-0.1	

(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 20.1.- Relative Unit Labour Costs in industry (Spain/EMU) 1998=100





Table 21a

Imbalances: International comparison (I)

In blue: European Commission Forecasts

	Governme	ent net lendi	ng (+) or bor	rowing (-)		Government gross debt				Current Account Balance of Payments (National Accounts)			
	Spain	EU-15	USA	UK	Spain	EU-15	USA	UK	Spain	EU-15	USA	UK	
					Billions	of national	currency						
2005	11.2	-269.0	-542.8	-47.0	393.5	6,844.6	8,496.5	552.0	-70.3	44.4	-737.7	-16.6	
2006	22.1	-171.7	-410.6	-40.9	392.2	7,057.0	8,817.8	597.1	-90.7	27.6	-802.2	-32.3	
2007	21.6	-100.3	-512.5	-44.3	383.8	7,134.7	9,267.3	646.2	-104.1	25.6	-718.1	-37.3	
2008	-49.4	-284.3	-1030.1	-76.2	439.8	7,570.7	10,720.2	786.3	-102.9	-80.7	-691.6	-55.2	
2009	-118.2	-755.9	-1824.2	-159.2	568.7	8,531.5	12,405.1	975.5	-46.5	13.9	-381.9	-45.2	
2010	-101.4	-759.3	-1793.9	-150.0	649.3	9,581.6	14,175.8	1,190.9	-42.0	33.8	-445.9	-43.5	
2011	-102.9	-548.0	-1644.6	-124.0	743.5	10,258.0	15,362.2	1,324.2	-35.3	72.5	-481.5	-27.4	
2012	-108.9	-535.0	-1424.2	-137.5	890.7	10,891.7	16,557.3	1,420.7	-4.6	160.6	-468.2	-54.7	
2013	-71.2	-409.5	-881.9	-97.5	966.0	11,241.0	17,459.9	1,495.9	15.2	195.7	-395.8	-77.9	
2014	-61.3	-385.1	-842.2	-102.2	1,033.7	11,786.7	18,178.6	1,602.2	10.3	223.1	-401.1	-92.5	
2015	-55.0	-330.0	-724.8	-82.2	1,072.2	12,115.5	18,992.0	1,663.0	15.1	282.1	-604.6	-96.2	
2016	-44.1	-292.2	-824.7	-65.2	1,122.7	12,227.2	20,016.7	1,729.9	17.3	321.1	-515.5	-93.8	
2017	-35.7	-244.9	-859.2	-48.3	1,158.4	12,474.3	20,945.9	1,789.4	15.6	331.8	-612.7	-87.4	
					Per	centage of	GDP						
2005	1.2	-2.5	-4.1	-3.5	42.3	63.4	64.9	41.5	-7.6	0.4	-5.6	-1.2	
2006	2.2	-1.5	-3.0	-2.9	38.9	62.0	63.6	42.4	-9.0	0.2	-5.8	-2.3	
2007	2.0	-0.8	-3.5	-3.0	35.5	59.6	64.0	43.5	-9.6	0.2	-5.0	-2.5	
2008	-4.4	-2.4	-7.0	-5.0	39.4	63.4	72.8	51.7	-9.2	-0.7	-4.7	-3.6	
2009	-11.0	-6.7	-12.7	-10.7	52.7	75.4	86.0	65.7	-4.3	0.1	-2.6	-3.0	
2010	-9.4	-6.4	-12.0	-9.6	60.1	81.4	94.7	76.6	-3.9	0.3	-3.0	-2.8	
2011	-9.6	-4.5	-10.6	-7.7	69.5	84.7	99.0	81.8	-3.3	0.6	-3.1	-1.7	
2012	-10.4	-4.3	-8.8	-8.3	85.4	88.2	102.5	85.3	-0.4	1.3	-2.9	-3.3	
2013	-6.9	-3.3	-5.3	-5.6	93.7	90.3	104.8	86.2	1.5	1.6	-2.4	-4.5	
2014	-5.9	-3.0	-4.9	-5.6	99.3	91.8	104.8	88.2	1.0	1.7	-2.3	-5.1	
2015	-5.1	-2.5	-4.0	-4.4	99.2	90.0	105.9	89.2	1.4	2.1	-3.4	-5.2	
2016	-3.9	-2.1	-4.4	-3.4	100.3	89.5	107.5	89.7	1.5	2.4	-2.8	-4.9	
2017	-3.1	-1.7	-4.4	-2.4	99.6	88.5	107.6	89.1	1.3	2.4	-3.1	-4.4	

Source: European Commission Forecasts, Spring 2016.



(f) European Commission forecast.

Table 21b Imbalances: International comparison (II)

		Househo	ld debt (a)		Non-financial corporations debt (a)				Financial corporations debt (a)			
	Spain	EMU-18	USA	UK	Spain	EMU-18	USA	UK	Spain	EMU-18	USA	UK
					Billions	of nationa	l currenc	y				
2005	653.5	4,753.2	11,953.5	1,189.8	925.0	6,899.3	8,152.0	1,102.9	541.5	8,453.0	13,705.8	2,381.7
2006	780.7	5,175.4	13,233.4	1,310.9	1,158.8	7,534.7	8,970.3	1,201.6	771.2	9,521.2	15,094.1	2,619.8
2007	876.6	5,541.3	14,151.3	1,426.4	1,344.5	8,330.9	10,091.3	1,281.6	1,000.0	10,777.7	17,276.2	3,128.7
2008	914.0	5,752.6	14,009.0	1,477.0	1,422.6	8,937.5	10,683.2	1,476.9	1,068.0	11,906.2	17,994.7	3,617.5
2009	906.2	5,861.0	13,765.3	1,473.8	1,406.1	8,996.8	10,146.1	1,414.2	1,147.5	12,358.3	16,545.6	3,599.5
2010	902.5	6,002.1	13,514.6	1,476.9	1,429.4	9,101.2	9,993.6	1,379.5	1,141.4	12,605.7	15,331.1	3,736.5
2011	875.2	6,086.1	13,305.2	1,486.7	1,415.7	9,422.1	12,265.3	1,408.1	1,153.8	13,482.8	14,916.4	3,661.6
2012	838.2	6,080.2	13,356.7	1,509.2	1,310.4	9,573.1	10,786.2	1,481.4	1,182.1	14,047.0	14,705.3	3,776.6
2013	790.8	6,035.1	13,501.9	1,525.5	1,235.3	9,583.3	11,281.1	1,454.1	992.9	13,045.0	14,895.6	3,679.2
2014	754.9	6,041.1	13,880.4	1,565.8	1,173.7	9,680.6	11,969.2	1,414.1	922.0	13,569.5	15,201.7	3,605.5
2015	729.4		14,230.1	1,625.3	1,132.9		12,778.3	1,388.6	836.5		15,247.0	3,329.0
					Per	centage of	GDP					
2005	70.2	56.2	91.3	89.4	99.4	81.6	62.3	82.9	58.2	99.9	104.7	179.0
2006	77.5	58.1	95.5	93.2	115.0	84.6	64.7	85.4	76.5	106.9	108.9	186.2
2007	81.1	58.9	97.7	96.1	124.4	88.6	69.7	86.3	92.5	114.6	119.3	210.8
2008	81.9	59.7	95.2	97.2	127.5	92.8	72.6	97.2	95.7	123.6	122.3	238.1
2009	84.0	63.1	95.5	99.2	130.3	96.9	70.4	95.2	106.3	133.1	114.8	242.3
2010	83.5	62.9	90.3	94.9	132.2	95.4	66.8	88.7	105.6	132.1	102.5	240.2
2011	81.8	62.1	85.7	91.8	132.3	96.2	79.0	87.0	107.8	137.6	96.1	226.1
2012	80.4	61.8	82.7	90.6	125.6	97.3	66.8	89.0	113.4	142.8	91.0	226.8
2013	76.7	60.8	81.0	87.9	119.8	96.5	67.7	83.8	96.3	131.3	89.4	212.1
2014	72.5	59.8	80.0	86.2	112.7	95.8	69.0	77.8	88.6	134.3	87.6	198.4
2015	67.5		79.3	87.2	104.8		71.2	74.5	77.4		85.0	178.5

(a) Loans and securities other than shares, excluding financial derivatives.

Sources: Eurostat and Federal Reserve.



KEY FACTS: 50 FINANCIAL SYSTEM INDICATORS – FUNCAS

Updated: September 15th, 2016

Highlights										
Indicator	Last value available	Corresponding to:								
Bank lending to other resident sectors (monthly average % var.)	1.2	June 2016								
Other resident sectors' deposits in credit institutions (monthly average % var.)	0.5	June 2016								
Doubtful loans (monthly % var.)	-3.0	June 2016								
Recourse to the Eurosystem (Eurozone financial institutions, million euros)	178,082	August 2016								
Recourse to the Eurosystem (Spanish financial institutions, million euros)	135,501	August 2016								
Recourse to the Eurosystem (Spanish financial institutions million euros)- Main L/T refinancing operations	1,279	August 2016								
Operating expenses/gross operating income ratio (%)	52.44	March 16								
Customer deposits/employees ratio (thousand euros)	5,683.37	March 16								
Customer deposits/branches ratio (thousand euros)	36,521.43	March 16								
Branches/institutions ratio	235.00	March 16								

A. Money and interest rates

Indicator	Source:	Average 2000-2013	2014	2015	2016 August	2016 September 15 th	Definition and calculation
1. Monetary Supply (% chg.)	ECB	5.6	3.8	4.7	-	-	M3 aggregate change (non-stationary)
2. Three-month interbank interest rate	Bank of Spain	2.49	0.21	-0.02	-0.299	-0.303	Daily data average
3. One-year Euribor interest rate (from 1994)	Bank of Spain	2.76	0.48	0.17	-0.052	-0.054	End-of-month data
4. Ten-year Treasury bonds interest rate (from 1998)	Bank of Spain	4.6	2.7	1.7	1.1	1.1	Market interest rate (not exclusively between account holders)
5. Corporate bonds average interest rate	Bank of Spain	4.5	2.3	2.2	1.7	-	End-of-month straight bonds average interest rate (> 2 years) in the AIAF market

Comment on "Money and Interest Rates:" The 3-month interbank rate has fallen to -0.303% (from -0.299%) and the 1-year Euribor to -0.054%((from -0.052%) in September. The ECB has not announced any further monetary policy measures but it has anticipated some further actions could be adopted in December. As for the Spanish 10-year bond yield, it has remained at 1.1%.

Funcas

B. Financial markets

Indicator	Source:	Average 2000-2013	2014	2015	2016 June	2016 July	Definition and calculation
6. Outright spot treasury bills transactions trade ratio	Bank of Spain	34.6	75.6	75.5	113.01	82.95	(Traded amount/ outstanding balance) x100 in the market (not exclusively between account holders)
7. Outright spot governmen bonds transactions trade ratio	t Bank of Spain	77.7	73.2	65.3	63.24	58.49	(Traded amount/ outstanding balance) x100 in the market (not exclusively between account holders)
8. Outright forward treasury bills transactions trade ratio	Bank of Spain	0.9	2.6	1.3	0.34	0.46	(Traded amount/ outstanding balance) x100 in the market (not exclusively between account holders)
9. Outright forward government bonds transactions trade ratio	Bank of Spain	4.5	4.6	3.4	2.03	1.08	(Traded amount/ outstanding balance) in the market (not exclusively between account holders)
10. Three-month maturity treasury bills interest rate	Bank of Spain	2.3	0.1	0.1	-0.02	-0.00	Outright transactions in the market (not exclusively between account holders)
11. Government bonds yield index (Dec1987=100)	Bank of Spain	603.2	1,037.9	1,058.2	1,110.7	1,142.0	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	0.6	0.5	-7.9	5.4	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	3.7	7.0	-0.2	36.2	-24.0	Stock market trading volume. Stock trading volume: change in total trading volume
14. Madrid Stock Exchange general index (Dec1985=100)	Bank of Spain and Madrid Stock Exchange	1,026.8	1,042.5	965.1	820.9	877.4 ^(a)	Base 1985=100
15. lbex-35 (Dec1989=3000)	Bank of Spain and Madrid Stock Exchange	9,767.1	10,528.8	10,647.2	8,163.3	8,720.5 ^(a)	Base dec1989=3000
16. Madrid Stock Exchange PER ratio (share value/ profitability)	Bank of Spain and Madrid Stock Exchange	16.2	26.1	15.4	18.2	21.6 ^(a)	Madrid Stock Exchange Ratio "share value/ capital profitability"

B. Financial markets (continued)

Indicator	Source:	Average 2000-2013	2014	2015	2016 June	2016 July	Definition and calculation
17. Long-term bonds. Stock trading volume (% chg.)	Bank of Spain and Madrid Stock Exchange	4.2	7.4	21.3	117.9	32.0	Variation for all stocks
18. Commercial paper. Trading balance (% chg.)	Bank of Spain and AIAF	2.0	-1.3	-0.2	3.8	-0.9	AIAF fixed-income market
19. Commercial paper. Three-month interest rate	Bank of Spain and AIAF	2.7	0.6	0.1	0.1	-	AIAF fixed-income market
20. IBEX-35 financial futures concluded transactions (% chg.)	Bank of Spain	1.3	4.3	1.3	32.5	-20.7	IBEX-35 shares concluded transactions
21. IBEX-35 financial options concluded transactions (% chg.)	Bank of Spain	8.6	6.4	17.7	111.2	-55.3	IBEX-35 shares concluded transactions

(a) Last data published: September 15th, 2016.

Comment on "Financial Markets:" During July, there was a decrease in transactions with outright spot T-bills and of spot government bonds transactions, which stood at 82.9% and 58.5%, respectively. The stock market has recovered to some extent, although volatility is still high, with the IBEX-35 up to 8,721 points, and the General Index of the Madrid Stock Exchange to 877. Additionally, there was a decrease of 20.7% in financial IBEX-35 futures transactions and also a fall of 55.3% in transactions with IBEX-35 financial options.

C. Financial Savings and Debt

Indicator	Source:	Average 2007-2012	2013	2014	2015 Q 4	2016 Q 1	Definition and calculation
22. Net Financial Savings/GDP (National Economy)	Bank of Spain	-5.3	2.1	1.0	2.2	2.1	Difference between financial assets and financial liabilities flows over GDP
23. Net Financial Savings/GDP (Households and non- profit institutions)	Bank of Spain	0.7	3.7	3.1	3.6	3.4	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	276.4	315.4	319.1	302.4	301.9	Public debt, non- financial companies debt and households and non-profit institutions debt over GDP

153

C. Financial Savings and Debt (continued)

Indicator	Source:	Average 2007-2012	2013	2014	2015 Q 4	2016 Q 1	Definition and calculation
25. Debt in securities (other than shares) and loans/GDP (Households and non-profit institutions)	Bank of Spain	82.1	76.7	72.4	67.5	66.4	Households and non- profit institutions debt over GDP
26. Households and non-profit institutions balance: financial assets (quarterly average % chg.)	Bank of Spain	1.9	6.8	4.8	2.3	-1.7	Total assets percentage change (financial balance)
27. Households and non-profit institutions balance: financial liabilities (quarterly average % chg.)	Bank of Spain	3.5	-5.3	-3.8	-0.6	-1.0	Total liabilities percentage change (financial balance)

Comment on "Financial Savings and Debt." During 2016Q1, there was a decrease in financial savings to GDP in the overall economy that reached 2.1% of GDP. There was also a fall in the financial savings rate of households from 3.6% in 2015Q4 to 3.4% in 2016Q1. The debt to GDP ratio fell from 67.5% to 66.4% in the same period. Finally, the stock of financial assets on households' balance sheets registered a decrease of 1.7%, and there was a 1% decrease in the stock of financial liabilities.

D. Credit institutions. Business Development

Indicator	Source:	Average 2000-2013	2014	2015	2016 May	2016 June	Definition and calculation
28. Bank lending to other resident sectors (monthly average % var.)	Bank of Spain	9.1	-4.6	-4.0	-0.6	1.2	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	9.0	-1.5	-0.1	0.5	0.5	Deposits percentage change for the sum of banks, savings banks and credit unions
30. Debt securities (monthly average % var.)	Bank of Spain	10.1	1.2	-15.2	-1.2	-1.0	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	14.1	-6.8	-6.0	0.7	-0.5	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	-1.7	-5.9	-5.2	-5.3	-5.4	Difference between the asset-side and liability-side "Credit System" item as a proxy of the net position in the interbank market (month-end)

Vol. 5, N.º 5 (September 2016)

154

D. Credit institutions. Bu	isiness Dev	velopment (c	ontinue	d)			
Indicator	Source:	Average 2000-2013	2014	2015	2016 May	2016 June	Definition and calculation
33. Doubtful loans (monthly average % var.)	/Bank of Spain	40.5	-12.7	-22.4	-1.3	-3.0	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	-0.8	-6.1	-30.8	0.8	14.7	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	11.1	-1.1	-1.8	-0.5	2.1	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 June 2016 show an increase in bank credit to the private sector of 1.2%. Data also show an increase in financial institutions' deposit-taking of 0.5%. Holdings of debt securities fell by 1%, while shares and equity decreased 0.5%. Also, doubtful loans decreased 3% compared to the previous month.

E. Credit institutions. Market Structure and Eurosystem Refinancing

Indicator	Source:	Average 2000-2012	2013	2014	2015 December	2016 March	Definition and calculation
36. Number of Spanish credit institutions	Bank of Spain	205	155	138	135	131	Total number of banks, savings banks and credit unions operating in Spanish territory
37. Number of foreigr credit institutions operating in Spain	¹ Bank of Spain	71	86	86	82	81	Total number of foreign credit institutions operating in Spanish territory
38. Number of employees	Bank of Spain	248,277	212,998	203,305	202,954	202,954	Total number of employees in the banking sector
39. Number of branches	Bank of Spain	41,093	33,527	31,999	30,921	30,627	Total number of branches in the banking sector
40. Recourse to the Eurosystem (total Eurozone financial institutions) (Euro millions)	Bank of Spain	412,563	665,849	506,285	354,833	178,082 ^(a)	Open market operations and ECB standing facilities. Eurozone total
41. Recourse to the Eurosystem (total Spanish financial institutions) (Euro millions)	Bank of Spain	59,960	201,865	141,338	132,934	135,501 ^(a)	Open market operations and ECB standing facilities. Spain total

Funcas

E. Credit institutions. Market Structure and Eurosystem Refinancing (continued) 2016 2015 Definition Average Indicator Source: 2013 2014 2000-2012 and calculation December March 42. Recourse to the Eurosystem (total Spanish financial Open market operations: Bank of 1,279^(a) institutions): main 22,425 19,833 21,115 10,515 main long term refinancing Spain long term refinancing operations. Spain total operations (Euro millions)

(a) Last data published: August 2016.

Comment on "Credit institutions. Market Structure and Eurosystem Refinancing:" In August 2016, recourse to Eurosystem funding by Spanish credit institutions reached 135.5 billion euro. There has been a 1.36 billion euro decrease in the recourse to the Eurosystem by Spanish banks from July.

MEMO ITEM: From January 2015, the ECB also offers information on the asset purchase program. The amount borrowed by Spanish banks in these programs reached 179.4 billion euro in August and 1.33 trillion euro for the entire Eurozone banking system.

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

Indicator	Source:	Average 2000-2012	2013	2014	2015 December	2016 March	Definition and calculation
43. "Operating expenses/gross operating income' ratio	Bank " of Spain	52.13	48.25	47.27	50.98	52.44	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	3,238.13	5,426,09	5,892.09	5,595.62	5,683.37	Productivity indicator (business by employee)
45. "Customer deposits/ branches" ratio (Euro thousands)	Bank of Spain	19,527.14	34,472.09	40,119.97	36,791.09	36,521.43	Productivity indicator (business by branch)
46. "Branches/ institutions" ratio	Bank of Spain	202.10	216.30	142.85	229.04	235.00	Network expansion indicator
47. "Employees/ branches" ratio	Bank of Spain	6.0	6.35	6.8	6.57	6.43	Branch size indicator
48. Equity capital (monthly average % var.)	Bank of Spain	0.10	0.16	0.07	0.28	0.14	Credit institutions equity capital variation indicator
49. ROA	Bank of Spain	0.51	0.13	0.49	0.42	0.39	Profitability indicator, defined as the "pre-tax profit/average total assets"
50. ROE	Bank of Spain	7.26	1.88	6.46	5.62	4.79	Profitability indicator, defined as the "pre-tax profit/equity capital"

Comment on "Credit institutions. Efficiency and Productivity, Risk and Profitability:" In March 2016, 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.

156

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