Spanish Economic and Financial Outlook

Spain´s recovery in the context of heightened global uncertainty

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FEATURES

Letter from the Editors

Since the publication of the latest edition of *Spanish Economic and Financial Outlook (SEFO)* last May, two landmark events have taken place. Domestically, Spain´s follow-up, general elections on June 26th should bring increased political stability to the Spanish economy and financial sector. Internationally, the result of the United Kingdom´s referendum to leave the EU has significantly increased the climate of global uncertainty. In addition to Brexit, the global economic context has deteriorated as a result of renewed turbulence in European banking systems, driven by concerns over the soundness of Italian banks, together with general doubts regarding the ability of the EU to stimulate growth and create jobs. Moreover, there has been a weakening of economic growth in emerging economies, notably China and Latin America.

The global economy should, however, avoid a new recession, thanks in part to the support of the ECB´s expansionary monetary policy. In this context, Spain´s economic recovery is outperforming expectations and economic growth should remain relatively strong until the end of the year. Nevertheless, although the electoral period may be over, the deterioration in global conditions, together with the possible end of low oil prices, means risks to projections are on the downside.

On the subject of growth, this *SEFO* looks at the relationship between economic growth and job creation in Spain. Recent evidence suggests that the Spanish economy can create jobs at a lower rate of economic growth than in the past, as a result of structural reforms undertaken in recent years, in particular the labour market reform of 2012, which seem to have made the Spanish economy more flexible and competitive. However, the lower growth threshold for job creation depends on sustaining wage restraint.

Apart from Spain´s economic outlook, this month´s *SEFO* looks at the recent performance of the country´s financial sector, as regards solvency indicators in a European context, and explores the evolution of access to bank finance for enterprises across the EU. In line with the general trend in Europe over recent months, Spanish banks have rapidly increased their solvency, bringing levels in line with the European average. The Common Equity Tier 1 (CET1) ratio has risen to over 12%, close to the 13% euro area average. This has been boosted by two additional factors: transparency, enabling balance sheet quality to be calibrated with relative certainty; and, cost rationalisation, making it possible for Spanish banks to hold on to their advantage in profitability and efficiency relative to the euro area average. Despite the persistence of negative interest rates and deterioration in the global scenario described above, Spanish banks' solvency is not a cause for concern, either in isolation or from a comparative standpoint with Europe as a whole.

According to the ECB´s latest survey data, published in June 2016, Spanish SMEs´

access to bank credit has progressively improved. Access to finance is no longer a major problem for Spanish SMEs and availability of bank loans and some conditions, such as interest rates and loan/credit size, have also improved (albeit collateral requirements and fees appear to be on the rise). If progress continues to be made towards European Banking Union, the economic recovery consolidates, and the ECB's liquidity support and monetary measures are effective, euro area enterprises' conditions of access to bank credit should continue to improve.

We then assess the issue of leverage within the Spanish economy: first, taking stock of the strong deleveraging effort by households and firms; and, second, looking at the evolution of Spain´s public debt and the implications of an elevated debt stock for economic growth. Spanish households and firms have made a considerable deleveraging effort since the beginning of the crisis. Spanish household leverage has fallen from 135% of their Gross Disposable Income (GDI) in Q208 to 106% at year-end 2015, although still above the Eurozone average. Corporate deleveraging has come down over the past three and a half years by 28% of GDP and currently stands below Eurozone levels. Conversely, public debt closed 2015 at 99.2%, which means the leverage ratio for the resident sectors as a whole remains a source of vulnerability for the Spanish economy. In fact, lessons from Spanish history teach us that there is a correlation between increased public debt and a reduction in growth prospects, and that this correlation has strengthened in more recent years. These lessons are particularly important for policy makers to bear in mind when assessing public debt sustainability and when pursuing fiscal consolidation objectives.

In this issue, we also take a look at a relatively new investment vehicle that is supporting the recovery of the real estate sector – the SOCIMI. Only several years in existence, Spain´s listed real estate investment vehicles, known as SOCIMI, are generating a lot of attention and channelling significant sums of both local and foreign investment into Spain´s real estate market. There are currently 19 SOCIMI listed on Spain´s stock markets. Between them, they boast a market capitalisation of over 7 billion euros and total assets of more than 9 billion euros. Based on 2015 figures, two-thirds of the increase in the real estate sector's market cap since the lows of May 2012 is attributable to SOCIMI. Although it is still too soon to draw conclusions regarding SOCIMI's real merit in reactivating the Spanish real estate market, the momentum in these entities' share prices, their substantial market caps and their recent investments in rental properties suggest that SOCIMI's investors are expecting their properties to revalue – mirroring the trend in the sectors of the economy underpinning the recovery underway.

We then discuss developments in the process of integration of European production chains where we find that, overall, EU integration has led to an intensification of international fragmentation strategies of production and the formation of transnational networks. Germany plays a central role in this process, and there has been increased fragmentation of production towards the southern peripheral economies, such as

Spain and Portugal, and more recently towards the eastern periphery.

Finally, we close with an assessment of the role of the social economy in Spain during the crisis. Specifically, we demonstrate how the resilience of Spain´s social economy, which currently accounts for 10% of the country´s GDP, has played a noteworthy role in mitigating some of the negative impacts of the crisis on society, highlighting its countercyclical characteristics.

The Spanish economy's recovery in a weakened international context

Raymond Torres and María Jesús Fernández[1]

Spain´s economic recovery is outperforming expectations and economic growth should remain relatively strong until the end of the year. However, the deterioration in the outlook for the global economy, renewed turbulence in European financial markets and the end of temporary positive shocks that had nurtured the recovery may lead to a significant slowdown in 2017.

The global economic context has deteriorated as a result of the outcome of the referendum on EU membership of the United Kingdom, uncertainties in European banking systems, concerns regarding the ability of the EU to stimulate growth and create jobs and a weakening of economic growth in emerging economies, notably China and Latin America. Moreover, the period of low and declining oil prices, which had sustained real incomes in earlier years, may have come to an end. Though the electoral period may be over, the risks over the projection period are on the downside.

International context

The slowdown in the emerging economies, the turbulence affecting financial markets, in Europe in particular, and slower growth in export markets have led to a weakening of the global economy.

China's transition towards an economic model less dependent on exports has run into fresh difficulties. The volume of bad debt is weighing down banks' balance sheets and hindering investment growth, consumption, and the creation of business aimed at meeting domestic demand. The result is slower growth in Chinese imports, particularly affecting other Asian economies, such as Japan and South Korea.

Natural resource exporting countries have suffered serious adjustments due to international price trends. Latin America has entered a period of sluggish growth, which in Brazil's case has translated into one of the deepest recessions in its recent history. Russia, the Arab countries and Sub-Saharan Africa's oil and gas producers have seen their economies slow sharply. The oil price has risen in recent months as a result of supply problems in a number of producer countries. Geopolitical risks in North Africa and the Middle East remain high, diverting tourism towards more stable countries, such as Spain.

In the first quarter of 2016, the U.S. economy grew by 1.1% a year, three tenths less than in

[1] Economic Trends and Statistics Department, Funcas.

the previous quarter. Nevertheless, according to the data for June, employment grew strongly, maintaining the unemployment rate below 5%, stimulating labour market participation and raising wages. The Federal Reserve is now expected to start gradually tightening monetary conditions over the next few months.

For its part, the euro-area economy is facing fresh turbulence, with high unemployment and a continuing risk of deflation. Growth in the first quarter came to 0.6%. Nevertheless, there have been signs of weakness in industrial activity. The United Kingdom's exit from the European Union (so-called Brexit) has created a climate of greater uncertainty. In Italy, there are further concerns about the solidity of the banking system in light of the high non-performing loan rate and difficulty capitalizing the worst-affected institutions.

Against this backdrop, the IMF anticipates stagnation of growth in the euro area at around 1.7% and inflation a long way below the 2% target. This would justify the ECB's maintaining its current accommodative policy, with negative interest rates and purchases of public and private bonds worth up to 80 billion euros a month (TLTRO II).

The Spanish economy is facing a more uncertain international context, clouded by the prospect of lengthy EU-UK negotiations, fresh bouts of turbulence in European financial markets, and EM weakness.

In short, the Spanish economy is facing a more uncertain international context, clouded by the prospect of lengthy negotiations between the EU and the United Kingdom, fresh bouts of turbulence in European financial markets, and the weakness of the emerging economies. Export markets will face slower growth and oil prices will rise. Nevertheless, the global economy should avoid a new recession, and the monetary conditions created by the ECB should help partially offset this turbulence.

Recent developments in the Spanish economy

Spain's GDP grew by 0.8% in the first quarter of 2016, the same rate as in the previous quarter. In annualised terms, this growth was equivalent to 3.1 % (all quarter-on-quarter growth rates below will be given in these terms). The year-on-year increase was 3.4 %.

The pace of domestic demand growth rose compared to the preceding quarter, boosted by an upturn in public and private consumption, and a bigger accumulation of inventories. The contribution to the quarter-on-quarter growth rate was 4.2 percentage points, while the net contribution of the external sector was -1.1 percentage points.

Private consumption rose by 3.8%, which beat expectations and was higher than in the previous quarter. Various factors are stimulating this variable's growth: rising wages thanks to increased employment, the income tax cut, and falling energy prices. Public consumption growth also accelerated, rising to 3.4%, which has been the pattern in the first quarter for several years now. In current price terms, growth was 10.7%, although in year-on-year terms the growth rate was 1.9%.

Gross fixed capital formation in capital goods moderated its climb to 5.4%, the lowest rates since the first quarter of 2013. Nevertheless, it is remarkably strong given that this investment growth is taking place while businesses are simultaneously paying off debt. Several factors are driving this variable's favourable performance: the recovery in the business surplus, lower costs deriving from falling interest rates and energy prices, and the need to replace productive capital after a long investment freeze during the crisis.

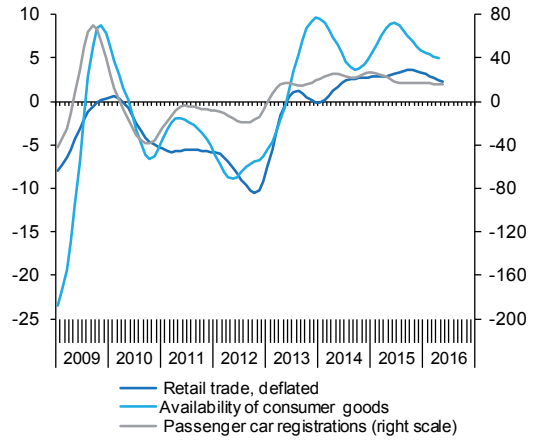
Construction investment fell by 0.8%, as a result of the drop in non-residential investment, probably caused by the end of public works driven by the electoral cycle: in 2015, general government investment rose for the first time since 2009 at a

Exhibit 1

Consumption and capital goods investment indicators

1.1 - Consumption indicators (I)

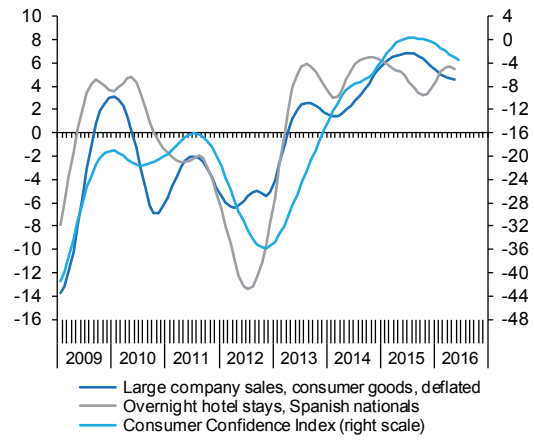
Annualised moving quarterly change in %, smoothed series



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

1.2 - Consumption indicators (II)

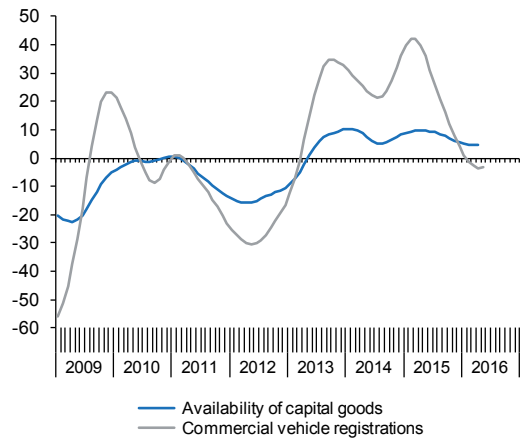
Annualised moving quarterly change in % and index (CCI), smoothed series



Sources: European Commission, INE, AEAT and Funcas.

1.3 - Capital goods GFCF indicators (I)

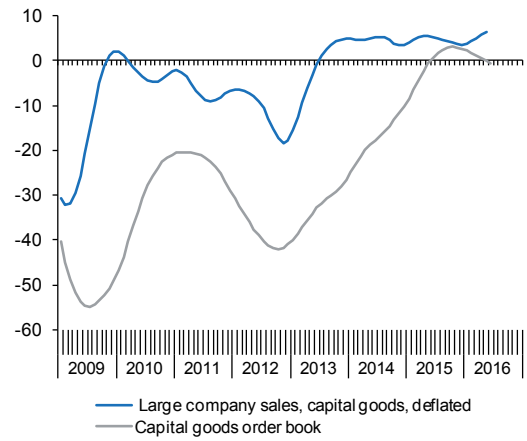
Annualised moving quarterly change in %, smoothed series



Sources: Ministry of Economy, DGT and Funcas.

1.4 - Capital goods GFCF indicators (II)

Annualised moving quarterly change in %, smoothed series



Sources: Ministry of Industry, AEAT and Funcas.

rate of 12.7%. The rate of growth in investment in home building, by contrast, rose to 5%, reflecting the recovery in the property market. Growth in housing sales accelerated in the first quarter, as did prices, which according to figures from the National Statistics Institute (INE), rose by 6.3% over the period in year-on-year comparative terms.

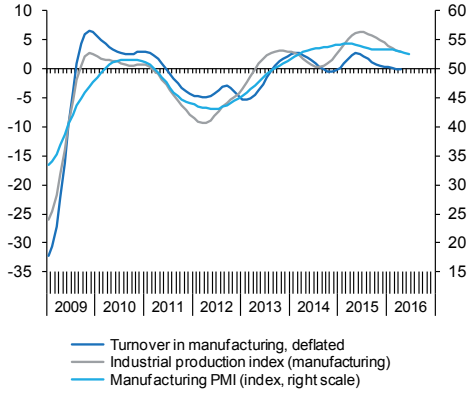
Total exports fell in the first quarter by 2.1% as a result of the decline in services exports, which include tourism. The drop in services exports

Exhibit 2

Industrial activity, services and construction indicators

2.1 - Industrial sector indicators (I)

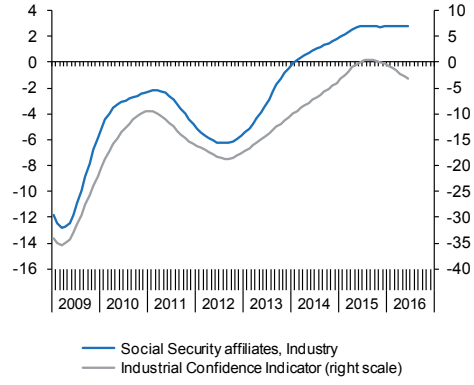
Annualised moving quarterly change in % and index, smoothed series



Sources: INE, Markit Economics and Funcas.

2.2 - Industrial sector indicators (II)

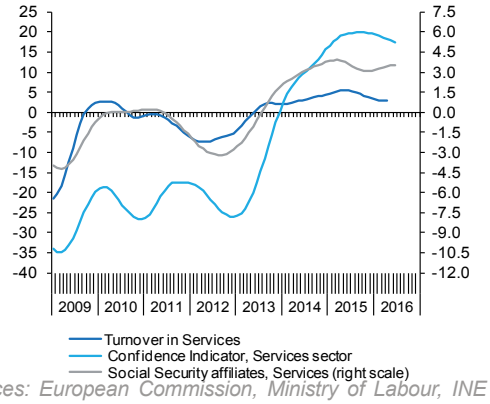
Annualised moving quarterly change in % and index, smoothed series



Sources: European Commission, Ministry of Labour and Funcas.

2.3 - Services indicators (I)

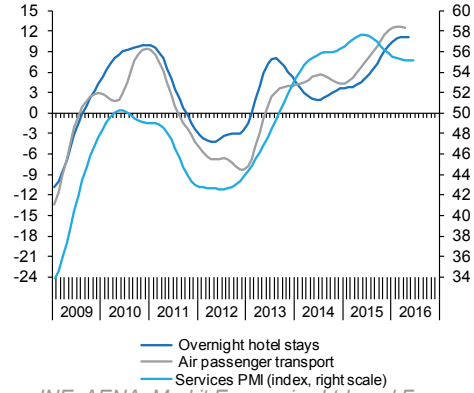
Annualised moving quarterly change in % and index, smoothed series



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

2.4 - Services indicators (II)

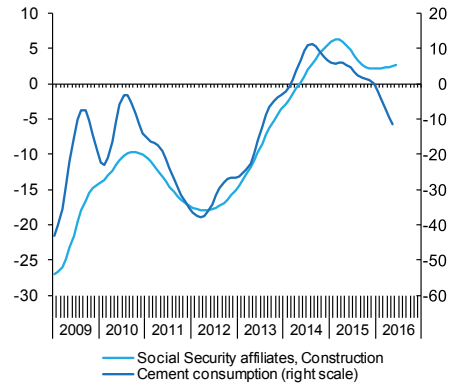
Annualised moving quarterly change in %, smoothed series



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

2.5 - Construction sector indicators (I)

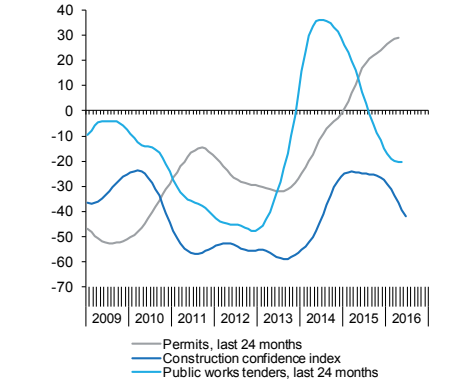
Annualised moving quarterly change in %, smoothed series



Sources: Ministry of Labour, OFICEMEN and Funcas.

2.6 - Construction sector indicators (II)

Annualised moving quarterly change in %, and index, smoothed series



Sources: Ministry of Industry, SEOPAN and Funcas.

registered by the National Accounts figures is surprising in view of the excellent performance over the same period of the indicators relating to tourism activity, such as tourist arrivals and the number of overnight hotel stays. Goods exports experienced zero growth in real terms. However, this could be considered favourable performance in view of the fact that global exports contracted over the period.

Goods imports dropped while services imports rose, with strong growth in tourism services. The result was growth of total imports of 1.4% in real terms, although in current prices, purchases from abroad dropped by 9.2%. This is basically explained by the drop in energy prices.

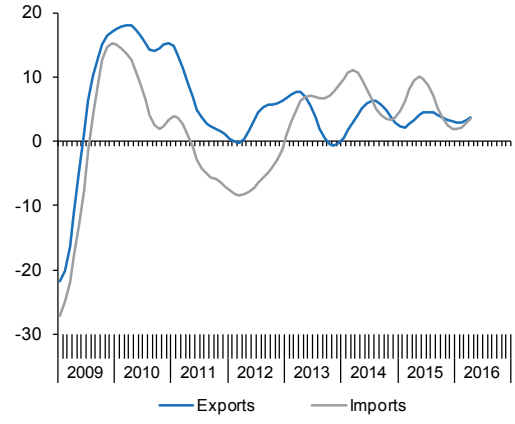
From a supply-side perspective, the sector enjoying fastest gross value added growth was manufacturing, followed by market services.

Exhibit 3

External sector

3.1 - Exports/Imports at constant prices (Customs)

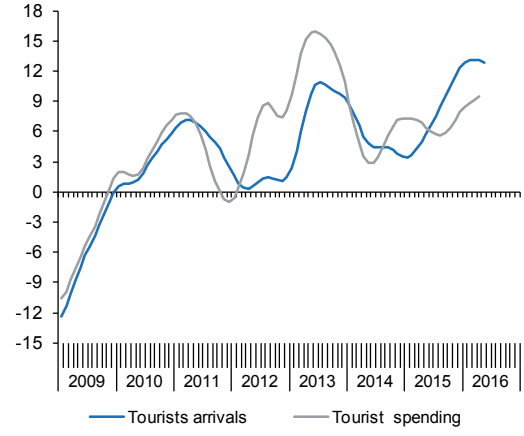
Annualised moving quarterly change in %, smoothed series



Source: Ministry of Economy.

3.2 - Tourist sector

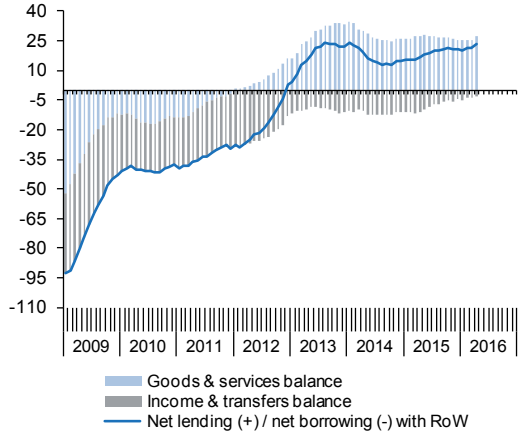
Annualised moving quarterly change in %, smoothed series



Source: Ministry of Industry.

3.3 - Balance of payments

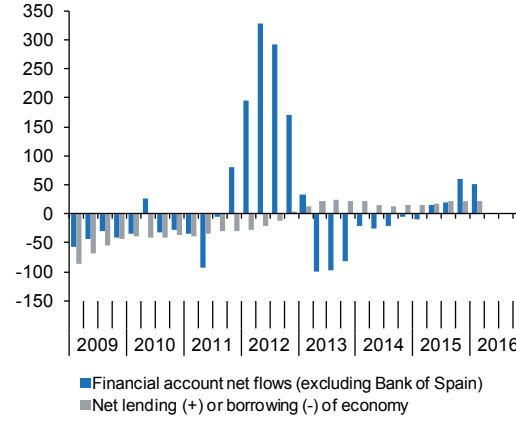
EUR billion, cumulative last 12 months



Source: Bank of Spain.

3.4 - Balance of payments

EUR billions, moving sum 4 quarters



Source: Bank of Spain.

Services sectors with the closest links to the public sector also saw a rise in GVA, while construction suffered a contraction, probably as a result of the cut-back in public works.

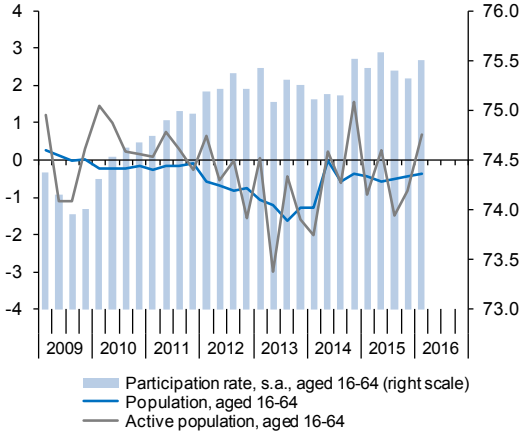
Employment grew faster in terms of full-time equivalent jobs, with the growth rate rising to 3.7%. The bulk of the increase was in manufacturing, while employment in construction declined. The seasonally adjusted unemployment rate fell to 20.3%, six tenths of a percent lower than in the preceding quarter. This was entirely due to the increase in employment, as the activity rate registered a slight increase over the period. The labour force remained on a downward trend due to the shrinking of the working-age population.

Exhibit 4

Labour market indicators

4.1 - Labour supply

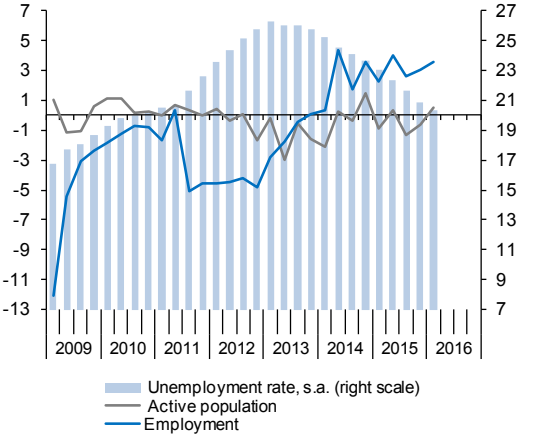
Annualised change q-o-q in % and percentage of population aged 16-64



Source: INE (LFS).

4.2 - Employment and unemployment (LFS)

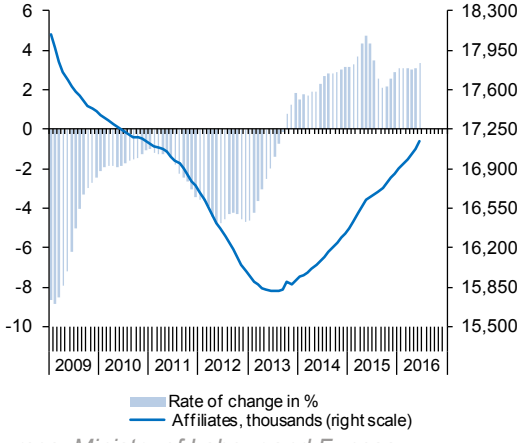
Annualised change q-o-q in % and percentage of working age population



Source: INE (LFS).

4.3 - Social Security affiliates

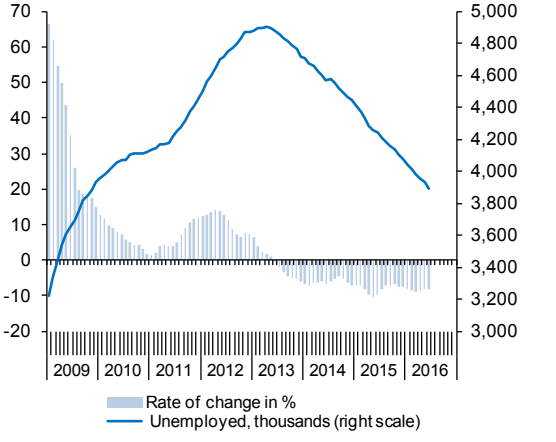
Annualised moving quarterly change in % and thousands, seasonally-adjusted data



Sources: Ministry of Labour and Funcas.

4.4 - Registered unemployment

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



Sources: Ministry of Labour and Funcas.

As employment grew faster than GDP, productivity dropped in the first quarter of the year, although the trend growth rate remained around 0.2%. Compensation per employee fell in the first quarter, such that unit labour costs registered a decrease. In the case of the manufacturing industry, ULCs grew in the first quarter, but this followed several quarters of steep decline, such that the overall trend remains downwards.

Demand indicators remained healthy in the second quarter despite the poorer confidence indicators. The consumption figures were generally good in April, although they worsened in May, suggesting an overall growth rate somewhat lower than in the first quarter. The indicators available for investments in capital goods showed an improvement. As regards foreign trade, exports of goods recovered faster than imports at the start of the second quarter, such that, in conjunction with the positive performance of tourism, the external sector should make a positive contribution to growth.

Sector activity indicators, on the other hand, suggest more sluggish growth, with the slowdown possibly coming from industry, but above all, from construction. This latter sector is where the signs of a continued decline in activity are clearest. Official tenders, taking a moving sum over 24 months as an approximate measure of the volume of public works, fell at increasingly negative rates, as did cement consumption. Nevertheless, new house building continues to pick up, with the increase in new housing permits (also calculated as a moving 24-month sum) gaining pace, and employment in the sector continues to rise, according to social security membership figures, although the rate is more moderate and slowing. From these figures it may, therefore, be concluded that the contraction in activity in this sector is being driven by the cut-back in public works, which is not being offset, at least at present, by a recovery in residential construction.

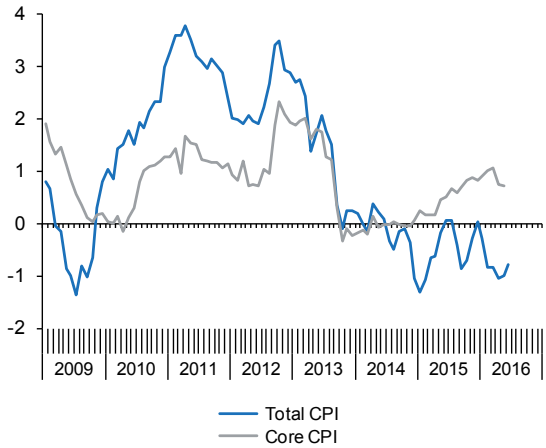
In the last few months, employment, according to social security membership numbers, has grown somewhat less than in 2015. The loss of momentum affected all sectors of the economy. Registered unemployment also moderated its rate of decline over the same period.

Exhibit 5

Price indicators

5.1 - Consumer Prices Index

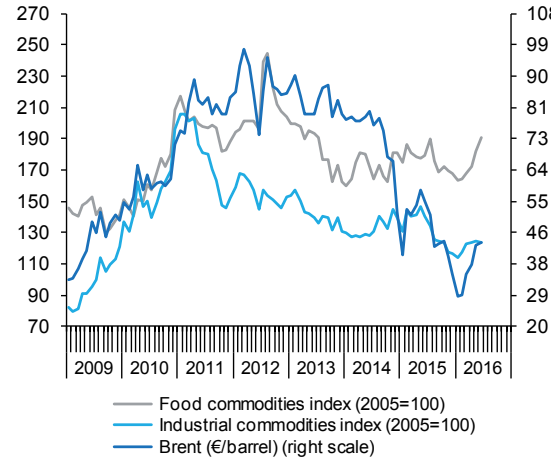
Change y-o-y in %



Source: INE (CPI).

5.2 - Commodities prices in €

Euros and index



Sources: Ministry of Economy and The Economist.

All in all, the economic indicators suggest a slight slowing of GDP growth in the second quarter, which could be estimated at 2.8% quarter-on-quarter on an annualised rate, or 0.7% if not annualised. As in the first quarter, this result would be higher than expected.

The headline inflation rate remained negative throughout the first six months of the year as a result of the drop in the prices of energy products. Core inflation, however, remained positive, although lower in April and May than it had been at the start of the year.

The current account of the balance of payments to April posted a surplus of 1.5 billion euros, compared to a deficit of 1.9 billion registered in the same period of the previous year. The improvement derived from both a decrease in the income deficit and an increase in the trade surplus in goods and services. In the case of the trade balance in goods, the deficit on the energy balance continued to shrink thanks to lower oil prices, while the surplus on the non-energy balance fell only very slightly. The financial account, excluding the Bank of Spain, registered a positive balance – *i.e.* an outflow of funds – of 4.8 billion euros. This balance was bigger than that registered in the same period of the previous year as a result of the sharp contraction in foreign investment in Spain, which was not offset by the drop in Spanish investment abroad.

The national savings rate (the moving average over four quarters) was 22.3% of GDP in the first quarter of 2016, two tenths of a percent more than in the previous quarter. The national investment rate also rose, such that the economy's net lending position remained on a similar level to that in the previous quarter, at 2% of GDP.

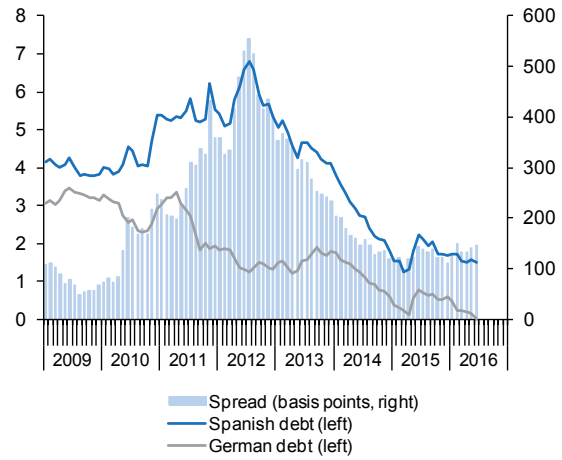
Both households and non-financial corporations maintained a financial surplus in the first quarter, although in the case of households it dropped to 3.2% of GDP. Non-financial corporations' surplus remained at the same level as in the previous quarter, at 2.4% of GDP. For the last few years this surplus has largely been used to pay off debt. Thus household debt ended 2015 at 106% of gross disposable income, 6.1 percentage points lower

Exhibit 6

Financial indicators

6.1 - Government 10 years bonds rate

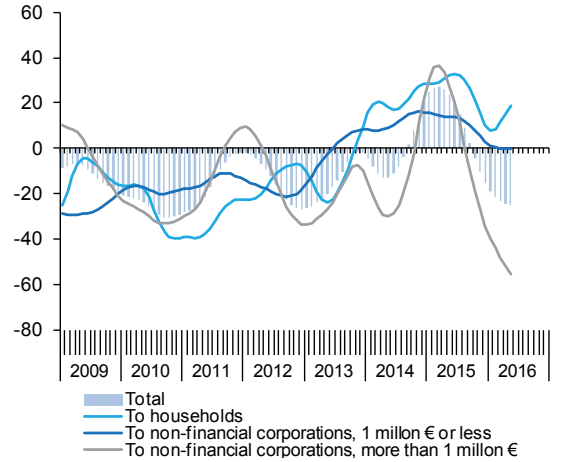
Percentage and basis points



Sources: ECB and Bank of Spain.

6.2 - New business loans

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



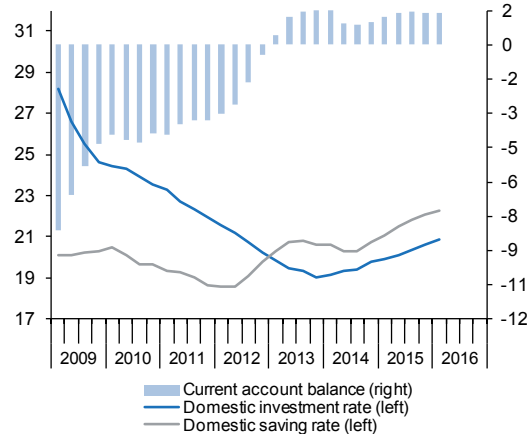
Sources: Bank of Spain and Funcas.

Exhibit 7

Financial imbalances

7.1 - Domestic saving, investment and current account balance

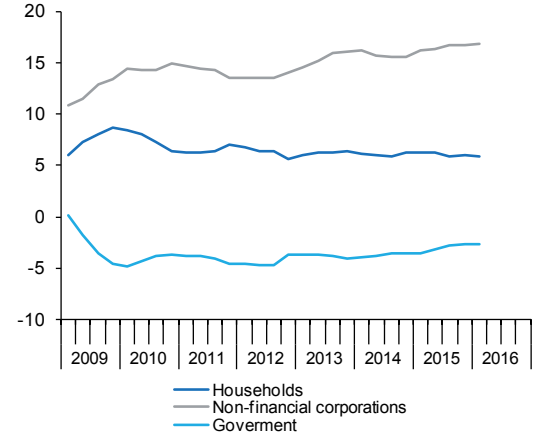
Percentage of GDP, 4-quarter moving average



Source: INE.

7.2 - Saving rates

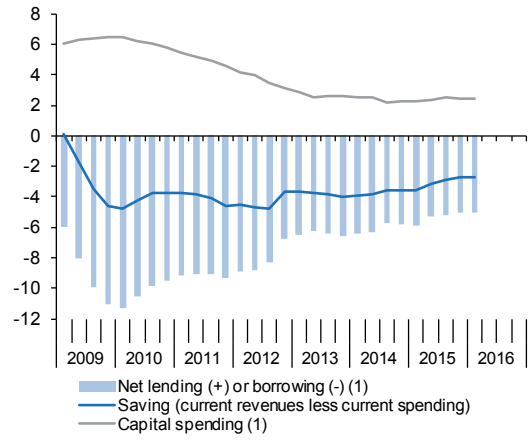
Percentage of GDP, 4-quarter moving average



Sources: INE and IGAE.

7.3 - General Government deficit

Percentage of GDP, 4-quarter moving average

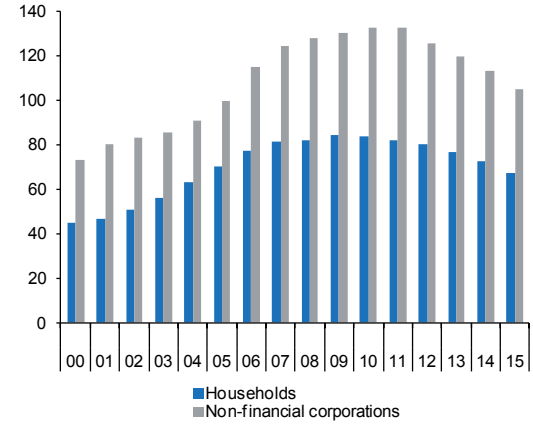


(1) Excluding financial entities bail-out.

Sources: INE and IGAE.

7.4 - Gross debt

Percentage of GDP, 4-quarter moving average



Source: Bank of Spain (Financial Accounts).

than one year earlier. Non-financial corporations' debt dropped by 8.2 percentage points to 104.6% of GDP.

The consolidated general government deficit in the first quarter of 2016 came to 8.3 billion euros, 500 million euros more than the deficit in the same period of the previous year. Income dropped by 0.1%, as a result of the drop in income tax and corporate tax revenues. The drop in income tax revenues was a result of the tax cut that came

into effect in January, while smaller corporate tax revenues were also due to certain transitional measures that meant advance payments were brought forward last year. Spending grew by 0.4%, excluding expenditure arising as a result of bank bail-outs. By level of government, the central government and the autonomous regions reduced their deficit; by contrast, local authorities and social security reduced their surplus. In April, the consolidated result for all branches of government excluding local authorities followed the same downward trend in income and upward trend in spending.

In the first quarter of 2016, the central government and the autonomous regions reduced their deficit; by contrast, local authorities and social security reduced their surplus.

The risk premium on Spanish sovereign debt rose moderately during the turbulence in the wake of Britain's referendum on membership of the EU, with yields on Spanish debt rising and those on German debt falling. Nevertheless, in the following days there was a return to normal, with levels similar to those in the weeks prior to the referendum. However, the yield on Spanish debt, at around 1.3%, is the lowest it has been since 2015, which could also be a sign of the reaction to the results of the Spanish elections.

Forecasts for 2016 and 2017

The Spanish economy is expected to slow during the remainder of 2016 and into 2017, although growth will continue to outpace the European average. These forecasts were made based on the assumption that there is no change in monetary conditions. This implies that that the ECB will maintain its expanded asset purchase policy (TLTRO II), and that twelve-month interest rates in the inter-bank market will remain zero, and rates on ten-year government bonds stay around 1.5%. Over the forecast horizon, the euro will continue to trade at its current level of 1.10 dollars.

The slowdown is mainly due to external factors. Annual growth in export markets, the key driver of the economic recovery, could suffer the impact of Brexit and weaker emerging economies. For 2017, exports of goods and services are expected to grow by 4.3%, which is faster than growth in global markets, but one point less than in 2015.

The scenario envisages OPEC decisions concerning output to continue having an impact. The oil price is likely to increase over the course of the year, to reach 60 dollars a barrel in 2017. This would end the improvement in the terms of trade which supported real incomes and consumption in 2015.

The uncertainty in financial markets, together with the lack of demand, could lead to a sudden halt in business investments. An increase in capital goods investments of 1.1 percentage points less than in 2015 is projected for 2017. Nevertheless, investment will continue to grow strongly thanks to the reduction in financial charges enabled by the ECB's accommodative monetary policy and the shrinking of business debt.

There are also domestic decelerating factors. Household consumption is expected to increase in the second half of 2016 and into 2017 by between 2% and 2.5% (compared with 3% in 2015). This is the result of the impact of higher oil prices on real incomes, the slowdown in job creation, and wage moderation. Construction investment could also suffer from a slowdown. The savings rate is not expected to fall further, bearing in mind that household debt is still relatively high. Lastly, a slowdown in public consumption is expected, as a result of the end of the electoral cycle.

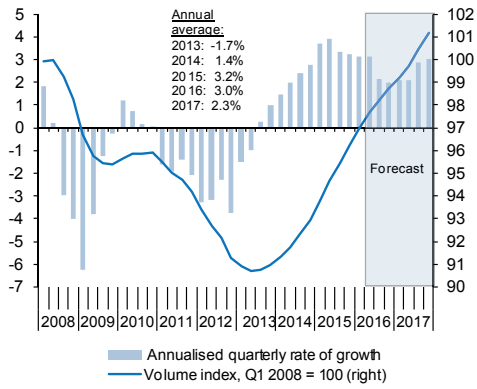
Growth could reach 3% in 2016, three tenths more than projected in the previous forecasting exercise, compared with 1.7% projected by the IMF for the euro area as a whole. The GDP growth forecast for 2017 remains unchanged at 2.3% (half a point

Exhibit 8

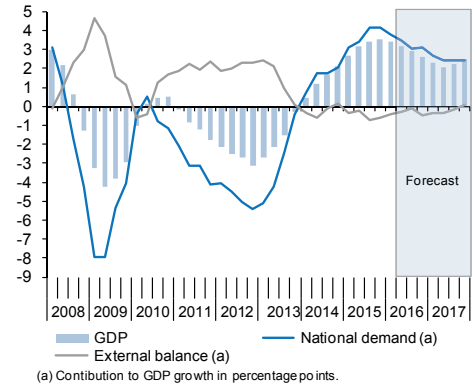
Economic forecasts for Spain, 2016-2017

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

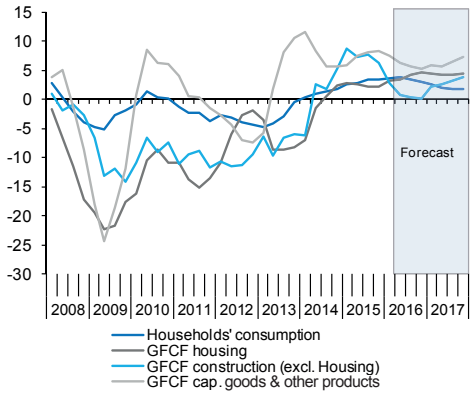
8.1 - GDP



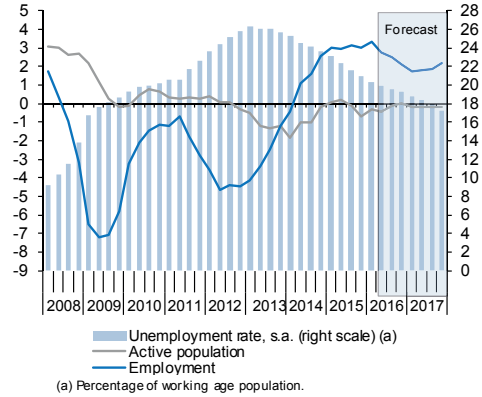
8.2 - GDP, national demand and external balance



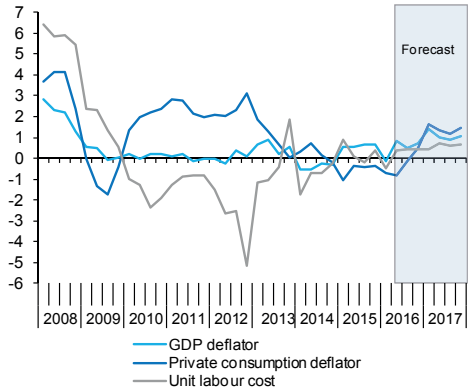
8.3 - National demand aggregates



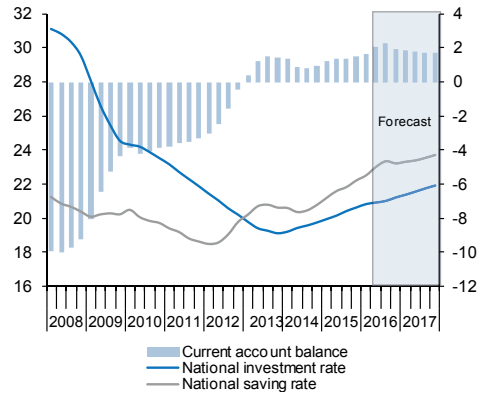
8.4 - Employment and unemployment



8.5 - Inflation



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**	**3.0**	**2.3**	**0.3**	**0.0**
Final consumption households and NPISHs	3.6	-2.2	1.2	3.1	3.5	2.1	0.2	-0.5
Final consumption general government	4.3	0.7	0.0	2.7	2.1	1.0	0.1	-0.3
Gross fixed capital formation	6.4	-7.0	3.5	6.4	4.2	5.0	-0.1	1.1
Construction	5.9	-9.8	-0.2	5.3	2.3	3.6	-1.3	-0.2
Residential construction	7.8	-11.2	-1.4	2.4	3.9	4.4	0.3	-1.1
Non-residential construction	4.2	-8.2	0.8	7.5	1.0	3.0	-2.7	0.6
Capital goods and other products	7.5	-2.4	7.7	7.5	6.2	6.4	1.1	2.4
Exports goods and services	6.6	1.7	5.1	5.4	4.0	4.3	0.2	-0.5
Imports goods and services	8.7	-4.1	6.4	7.5	5.4	5.3	-0.3	-0.7
National demand (b)	**4.5**	**-3.0**	**1.6**	**3.7**	**3.3**	**2.5**	**0.1**	**-0.1**
External balance (b)	-0.7	1.7	-0.2	-0.5	-0.3	-0.2	0.2	0.1
GDP, current prices: - € billion	--	--	1,041.2	1,081.2	1,119.2	1,157.3	--	--
- % change	7.4	-0.8	1.0	3.8	3.5	3.4	0.1	0.0
2. Inflation, employment and unemployment								
GDP deflator	3.5	0.5	-0.4	0.6	0.5	1.1	-0.2	0.0
Household consumption deflator	**3.1**	**1.8**	**0.2**	**-0.5**	**-0.3**	**1.4**	**-0.1**	-0.2
Total employment (National Accounts, FTEJ)	3.4	-3.3	1.1	3.0	2.6	1.9	0.2	-0.1
Productivity (FTEJ)	0.4	2.1	0.3	0.2	0.4	0.4	0.1	0.1
Wages	7.5	-1.1	0.9	3.9	3.4	3.0	-0.1	-0.4
Gross operating surplus	6.9	-0.2	0.4	3.1	3.3	3.4	0.5	0.6
Wages per worker (FTEJ)	3.3	2.4	-0.6	0.5	0.6	1.0	-0.2	-0.3
Unit labour costs	2.9	0.3	-0.8	0.3	0.2	0.6	-0.4	-0.4
Unemployment rate (LFS)	**12.5**	**20.2**	**24.4**	**22.1**	**19.8**	**18.1**	**-0.1**	**-0.1**
3. Financial balances (% of GDP)								
National saving rate	22.4	19.9	20.8	22.1	23.1	23.7	0.1	0.7
- of which, private saving	18.6	23.1	24.3	24.8	24.9	24.7	0.3	1.0
National investment rate	26.9	23.2	19.8	20.7	21.2	21.9	0.0	0.2
- of which, private investment	23.0	19.4	17.7	18.2	19.0	19.7	0.2	0.3
Current account balance with RoW	**-4.5**	**-3.3**	**1.0**	**1.4**	**1.8**	**1.8**	**0.0**	**0.4**
Nation's net lending (+) / net borrowing (-)	-3.7	-2.8	1.6	2.1	2.6	2.5	0.1	0.4
- Private sector	-2.8	5.9	7.5	7.2	6.4	5.4	-0.1	0.4
- Public sector (general governm. deficit)	**-0.9**	**-8.6**	**-5.9**	**-5.1**	**-3.8**	**-3.0**	**0.2**	**-0.1**
- General gov. deficit exc. financial instit. bailout	**--**	**-7.9**	**-5.8**	**-5.0**	**-3.8**	**-3.0**	**0.2**	**-0.1**
Gross public debt	52.2	66.8	99.3	99.2	99.5	99.5	-0.3	-0.3
4. Other variables								
Household saving rate (% of GDI)	10.2	10.2	9.6	9.4	9.6	9.5	0.0	0.5
Household gross debt (% of GDI)	82.1	127.2	112.1	106.0	100.4	97.3	-0.1	-0.2
Non-financial coporates gross debt (% of GDP)	80.0	127.9	112.9	104.6	99.1	92.8	-0.1	-0.2
Spanish external gross debt (% of GDP)	90.8	158.2	166.6	167.7	164.2	158.9	-2.4	-4.8
12-month EURIBOR (annual %)	3.7	1.9	0.5	0.2	0.0	0.0	0.0	-0.3
10-year government bond yield (annual %)	5.0	4.7	2.7	1.7	1.5	1.4	-0.1	-0.7

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.

higher than the euro area), which suggests a sharper slowdown than previously projected. The deceleration will come from domestic demand, particularly consumption by households and the general government. The external sector will continue to make a slightly negative contribution.

Growth could reach 3% in 2016, three tenths more than projected in the previous forecasting exercise, compared with 1.7% projected by the IMF for the euro area as a whole.

The pattern forecast for economic growth will be reflected in the labour market. Employment growth should remain strong in 2016 (at around 2.6%) but slow somewhat in 2017 (to 2.0%). The unemployment rate, although dropping, will remain high at almost twice the euro area average. Bringing down unemployment will remain the Spanish economy's biggest challenge.

Despite rising import prices, inflation will remain below the 2% target. Moderate change in unit labour costs is forecast, falling short of that in other European countries.

A current account surplus of 1.8% of GDP is forecast for 2016 as a whole, which is four tenths higher than in 2015. The consensus forecast for 2017 is a surplus of 1.5%.

Finally, the consensus forecasts for the general government deficit for 2016 and 2017 have been revised upwards to 3.8% and 3% of GDP, respectively. In both cases, these exceed the targets in the Stability Programme Update (3.6% and 2.9%). This situation has given rise to the European Commission's considering applying penalties. Public debt is slightly less than GDP over the forecast horizon, and after unemployment, reducing it is one of the main challenges facing the Spanish economy.

Unemployment remains the top challenge. Public debt, at slightly less than GDP over the forecast horizon, is also a major obstacle for the Spanish economy.

The economic growth threshold for job creation in Spain: The importance of wage moderation

Daniel Fernández Kranz[1]

Recent evidence suggests that the Spanish economy can create jobs at a lower rate of economic growth than in the past. However, the lower growth threshold for job creation depends on sustaining wage restraint.

According to analyst consensus, the growth threshold for job creation in Spain had generally been around 2%. However, structural reforms undertaken in recent years, in particular the labour market reform of 2012, seem to have made the Spanish economy more flexible, competitive, and able to generate employment at a growth threshold lower than in the past. Our data show that the recent increased dynamism of the Spanish job creation process has been concentrated in the private sector, manufacturing industry and full-time employment. Furthermore, our analysis suggests that wage restraint is a key factor behind the process of job creation at lower growth rates. If this hypothesis is true, the validity of existing forecasts that are based on a lower growth threshold for job creation in Spain depends on maintaining the current levels of wage moderation.

Appearing before the Congressional Economic Committee on April 19th, the Acting Minister for Economic Affairs and Competitiveness, Luís de Guindos, said that between 2016 and 2019, the Spanish economy will create half a million net jobs a year. This will make it possible to bring the unemployment rate down to 14% of the labour force by 2019. According to the latest *Labour Force Survey* (LFS), corresponding to the first quarter of 2016, the unemployment rate in Spain is currently 21%.

A million (net) jobs have been created over the last two years (a rate of half a million a year) and gross domestic product (GDP) has grown at an annual average of 3.25%. The Ministry of Economic Affairs and Competitiveness's projections imply that the rate of job creation will continue during a period in which the forecasts point to a slowdown in the rate of GDP growth. For example, in its latest report, the International Monetary Fund (IMF) forecasts that the Spanish economy will grow at an average of 2.29% a year between 2016 and 2019, one percentage point less each year than in the period 2014-2015, and slightly lower than the government's estimate of 2.5% (IMF, 2016). Are the Spanish Government's forecasts too optimistic? What assumptions has the government based its projections on?

One of the key assumptions of the government's programme, set out in the Stability Programme, refers to Spain's growth threshold for net job

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creation. According to the government, the structural reforms undertaken in recent years, in particular the labour-market reform of February 2012, were sufficiently far reaching to make the Spanish economy more flexible and competitive, and consequently have allowed it to generate employment at lower rates of economic growth than in the past. According to the government, the growth threshold for job creation, which past analysts' consensus had put at around 2%, could now be as low as 0.7%. In other words, according to the government, the Spanish economy is able to generate net employment provided it grows at or above 0.7%.

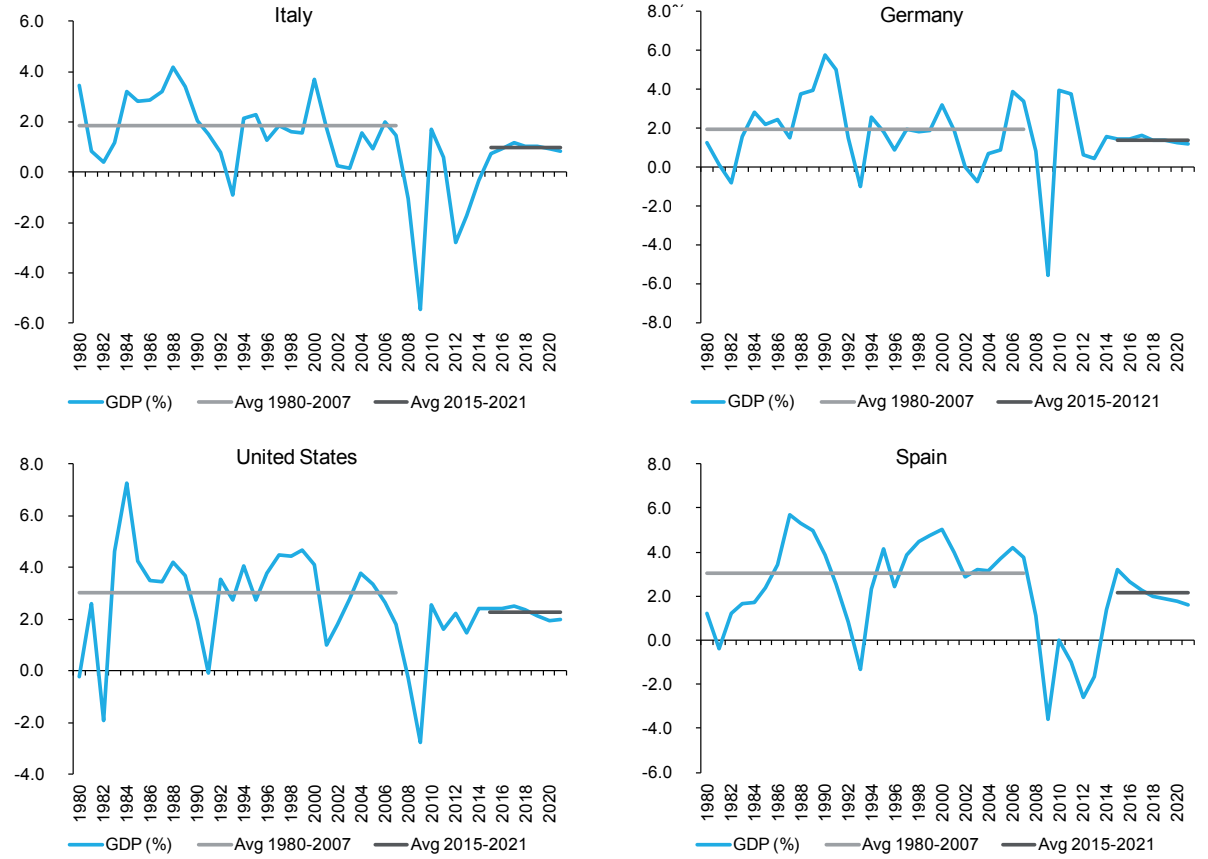
The importance of the debate on this topic stems from the fact that Spanish economic growth is expected to decrease to rates of 2% or less in 2017. The fear is therefore that the Spanish economy will stop generating employment, despite continued growth. However, this fear would be allayed if, as the government claims, the threshold for job creation is significantly below 2%.

It should be borne in mind that the global economy, particularly the economies of the developed countries, are undergoing a period of sluggish growth, with a slow take-off after the financial crisis. Larry Summers, the former U.S. Treasury Secretary

Exhibit 1

Economic deceleration in developed economies

(Percentage)



Source: The author, based on IMF data (World Economic Outlook, *April 2016*).

under President Bill Clinton, and former President of Harvard University, coined the term "secular stagnation" to refer to a state of permanently low economic growth. Economists continue to debate the validity of this concept and the possible causes of such low economic growth. These range from underestimating the impact of new technological revolutions, to demographical phenomena, or the aftermath of the devastating financial crisis. What is clear, however, is that there are various theories seeking to explain the lacklustre growth of most developed economies, which are expected to grow at significantly slower rates than in the last few decades.

Various theories seek to explain the lacklustre growth of most developed economies, which are expected to grow at significantly slower rates than in the last few decades.

Exhibit 1 shows GDP growth rates between 1980 and 2021 (according to IMF projections from 2016 onwards) for Italy, Germany, the United States and Spain. In all cases, average growth for the period 2015-2021 is projected to be significantly lower than the one between 1980 and 2007, before the outbreak of the financial crisis. In the case of Spain, the difference is almost one percentage point a year. What's more important, the IMF expects Spain's economy to grow at a rate of less than 2% from 2018 onwards, with a progressive deceleration of the growth rate towards 1.5% in 2021. In this context, the discussion about the growth threshold for job creation becomes particularly significant.

What do we know about the growth threshold for job creation?

Until recently, the consensus among economists was that the Spanish economy would not generate employment unless it grew at a rate of over 2% a year (Becker, 2011). With the February 2012 labour-market reform, Spain's job market gained in internal flexibility, which is to say, in the possibility of adjusting wages and other working conditions. This meant that employers could adjust wages and working hours in response to a negative shock rather than cutting jobs. Among other things, the 2012 reform cut the cost of dismissing permanent employees, made it easier for companies to opt out of collective wage agreements, and extended the range of situations in which employers can cut working hours (and wages) in response to a negative demand shock. This greater flexibility could lead to increased job creation even in periods of sluggish economic growth. Recent studies, such as that by Cea and Dolado (2013), estimate that Spain's net job creation threshold is around 1.3%. The authors used data from 1980 to 2012 to estimate a CES production function in which not only the historical relationship between GDP growth and job creation is taken into account, but also the degree of wage restraint and the composition of the work force, distinguishing between permanent and temporary employees. The idea underlying these estimates is that the level of job creation depends not only on the GDP growth rate, but also on the pressure exerted by wages

Taking into account the impact of the labour market reform, recent official estimates point to Spain´s job creation threshold now between 1-1.2%.

or the incentive effect of greater wage restraint. This result is similar to that given in the Ministry of Employment and Social Security's evaluation report on the impact of the labour-market reform, which was based on 2013 data. This report estimated that the job creation threshold could be somewhere between 1-1.2% (Ministry of Employment and Social Security, 2013).

Descriptive evidence

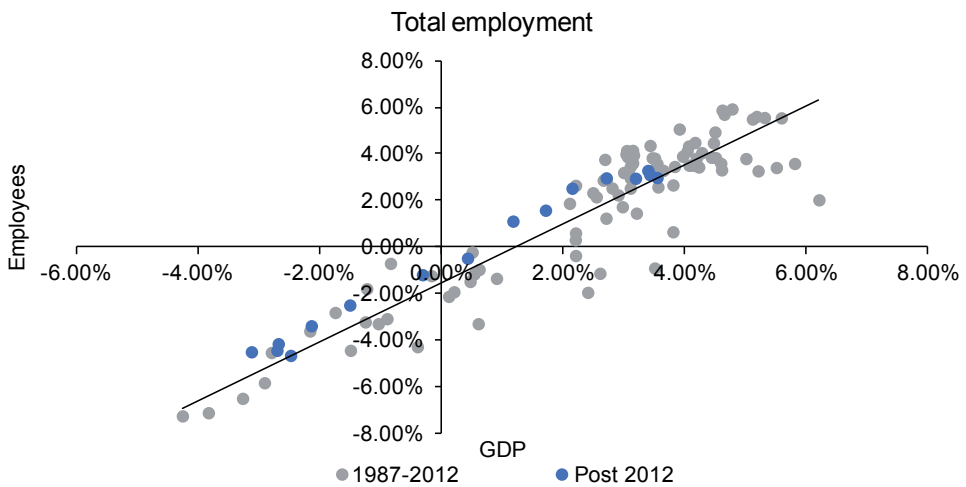
This section aims to offer additional descriptive evidence on the relationship between the Spanish economy's GDP growth rate and employment creation (or destruction). For this purpose, we have drawn upon GDP data from the national accounts published by the National Statistics Institute (INE) and the *Labour Force Survey* (LFS) between 1987 and 2016 (first quarter).[2] The most interesting aspect of this descriptive exercise, and the main difference from other, previous, analyses, is that it includes more recent data, which is important to assess the possible impact of the 2012 labour-market reform. The exhibits below are the result of calculating annual growth rates in employment and GDP levels. To this end, the levels of a given quarter were compared with the levels of the same quarter the preceding year, thus eliminating possible seasonality in job creation and economic activity.

According to these data, the Spanish economy began to create (net) jobs in the second quarter of 2014 and continued to do so continuously until the first quarter of 2016 (the most recent data available). This makes eight consecutive quarters of net job creation. Moreover, GDP began to grow on a year-on-year basis in the first quarter of 2014 at a rate of 0.42%. This rate accelerated progressively to reach 3.54% in the last quarter of 2015. The data from the first quarter of 2016 suggest a slight slowdown in GDP growth to 3.39%. This moderate deceleration is consistent with the longer-term projections mentioned above, which point to a slowdown in the Spanish economy's growth rate to below 2% from 2018 onwards.

The data corroborate the conclusions put forward by previous studies. In 2014, the Spanish economy added over 400,000 jobs despite economic growth averaging just 1.36%. Even in those quarters in which growth was close to 1%, the Spanish labour market was able to generate net employment.

Exhibit 2

Net job creation relative to the GDP growth rate. Before and after the 2012 labour-market reform



Source: The author, based on LFS and INE data. 1987-2016.

[2] There is a jump in 2005 in the series of tables published by the INE due to the change in the census values used for weightings and to construct representative samples of the Spanish population. The values of the 2011 census replaced those of the 2001 census as the basis for the calculations. For this reason, the exhibits and analysis below omit all four quarters of 2005.

Exhibit 2 shows the relationship between the rate of job creation (destruction) on the vertical axis and the rate of GDP growth (horizontal axis). Each point on the exhibit corresponds to a quarter, distinguishing between quarters after the labour-market reform was passed in February 2012 (in blue) and previous quarters (in gray). The exhibit also includes a trend line on the assumption of a linear relationship between the two variables. Taking this trend line as a reference, a change in level is observed as of the second quarter of 2012. In other words, from 2012 onwards, the Spanish economy destroyed fewer jobs for each percentage point of negative GDP growth and was able to create more jobs when the economy grew. It is also interesting to note how the 2% limit for job creation clearly shows up in the exhibit before 2012. Prior to 2012 there was only net job creation when GDP growth rates exceeded 2%. However, this was not the case for data post-2012, when the job creation rate turned positive at GDP growth rates of 1% or slightly higher. A slight reduction of the relationship between net job creation and GDP growth can also be seen in the exhibit. Thus, during the first half of 2015, the Spanish economy created net jobs at a rate of 3% a year while the economy grew at 2.94%. However, in the second half of the year, the rate of job creation stagnated at values of around 3%, even though the pace of GDP growth accelerated to 3.5%. It may be that the rate of job growth was faster at the start of the recovery, due, for example, to greater wage restraint in the early stages of the economic cycle and in comparison with those phases in which economic growth had consolidated.

Exhibit 3 shows the data for the period between the fourth quarter of 1993 and the first quarter of 1996 in light blue. This period covers the start of the economic recovery following the crisis in the nineties. The exhibit also shows the immediately subsequent period of economic growth, between the second quarter of 1996 and the third quarter of 1998. In the first period of growth ('recov 9496') the 2% growth limit is clearly visible as an impassable barrier. However, the exhibit does not show signs of a clear slowdown in the rate of job creation in the immediately subsequent period. On the contrary, when the recovery gained traction

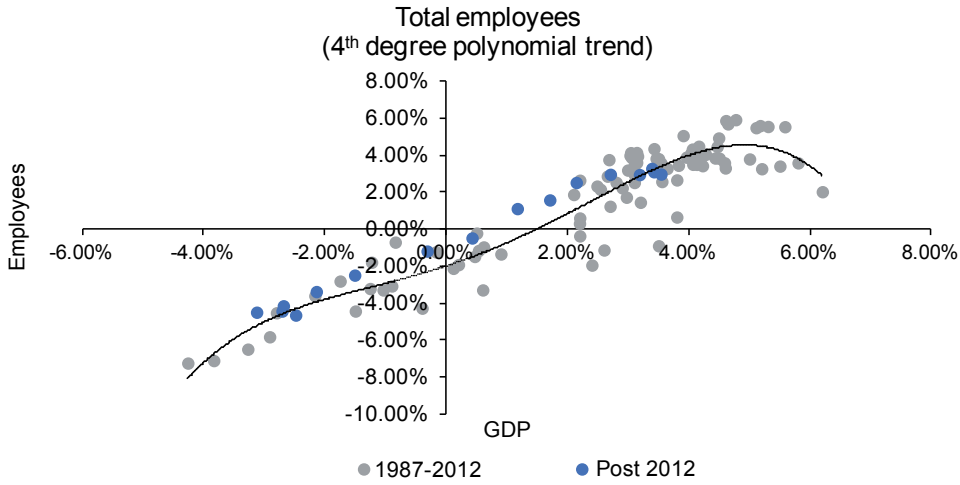
Exhibit 3

Net job creation relative to rate of GDP growth. Comparison of various phases of the economic cycle

Source: The author, based on LFS and INE data. 1987-2016.

Exhibit 4

Net job creation relative to the GDP growth rate. Before and after the 2012 labour-market reform. Non-linear trend



Source: The author, based on LFS and INE data. 1987-2016.

and GDP grew at rates of over 3% in 1997, job creation soared, reaching rates of 3.5% or even 4.0% a year. It is only when GDP growth rates are over 4% (in 1998) that the rate of job creation levels at around 4%. To sum up, although Exhibit 2 suggests that the 2012 labour-market reform has resulted in a higher rate of job creation at lower levels of economic growth, this is not the case at higher levels of GDP growth, for which the rate of employment growth following the 2012 reform is similar to that seen in previous recoveries.

Exhibit 4 shows the same data as Exhibit 2, but now adds a fourth degree polynomial trend line. There is nothing in economic theory or from the observation of the data that justifies a linear trend. In fact, observation of the data prior to 2012 suggests a non-linear relationship between economic growth and job creation, with levels of job creation below the trend line for growth rates of less than 2% and a degree of acceleration in the rate of employment growth for higher growth rates. Thus, Exhibit 4 shows this non-linear relationship and the levelling off of the trend for growth rates of less than 2%. The exhibit clearly shows the higher rate of job creation (or the lower rate of job destruction) post-2012 when GDP growth has been slightly negative or slightly positive (between -2% and +2%). However, it is also evident from the exhibit that the rate of job creation (or destruction) in the post-reform period is similar to that in previous periods when GDP grew or contracted at relatively high rates.

The 2012 labour-market reform and an analysis disaggregated by worker groups

This section presents the findings concerning different types of workers. The aim is to elucidate the drivers of the faster job creation seen since 2012. Is it due to greater private or public sector dynamism? What types of jobs have been created and how does the process compare to previous recoveries? Are the jobs that have been created full-time or part-time?

This set of questions needs to be addressed in the context of the 2012 labour-market reform. The February 2012 reform introduced three fundamental changes in labour relations.[3] First, it profoundly changed the framework of collective bargaining, putting the emphasis on agreements at the company level, rather than the sector and province levels. The aim was to give collective bargaining greater flexibility, so agreements could be adapted to each company's individual circumstances. Secondly, it made it easier for companies to adjust working conditions, such as the length and structure of the working day, to adjust to changes in the demand for their products. The male part-time employment rate, traditionally very low, went from 6.1% before the reform to 8.1% in the first quarter of 2016 (the female part-time employment rate remained virtually unchanged). Finally, with regard to contract types, the 2012 reform significantly reduced redundancy costs in the case of employees on permanent contracts. However, big differences remain in the degree of protection given to permanent and temporary workers. It is not therefore clear whether the 2012 reform has significantly modified the company's incentives to hire workers on permanent or temporary contracts, and it would be interesting to see how much of the dynamism of employment creation is due to new jobs under each of the different types of contracts.

The increased dynamism of job creation during the current recovery is entirely due to the private sector, given public sector employment has grown more slowly during this period.

Panels a and b of Exhibit 5 distinguish between public- and private-sector employees. The comparison is interesting as it reveals that the increased dynamism of job creation during the current recovery is entirely due to the private sector. In keeping with the fiscal adjustments that have been implemented in Spain and in other euro area countries since 2011, public sector employment has grown more slowly in this recovery than in previous periods. Consistent with this fiscal adjustment process, public sector employment in 2012 and 2013, far from being a counterweight to job cuts in the private sector, has been hugely negative. Thus, in the second quarter of 2012 and the fourth quarter of 2013, over 200,000 net jobs were destroyed in the public sector, a third of the total jobs lost during the period. This contrasts with the more than 150 thousand net jobs created in the public sector between the last quarter of 2008 and the first quarter of 2012. If we focus on 2014, the first year of the recovery, when economic growth was still sluggish, we can see how, although employment in the public sector contracted slightly, the Spanish economy was still able to create 400,000 net jobs, all of which were in the private sector.

Comparing panels c and d of Exhibit 5 also shows that the lower growth threshold for net job creation is due to the creation of full time jobs and not part-time ones, as could be feared given that the 2012 reform made it easier to sign contracts of this kind. The reform does seem to have had an effect on part-time job creation in the periods of recession, in which this type of employment grew in relative terms. However, once the recovery had gotten under way, no growth in part-time contracts was observed. Instead, full time contracts accounted for all job creation.

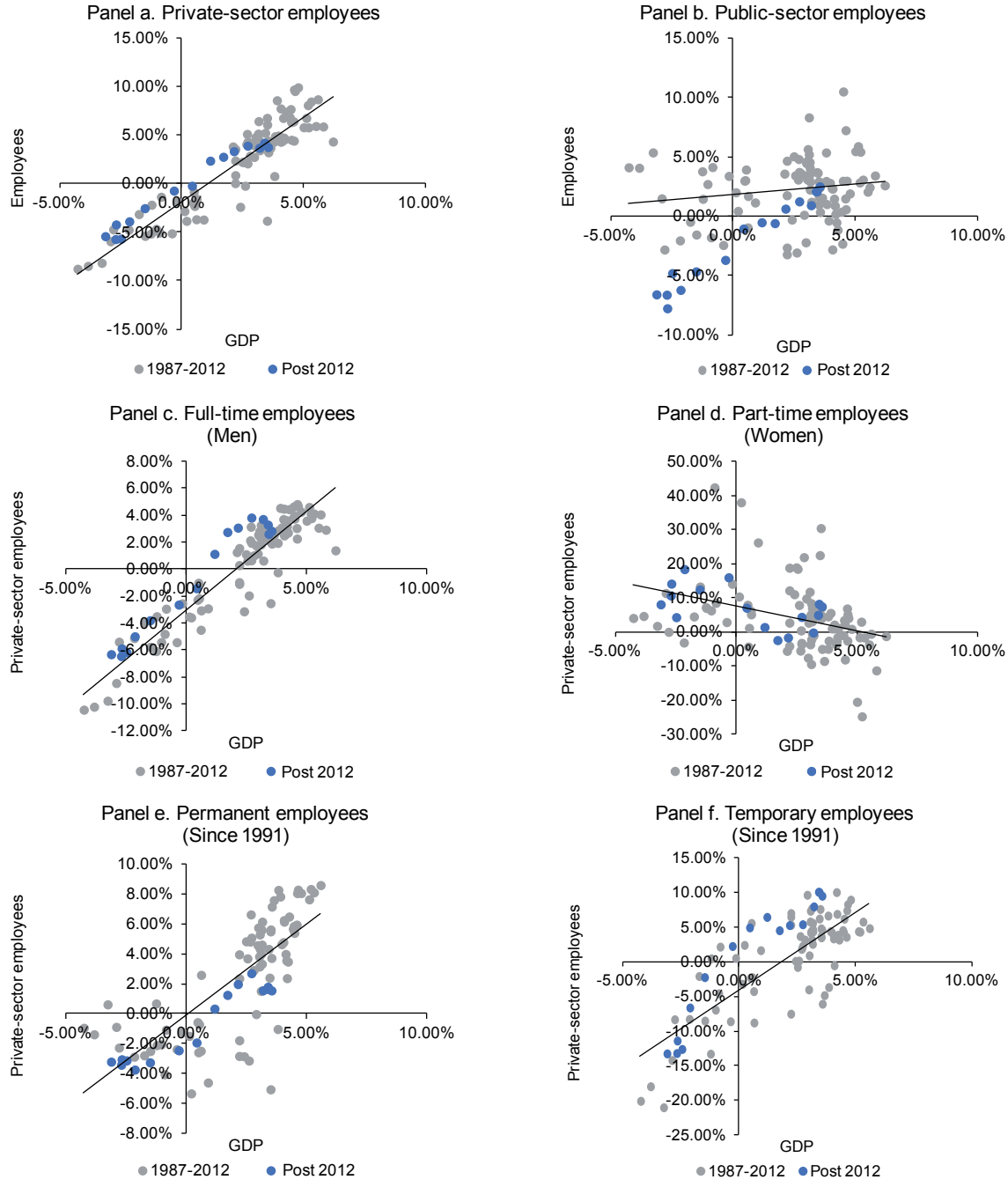
Finally, panels e and f of the exhibit show that temporary employment has surged relative to permanent employment.[4] Panel f clearly shows how in the post-reform period, job creation on temporary contracts was well above the trend

[3] For a detailed analysis of the content of the reform and its effects, see García-Pérez and Jensen (2015).

[4] The data shown in the panels go back to 1991 in order to include a period in which temporary contracts, which were reformed in 1984, were fully established in the Spanish labour relations framework.

Exhibit 5

Net job creation relative to the GDP growth rate. Analysis of groups of workers according to employer, working hours and contract type



Source: The author, based on LFS and INE data. 1987-2016.

line extrapolated from the data prior to the 2012 reform. However, in the case of employment on permanent contracts, the message is somewhat ambiguous. At low levels of economic growth (GDP growth < 2%) a rise in the number of permanent jobs is observed, contrasting with pre-crisis periods, when permanent jobs were only created when GDP growth was over 2%. However, for GDP growth rates of over 2%, the rate at which permanent jobs were created is significantly below the trend line. This could be due to the incipient stage of the economic recovery and it will therefore be interesting to see if, in the future, when the recovery has gained traction, permanent job creation grows at similar – or even faster – rates than before the 2012 reform.

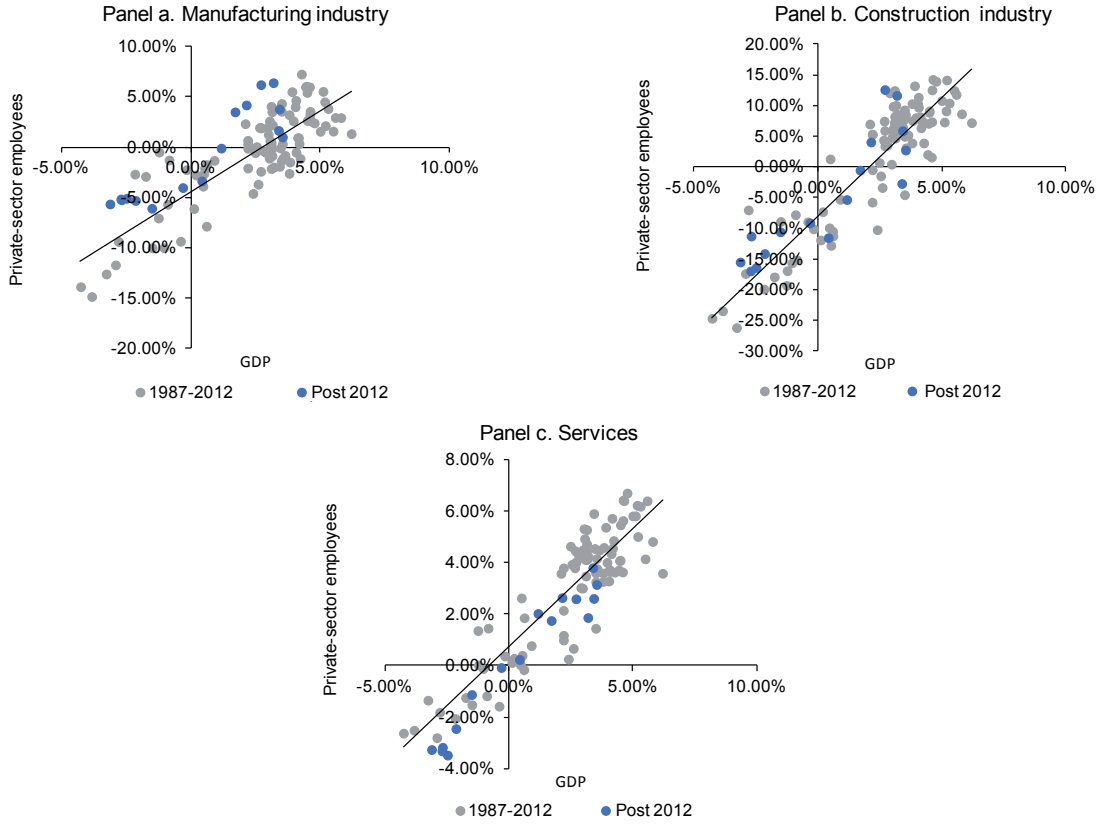
At low levels of economic growth (GDP growth < 2%) a rise in the number of permanent jobs is observed, contrasting with pre-crisis periods, when permanent jobs were only created when GDP growth was over 2%.

Analysis by sector

Exhibit 6 shows the analysis by sectors of activity. If we focus on the part of the exhibit corresponding to low levels of economic growth (below 2%),

Exhibit 6

Net job creation relative to the GDP growth rate. Analysis by economic sector



Source: The author, based on LFS and INE data. 1987-2016.

we see how the lower growth threshold for job creation is a phenomenon primarily observed in the manufacturing industry and not in the construction or services sector. One hypothesis is that the greater dynamism of manufacturing is due to the positive impact of wage restraint following the 2012 reform and the consequent growth in Spanish exports.

Concluding remarks

Various sectors of Spanish society have claimed that Spain's labour market has recently been able to generate employment even when the economy is growing at less than 2%. Whether or not the growth threshold for job creation has been reduced is an important topic in view of the various organisations' projections suggesting that the Spanish economy could grow at less than 2% from 2018 onwards. The most recent growth and job creation data confirm the findings of previous studies and suggest that the Spanish economy could create net employment when GDP grows at or above 1%. This increased dynamism in job creation is concentrated in the private sector, in manufacturing, and in full-time employment. The data do not allow us to say that there is greater dynamism in the creation of stable jobs, with permanent contracts. However, there is a clearly greater dynamism in the case of temporary employment. The mechanisms underlying this reduction in the growth threshold for job creation remain unknown. However, the data are consistent with the hypothesis that this process is related to the wage restraint following the 2012 reform, as the benefits are concentrated in the manufacturing industry and temporary contracts in times of low economic growth. Confirmation of this hypothesis implies that the existence of a lower growth threshold for job creation depends on the continuation of this wage restraint.

References

Becker, F. (2011), "El factor institucional en la crisis económica española," *Revista del Instituto de Estudios Económicos,* No. 2/2011: 53-79.

De Cea P., and J. J. Dolado (2013), *Output Growth Thresholds for Job Creation and Unemployment Reduction in Spain,* mimeo, Carlos III University.

García-Pérez J. I., and M. Jensen (2015), "Reforma laboral de 2012: ¿Qué sabemos sobre sus efectos y qué queda por hacer?," *Fedea Policy Papers,* 2015/04.

IMF (2016), *World Economic Outlook,* April.

Ministry of Employment and Social Security (2013), *Informe de Evaluación del Impacto de la Reforma Laboral [Evaluation report on the impact of the labour-market reform],* Madrid.

The progress of Spanish banks' solvency in a European context

Santiago Carbó Valverde[1] and Francisco Rodríguez Fernández[2]

In line with the general trend in Europe over recent months, Spanish banks have rapidly increased their solvency, bringing levels in line with the European average. While a challenging economic context will remain in place for the remainder of 2016, Spanish banks´ solvency does not appear to be a cause for concern.

Although capital increases are essential in the current context, their significance is difficult to interpret. As an example, several have taken place in Europe in recent months, giving rise to different readings. In Spain, there has been a relatively rapid increase in solvency, bringing capital levels up to the euro-area average. The Common Equity Tier 1 (CET1) ratio has risen to over 12%, close to the 13% euro area average. This has been boosted by two additional factors: a process of transparency, enabling balance sheet quality to be calibrated with relative certainty; and, a cost rationalisation effort that has made it possible for Spanish banks to hold on to their advantages in terms of higher profitability and efficiency than the euro-area average. Spanish banks´ return on equity (ROE) remains two percentage points above the euro-area average. The efficiency ratio (cost/income) in Spain is 48.64%, compared with a euro-area average of 61.64%. In any event, the consolidation of negative real interest rates, Brexit and the more pessimistic outlook for global growth since the start of the year continue to complicate the outlook for the banking sector in the second half of 2016. More specifically, Italian banks' increasing default rate (now over 16%) is worrisome. The heterogeneous composition of risks and asset valuations across countries is also a concern, particularly, the German banking system's high market risk weighting compared to its peers. In this context, it does not seem that Spanish banks' solvency is a cause for concern, either in isolation or from a comparative standpoint with Europe as a whole.

Growing instability, blurred concerns

A number of European financial institutions have recently announced capital increases, including some based in Spain. However, these operations have been met by a degree of concern –perceptible in the media and, transitorily, in some share values– about the reasons underlying their seeking to strengthen their solvency. These reactions can be, in part, explained by the information asymmetries that have become particularly acute in such a turbulent market.

[1] Bangor Business School and Funcas.
[2] University of Granada and Funcas.

The European banking sector has been one of the hardest hit since the start of the year, and stock-market valuations are still quite low. However, the biggest problems since the start of the year have related to doubts over the valuations of certain assets in Germany and Italy. That banks increase their own funds, however, is logical at a time when both regulators and the market are demanding higher levels of solvency. Capital increases may also be driven by other strategic motivations, such as anticipating a provision or a change in asset valuation, raising capital for a takeover bid, or to protect against possible hostile takeovers.

That banks increase their own funds is logical at a time when both regulators and the market are demanding higher levels of solvency. Capital increases may also be driven by other strategic motivations, such as anticipating a provision or a change in asset valuation, or in relation to M & A transactions.

Profitability remains the underlying challenge for the banking industry. However, it cannot be ignored that doubts as to the quality of certain investments and assets in a number of European countries´ banking sectors (particularly Germany and Italy) need to be dispelled more effectively than has been the case.

Moreover, the United Kingdom´s decision to leave the European Union will generate significant uncertainty and adds to the European banking sector's concerns. The exposure to the UK of many banks based in other EU countries is significant, but the most important banks have detailed contingency plans in place.

However, in the weeks leading up to the referendum, the main concern was not so much the cross-holdings between British and European banks as Brexit's possible effects on public debt holdings. Italy's case is particularly delicate, as its banks have a bigger exposure to public debt and a rise in the risk premium could put Italian banks' already damaged balance sheets in an even more delicate position. Banks in Italy, the euro area's third largest economy, have around 360 billion euros in loans identified as problematic, and hold 419 billion euros of government debt on their balance sheets.

As we will discuss below, the banking industry in Europe faces a variety of risks, and at the same time, levels of transparency are uneven making it more difficult to identify these sources of uncertainty. On this point, we will show that the Spanish banking sector's exposures are not only well provisioned, but that its balance sheets are probably the most transparent, precisely because they have been subjected to greater scrutiny.

Nevertheless, Spain's financial institutions share concerns and strategies with their European peers. While the challenge of profitability is being met, the main short- and medium-term objective is to raise efficiency. A recent note from Fitch Ratings dated June 13th on the Spanish banking system illustrates the market view of these challenges. The agency praised the restructuring effort Spanish banks had made, not only retrospectively, but for the future adjustments announced. In line with its view on other European financial centres, Fitch states that, "We expect revenue generation to remain tough for Spanish banks during the second half of 2016 as persistently low interest rates continue to put pressure on margins and net new lending volumes are sluggish despite a strong recovery in economic growth. [...] Carry-trade opportunities, which supported margins at a few banks in previous years, are now scarcer [...

For Spanish banks, while the challenge of profitability is being met, the main short- and medium-term objective is to raise efficiency.

which] will also contribute to the margin squeeze." Fitch is confident, however, that progress reducing problem assets will ultimately have a positive impact on profitability.

The references to regulatory scrutiny point in the same direction. The latest Risk Dashboard report from the European Banking Authority in April 2016, using 2015 data from the banks under EBA supervision, reports that:

- ✓ EU banks' capital ratios further increased.
- ✓ The quality of banks' loan portfolios modestly improved, but remains a concern.
- ✓ Profitability remains low.
- ✓ The leverage ratio decreased but the loan-to-deposit ratio still averaged 120.9%.

A more recent short-term reference in the European Central Bank's Financial Stability Review (May 2016) also said that turbulence in the first half of 2016 had affected banks' stock-market valuations, although systemic risks remained under control. In line with the arguments outlined above, the ECB estimates that the outlook for improvements in profitability is limited given sluggish nominal growth and interest rates that are near zero or negative. The structural challenges identified by the ECB include the fact that "the large stock of legacy problem assets in some euro area countries continues to dampen banks' profitability and weigh on their capacity to extend new loans." The ECB similarly said that "structural challenges to bank profitability could also arise from overcapacity."

Relating to this reasoning about transparency problems in certain European banking sectors, the ECB remarks that "a complete assessment of financial stability risks remains hampered by a dearth of harmonised reporting." It therefore calls for higher quality macroprudential supervision over the coming months.

Meanwhile, the ECB remains the cornerstone of market liquidity. The latests data from the Bank of Spain on Eurosystem financing, published on June 14th, indicate that European banks obtained 311,043 million euros through the ECB's asset purchase programmes between January and May 2016. Over this same period, Spanish banks obtained 42,259 million euros from the programme.

Nevertheless, banks remain affected by volatility and events, such as Brexit, could make it necessary to step up expansionary monetary measures.

The search for returns: Efficiency as the bridge

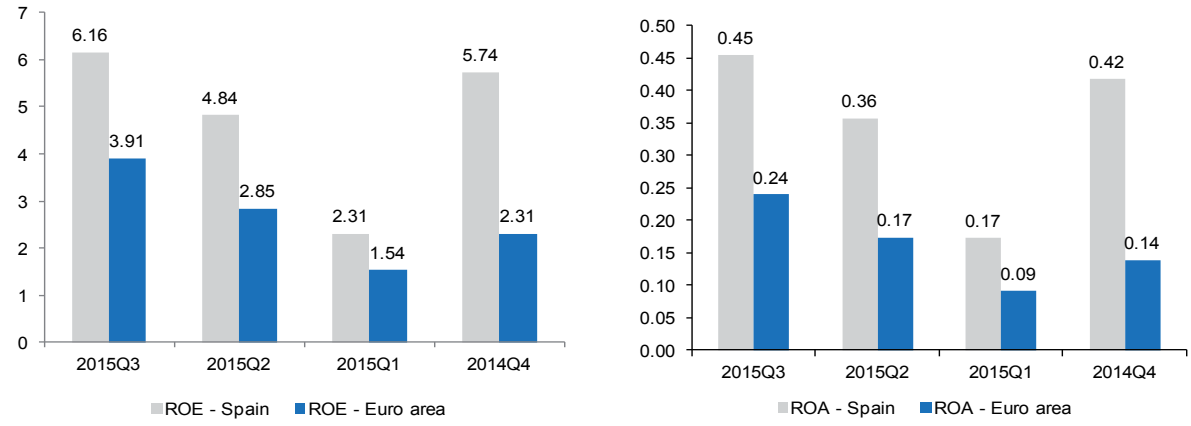
The challenge of restoring banks to profitability is half way through a period of transformation and assuming a new business reality. Pre-crisis profits per share (or per asset) were perhaps too high to be sustainable over the long term. However, markets and shareholders are demanding higher returns than at present, and this is difficult to achieve in a scenario of negative real interest rates. Exceptionally, from the historical point of view, liquidity is abundant, but the margins that can be obtained from it are slender.

The challenge of bank profitability is both global and European, and in no way specific to Spanish banks. Indeed, Spanish banks are sustaining higher levels of returns on equity (ROE) and on assets (ROA) than their counterparts elsewhere in the euro area. The left pane of Exhibit 1 shows how Spanish institutions' ROE has been around two percentage points higher than the euro-area average and that in the third quarter of 2015 (the most recent data available) it stood at 6.16% compared to 3.91%. Spanish banks' ROA was twice European levels, and at the end of the period considered, stood at 0.45% compared to 0.24%.

While the income route is constrained by market conditions, and the business models need to be transformed, European banks are at an impasse. They therefore need to advance their restructuring

Exhibit 1

Bank profitability in Spain and the euro area
(Percentage)

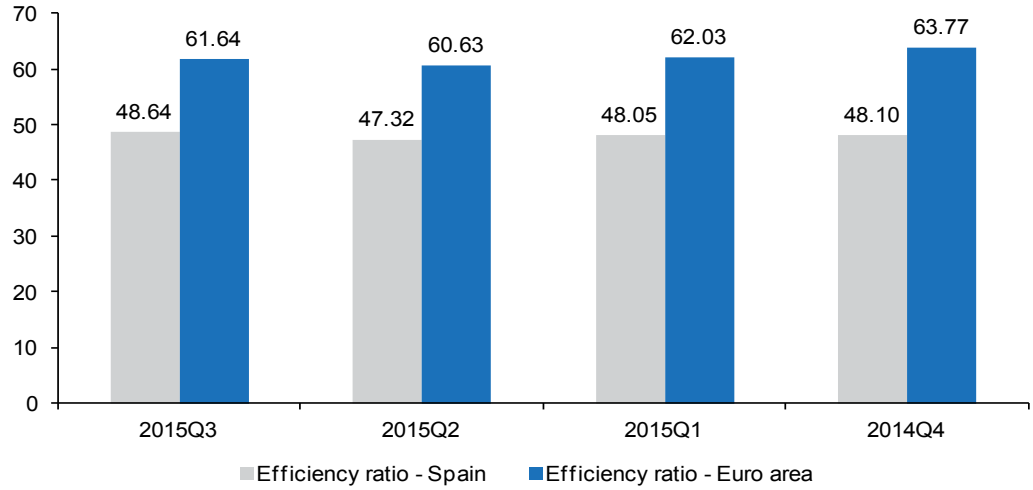


Notes: ROA: Return on assets; ROE: Return on equity.
Source: European Central Bank and the authors.

in order to correct their excess capacity. As reported in previous editions of *Spanish Economic and Financial Outlook (SEFO)*, relative to other countries, Spain has made strong progress towards simplifying structures. It should thus come as no surprise that the Spanish banking sector remains among the most efficient. As Exhibit 2 shows, the efficiency ratio in Spain is 48.64%, compared with

Exhibit 2

Banking efficiency in Spain and the euro area: Cost-income ratio



Notes: Cost-income ratio: Operating expenses/gross profit margin.
Source: European Central Bank and the authors.

a euro-area average of 61.64%. This means that Spanish banks need to consume significantly less gross margin to cover their operating expenses.

Solvency: More than just capital ratios

The data given in the previous section suggest that the Spanish banking industry has profitability and efficiency advantages relative to the European average. But what has happened to solvency levels? Do the capital increases underway give grounds for concern? To answer these questions, the first step is to determine the starting point. Spain's financial institutions had to make substantial write-downs during the crisis.

The Spanish banking industry underwent a process of enhanced transparency regarding the quality of its assets that was almost unparalleled in Europe.

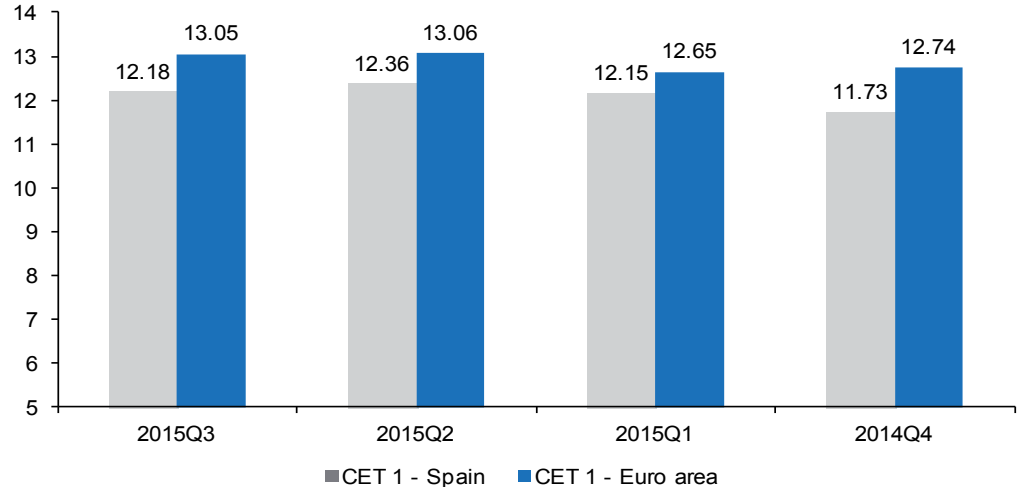
A third significant point is that the solvency ratios are a benchmark constructed based on assumptions of uniform quality of the valuation of asset quality, which as noted above, is questionable in some countries. It is not a question of whether this quality is higher or lower, but that it is adequately valued and provisioned.

Exhibit 3 suggests that, after the intensive write-downs and recapitalisation of recent years, Spanish banks are now at levels of solvency –measured using the Common Equity Tier 1 (CET1) ratio now used– close to euro-area averages, and in some cases, significantly above minimum regulatory requirements. Using uniform ECB data, the most recent data available shows a CET1 ratio of 12.18% compared to the euro-area average of 13.05%.

Nor does the risk exposure seem to have changed significantly over recent months. The results of the ECB's latest bank lending surveys suggest that in 2014, 2015 and the first half of 2016, there has been a progressive, but relatively prudent relaxation of credit standards after years of sovereign risk tensions. Exhibit 4 shows the degree of strictness/ laxity of credit standards as the difference between

Exhibit 3

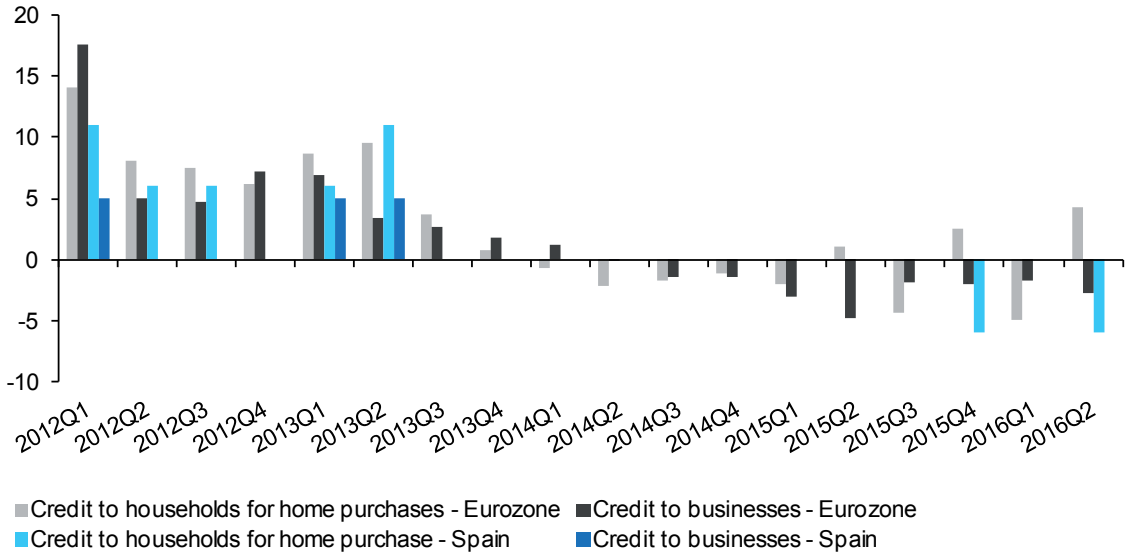
Solvency ratio in Spain and the euro area: CET1 ratio



Note: CET1 ratio: Common Equity Tier 1 (% risk-weighted assets).
Source: European Central Bank and the authors.

Exhibit 4

Strictness of credit standards for private-sector borrowing in Spain and the euro area
(Percentage)



Note: The graph shows average opinions on standards for concession of credit over the previous three months as the difference between the percentage considering standards to have become stricter (positive values) and the percentage considering them to have become looser (negative values).
Source: European Central Bank and the authors.

the percentage of positive valuations (hardening) and negative valuations (relaxation), confirming a progressive but moderate trend towards more relaxed credit standards in order to encourage borrowing.

The results of the ECB's latest bank lending surveys suggest that in 2014, 2015 and the first half of 2016, there has been a progressive, but relatively prudent relaxation of credit standards after years of sovereign risk tensions.

Another measure used to calibrate the risk exposure is the loan-to-deposit ratio. Spain started out with this indicator at a high level before the crisis, suggesting lending was high relative to savings attracted as deposits. As Exhibit 5 shows, Spain is progressively converging towards other European countries' averages of around 120%.

Part of the heterogeneity in the valuation of asset quality derives from the composition of risk-weighted assets (RWA), which are the denominator for the capital ratios. Apart from the uneven way in which RWAs are treated in different euro area jurisdictions –a matter of debate that requires detailed analysis– there are highly illustrative differences in the composition of RWA itself, as

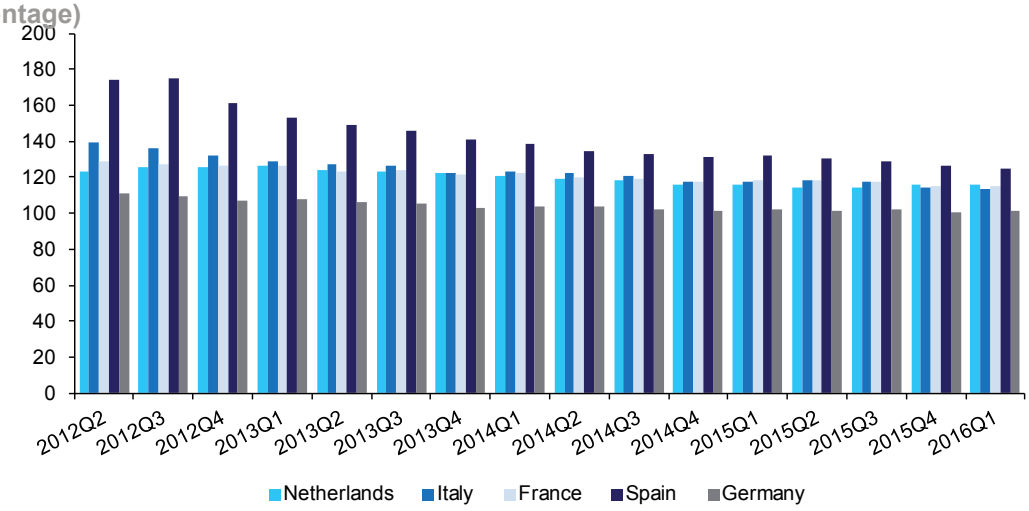
Apart from the uneven way in which RWAs are treated in different euro area jurisdictions, there are highly illustrative differences in the composition of RWA itself.

Exhibit 6 shows. As might be expected, the risk associated with the credit portfolio accounts for the bulk of RWAs. However, this risk is around 80-90% in most countries considered, with the exception of

Exhibit 5

Loan-to-deposit ratio in Spain and the euro area

(Percentage)

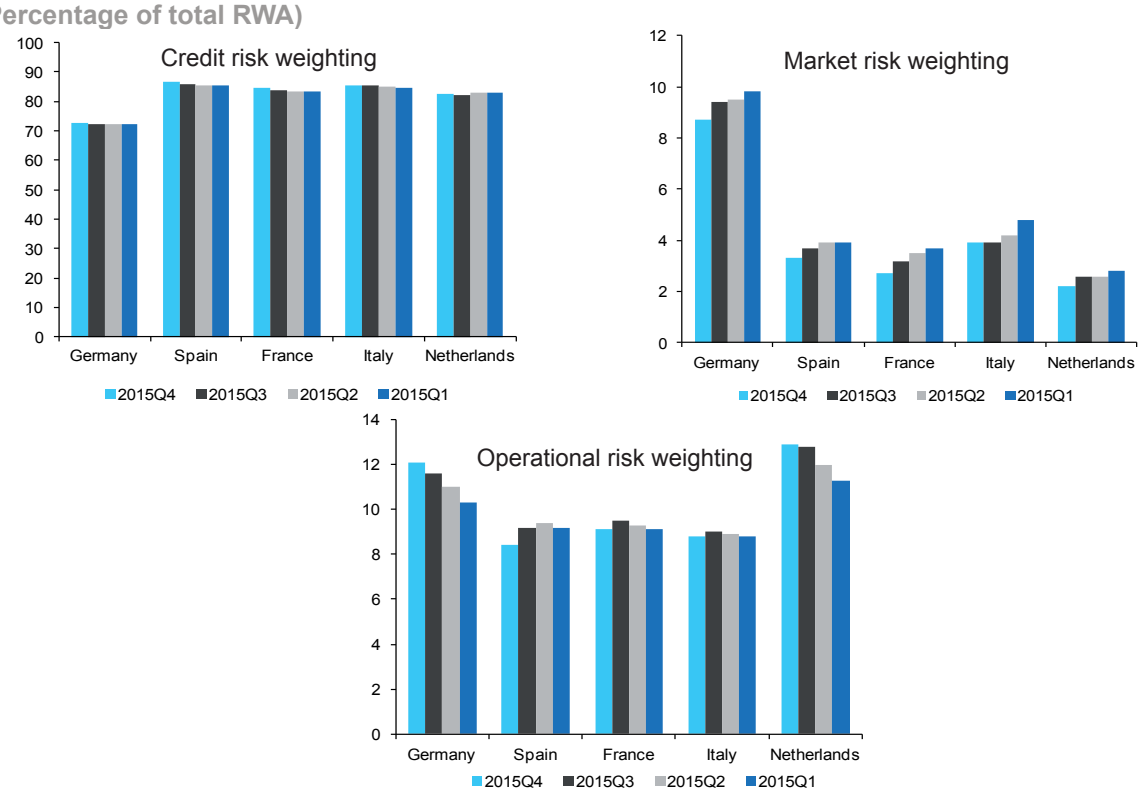


Source: European Banking Authority and the authors.

Exhibit 6

Distribution of risk-weighted assets (RWA) in the Spanish and euro area banking systems

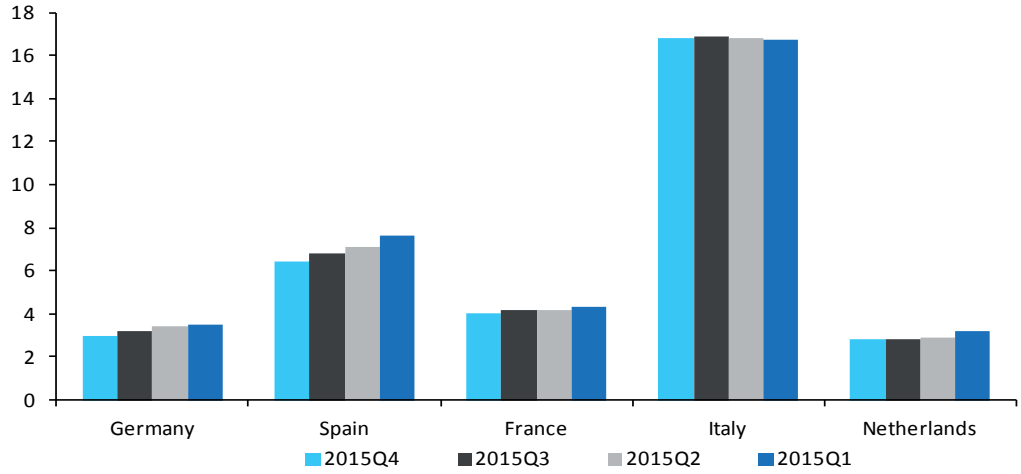
(Percentage of total RWA)



Source: European Banking Authority and the authors.

Exhibit 7

NPL ratio in certain euro-area countries. Institutions under EBA supervision
(Percentage)

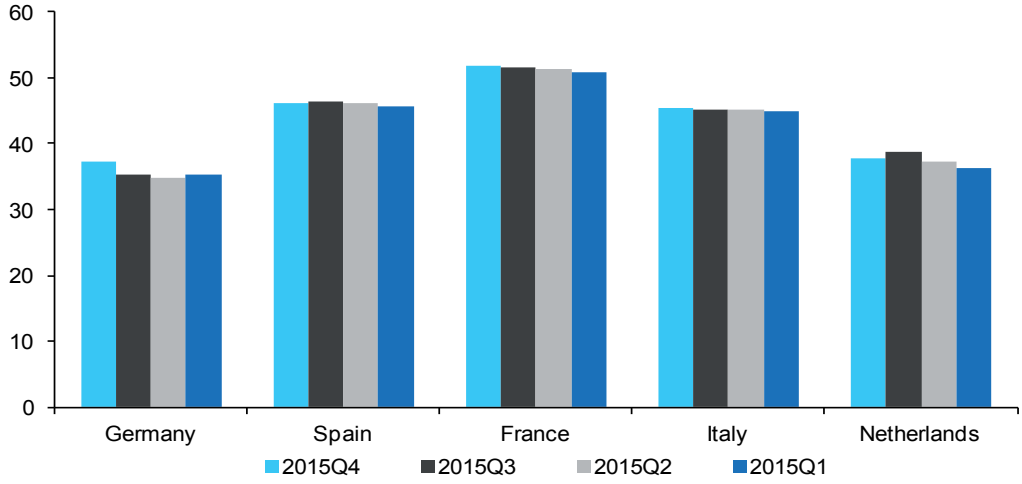


Source: European Banking Authority and the authors.

Germany, where it is around 70%. In this regard, in the German banking sector, market risk accounts for a bigger share of RWAs (9-10%), and this is an exposure whose valuation is more complex, about which the information is less transparent, and to which significantly less attention has been paid. Operational risk –including legal risk and risks arising out of procedures that may result in differences between current and potential asset valuations– also has a considerable weight in Germany and

Exhibit 8

Default coverage ratio in certain euro area countries. Institutions under EBA supervision
(Percentage)



Source: European Banking Authority and the authors.

the Netherlands (12-13%) in relation to the other sectors considered (all of them around 8-10%).

Nor does Spain seem to be a concern as regards non-performing loans. Exhibit 7 shows data for institutions under EBA supervision. The default rate in Spain is dropping rapidly. The concern, however, centres on Italy, where the ratio is over 16% and rising. As was suggested in previous issues of SEFO, the initiatives taken to manage this deterioration in the balance sheet – such as the asset management company Atlante – do not inspire confidence that they will be successful.

Spanish banks are also in a strong position in terms of allowances and provisions for default. The EBA's data show that at the end of 2015, the coverage ratio was over 45% in Spain, while in countries, such as Germany and the Netherlands it was below 40%.

Concluding remarks

The data analysed in this article confirm that the Spanish banking sector has improved its levels of solvency and is close to eurozone averages. The process of recapitalisation in both Spain and other countries may be a response to various strategic imperatives, although in most cases it aims to meet regulatory pressure to increase own funds.

Moreover, based on the data analysed, three further points may be mentioned concerning the solvency of the Spanish banking sector from the European perspective:

- Profitability in Spain remains above the eurozone average. The search for efficiency gains –among other factors, through restructuring– has allowed Spanish banks to remain among those with the lowest cost-to-income ratios in the euro area.

- The composition of risk-weighted assets (RWA) is very uneven across Europe. The proportion of these assets corresponding to market or operational risk in countries, such as Germany or the Netherlands, is striking.

- The quality of assets is as important as their correct valuation. The enhanced transparency to which Spanish banks have been subject has represented an advantage in this respect. Examining the evolution of indicators, such as non-performing loans and default provisions, seems to be assuaging concerns in some countries, such as Spain, while shifting the focus towards others, such as Italy.

Recent evolution of enterprises' access to bank finance: Spain in the European context

Joaquín Maudos[1]

Spanish SMEs' access to finance and financing conditions deteriorated significantly throughout the crisis, exacerbated by financial fragmentation in European markets. Since then, however, their access to credit has progressively improved.

SMEs in Spain account for 99.9% of businesses and contribute 73% to employment and 63% to GVA, making it extremely important that SMEs be able to access bank finance, their main source of credit, on favorable terms. Conditions on which Spanish SMEs were able to access finance worsened drastically with the onset of the crisis and reached worrisome levels in 2012 with European financial market fragmentation. But since then, according to ECB survey data, Spanish SMEs´ access to credit has progressively improved. Specifically, the latest ECB survey on enterprises' access to financing, published in June 2016, shows that access to bank credit has improved in Spain. Access to finance is no longer a major problem for Spanish SMEs and availability of bank loans and some conditions, such as interest rates and loan/credit size, have also improved (albeit collateral requirements and fees appear to be on the rise). If progress continues to be made towards European Banking Union, the economic recovery consolidates, and the ECB's liquidity support and monetary measures are effective, enterprises' conditions of access to bank credit should continue to improve.

SMEs play a key role in Europe's business structure yet they continue to face constraints obtaining finance. For this reason, since 2009, the European Central Bank (ECB) has been tracking the issue of SME access to finance through its six-monthly "Survey on the access to finance of enterprises in the euro area" (ECB, 2016a). The survey offers aggregate information on euro-area averages, with a breakdown by country and firm size. This is essential information when analysing the importance of business size in determining financing conditions and the differences that exist between countries.

The outbreak of the international financial crisis in 2007 resulted in a tightening of borrowing conditions for businesses and broke the trend towards financial integration that began in 1999 with the launch of the euro. But it was the sovereign-debt crisis in 2010 that segmented the European financial market most, with fragmentation reaching a peak in the summer of 2012. The subsequent

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divergence in borrowing conditions (affecting both public and private borrowing) between countries badly hit by the crisis and those that were relatively unscathed lead the ECB, the European Commission, the European Council and the Eurogroup to unanimously back the so-called four presidents´ report, which contemplated the creation of a European banking union (European Council, 2012). With the announcement of the banking union project, together with the ECB´s measures, financial fragmentation began to narrow.

The ECB's latest report in April 2016 on European financial market integration (ECB, 2016b) highlights that since mid-2012, the integration processes has recovered, although still remaining well below pre-crisis levels. In the case of banking markets, there are still major differences between peripheral countries and other euro-area countries in terms of their conditions of access to credit.

The ECB's reports offer a similar view on firms' access to finance: the crisis represented a deterioration in access to finance that was much more intense in those countries worst affected by the sovereign-debt crisis. Although conditions have improved, such that in the most recent survey in June 2016 only a small percentage of European SMEs (10%) reported access to finance as their main problem, major differences persist between countries, with a range of variation between a minimum of 6% (Austria) and a maximum of 31% (Greece).

Against this backdrop, this article sets out to analyse Spanish firms' conditions of access to bank finance relative to the euro area, using the ECB's most recent survey, which was published in June 2016 and covers the period from October 2015 to March 2016. Before comparing the situation of SMEs, the ECB reports information on firm size, which allows us to compare the position of SMEs (less than 250 employees) and large firms. Within the SME category, it distinguishes between microenterprises (up to 9 employees), small businesses (between 10 and 49 employees) and medium-sized enterprises (between 50 and 249 employees). We will focus here on the period between the second half of 2012, which coincides with the Four Presidents' Report supporting EMU, and the turning point in the process of reversing financial fragmentation.

Once again, the results show the importance of firm size in determining the conditions of access to finance, with the smallest firms (micro-enterprises, having less than 10 employees) facing the worst conditions. Access to bank finance has improved so strongly that in the ECB's most recent survey, only 10% of Spanish SMEs considered it their biggest problem – a percentage similar to that in other euro-area countries. Conditions have also improved in terms of lower interest rates and larger average credit line and loan sizes. However, more businesses consider additional costs of borrowing (such as fees and commissions) and collateral requirements to have increased than consider them to have decreased. The greater availability of credit is set to continue as the difference between the percentage of Spanish SMEs expecting credit to increase over the coming months and the percentage anticipating that it will drop is 27.7 pp, almost three times the figure for euro-area SMEs.

Access to bank finance has improved so strongly that in the ECB's most recent survey, only 10% of Spanish SMEs considered it their biggest problem, making it least important and with a value similar to that of other euro-area SMEs for the first time since the ECB starting reporting this information.

With these aims, this article is structured as follows: The next section looks at the importance of access to banking credit among the main problems facing businesses. The subsequent section analyses the changes in the availability of bank loans and enterprises' opinion of banks' willingness to lend. The following sections offers evidence on the changes that have taken place in the conditions of access to bank finance in terms of

interest rates, other costs of borrowing, collateral requirements, and loan and credit line size. We then examine firms' expectations regarding bank loans availability over the next six months, and we close the article by presenting some main messages and conclusions.

What is the main problem faced by Spanish businesses?

A clear indicator of the tougher financing conditions for Spanish SMEs at the start of the crisis was the high proportion that considered it their biggest problem, ahead of finding customers or the strength of competition. Specifically, in the second ECB survey referring to the second half of 2009, access to finance became the main problem for 34% of Spanish SMEs (compared with 19% in the euro area), 2.6 percentage points (pp) ahead of the problem of finding customers.

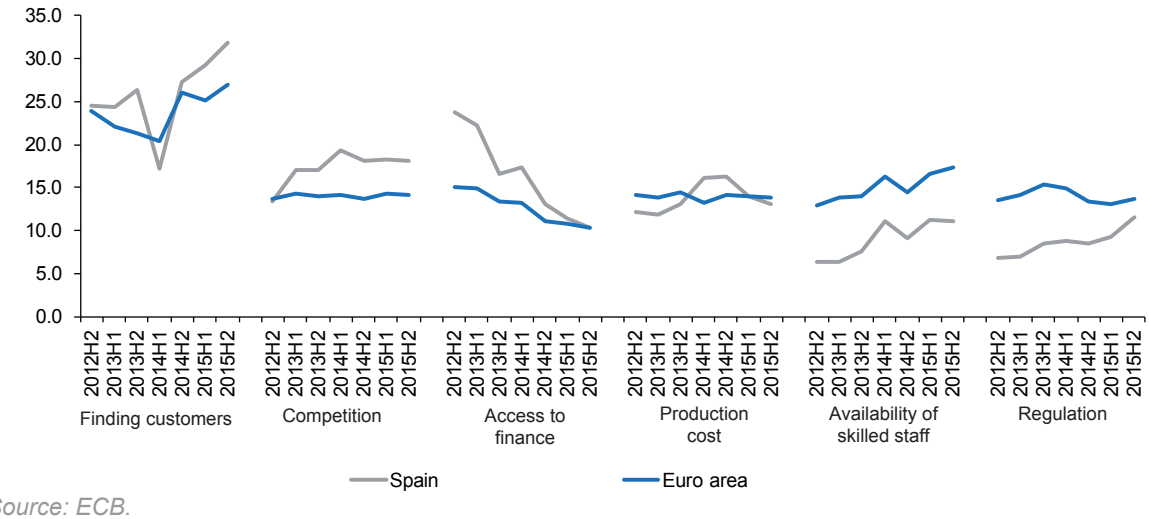
In the latest survey, recently published with data for 2016 (Exhibit 1), the main problem Spanish SMEs face is finding customers (reported by 31.7% of businesses, 4.8 pp more than those elsewhere in Europe), followed at a distance by competition. Access to finance is only the main problem for 10.3% of SMEs, behind that of production costs (13%), regulation (11.5%) and the availability of skilled staff or experienced managers (11.1%). Therefore, of the problems indicated in the latest ECB survey, access to finance is currently the least important, with a value similar to that of other euro-area SMEs for the first time since the ECB starting reporting this information.

One point that stands out in the latest survey is that the biggest difference between Spanish SMEs and those elsewhere in the euro area in terms of their most serious problem is the availability of skilled staff or experienced managers, where Spain is 6.2 pp below the euro-area average. The fact that Spain has the second highest unemployment rate in the euro area, behind only Greece, undoubtedly contributes to this.

Focusing on access to finance, Exhibit 2 shows information from the main euro-area countries (Germany, France, Italy and Spain), and the averages for the euro area and other countries, distinguishing between different sizes of business.

Exhibit 1

The most important problems faced by euro area SMEs
(Percentage of firms)



Source: ECB.

Spain's SMEs have seen their situation improve most since 2012, with the number identifying access to finance as their main problem falling by more than half (from 23.8% to 10.3%). As noted, the percentage is currently similar to the euro-area average, and below the figure for Italy, although 4.9 pp higher than in Germany and 0.6 pp higher than in France.

One point that stands out is that there has been a narrowing of the gap between SMEs and large corporations in Spain in terms of their perception of access to finance as being their main problem. In the latest survey, this gap was 2.4 pp, compared to a difference of 9.2 pp in the first half of 2014. This is now smaller than the euro-area average (a gap of 3.8 pp), Germany (4.1 pp) and Italy (5.1 pp), although it is higher than in France (1 pp).

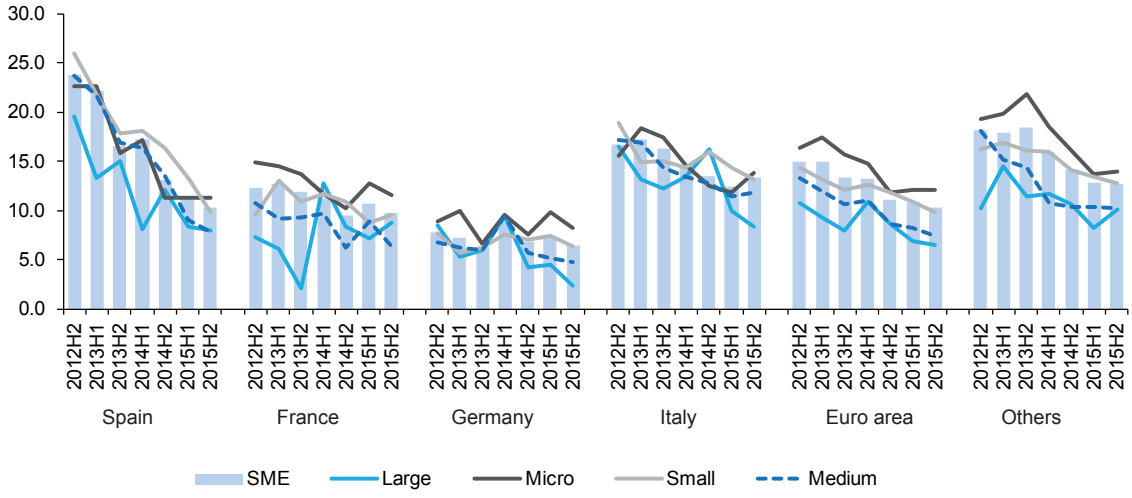
There has also been a significant improvement in the case of large Spanish corporations, as between 2012 and 2016 the percentage reporting access to finance as being their main problem has dropped from 19.6% to 7.9%. Nevertheless, despite the drop, the percentage still exceeds the euro-area average (7.9% vs. 6.5%), and is above the figure for Germany (2.3%). However, it is below that for France (8.7%), Italy (8.3%), and the other countries (10.1%).

Although in general terms SMEs are considered to be at a disadvantage compared to large corporations when it comes to obtaining finance, SMEs as a group comprise businesses of a variety of difference sizes. In Spain, microenterprises (fewer than 10 employees) are particularly significant, accounting for 94.6% of all Spanish SMEs and for 41.6% and 55.4% of SMEs' gross value added and employment, respectively.

In both Spain and the euro area, the percentage of micro-enterprises pointing to access to finance as their main problem exceeds that of other business sizes. In Spain, the figure is currently 11.4%, compared with a 10.3% average for SMEs. This is 3.6 pp higher than the case of medium-sized businesses. In this latter type of firm, the percentage is similar to that of large corporations, although the difference rose to over 8 pp in the first half of 2013. Consequently, within SMEs it is the smallest firms (those with fewer than 10

Exhibit 2

Percentage of firms for which access to bank finance is their main problem



Source: ECB.

employees) that have the biggest difficulties accessing finance. In any event, since the second half of 2014, the percentage of Spanish micro-enterprises that identify access to finance as their main problem is less than that of their European peers, the current difference being just 0.7 pp (11.4% *vs.* 12.1 %).

In Spain, microenterprises are particularly significant, accounting for 94.6% of all Spanish SMEs and for 41.6% and 55.4% of SMEs' gross value added and employment, respectively. They still face the biggest difficulties accessing finance.

Availability of bank loans

As well as determining the percentage of firms that report access to finance as their main problem, another question of interest addressed in the ECB survey is enterprises' opinion as to whether banks are making credit more or less readily available. Specifically, we will focus on the difference between the percentage that considers availability to have increased and the percentage that considers it to have decreased (net response percentage).

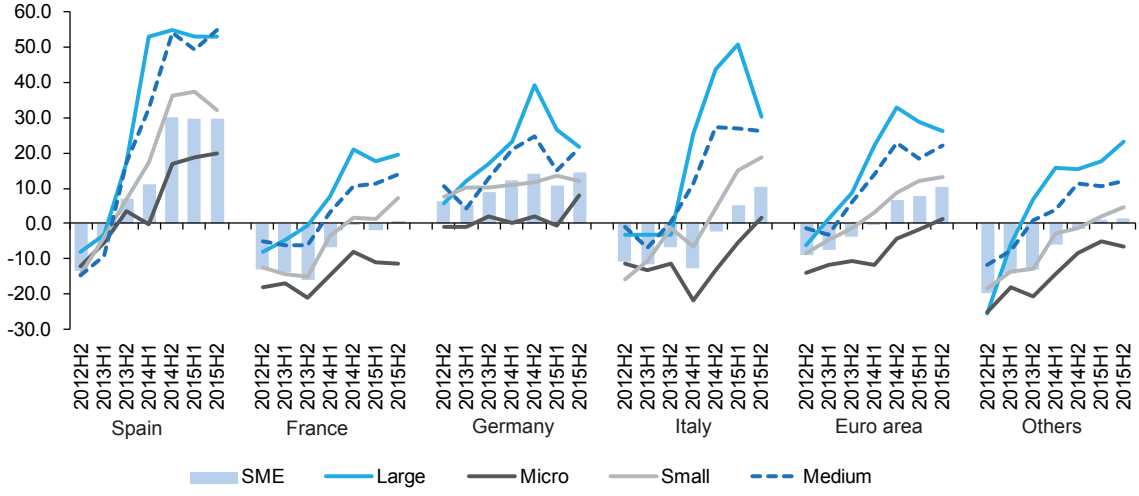
As Exhibit 3 shows, the availability of bank loans has improved considerably in Spain since mid-2012, to the extent that SMEs' net response percentage has risen from a negative value of -13.3 pp (the biggest percentage drop in the availability of credit) to a positive value of 29.8 pp.

The availability of bank credit has improved considerably in Spain since mid-2012. The improvement is such that in the latest ECB survey, it is triple the euro area average and the highest value of any country in the euro area.

The improvement is such that in the latest survey, the net response percentage is triple that of the euro area and much higher than in the other countries in the survey. In fact, it is the highest

Exhibit 3

Availability of bank loans. Difference between the percentage of firms considering it to have increased and those considering it to have decreased



Source: ECB.

value of any country in the euro area.[2] Since the second half of 2014 three successive surveys have shown the net response percentage of Spanish SMEs to be around 30 pp.

Once again, size makes a difference when it comes to obtaining bank finance. Among large Spanish firms, the net response percentage was also negative up until the first half of 2013, but since then, the availability of finance has recovered more strongly than among SMEs, to the extent that in the latest survey the net response percentage was 52.7 pp, as just 3.6% considered the situation to have worsened (against 56.3% who saw an improvement). Since the start of 2014, the net response percentage among large corporations has been over 55 pp. In the latest survey, it was twice the euro-area average and Spain's figure was the highest of all the countries of the euro area.

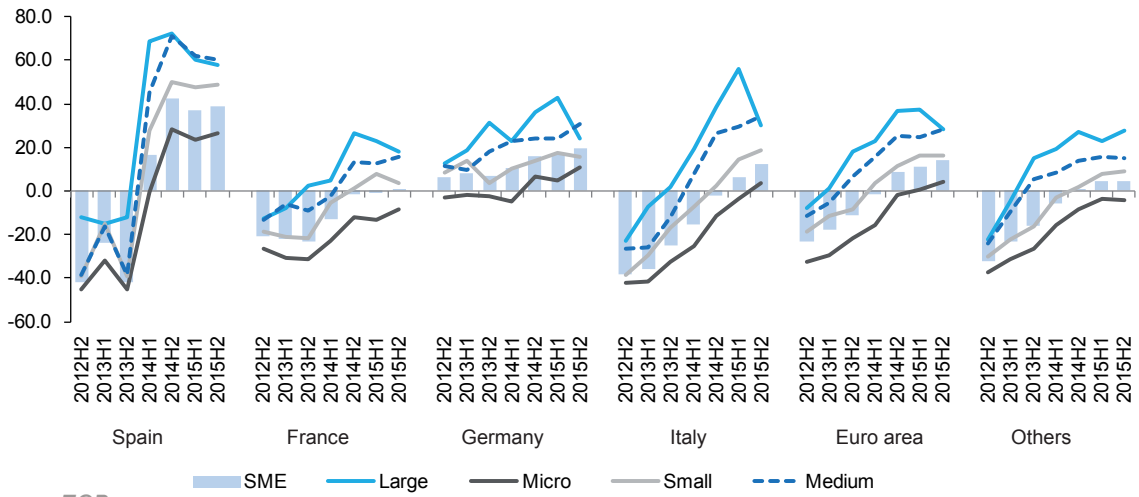
Among Spanish SMEs, micro-enterprises have seen the weakest improvement in bank loan availability, although the net response percentage is increasing and has been positive since the second half of 2014. In the most recent survey, referring to the period October 2015 to March 2016, the net response percentage was 19.7 pp, 35 pp less than among medium-sized enterprises. Once again, there is no difference between the latter and large Spanish firms, such that size is no longer an obstacle for firms with over 50 employees when it comes to obtaining credit.

It is worth noting that, for the first time since the ECB began its surveys, euro area micro-enterprises saying that they are finding it easier to obtain credit outnumber those that do not, although the net percentage is just 1.4 pp. Compared with this low percentage, the recovery in credit to Spanish micro-enterprises has been much stronger, with a net percentage of 18.3 pp.

In short, as far as the availability of bank loans is concerned, all Spanish firms, regardless of their size, have seen a bigger improvement than their euro area peers, although it has to be borne in mind that Spain has emerged from a

Exhibit 4

Willingness of banks to provide credit to businesses. Difference between the percentage of firms considering it to have increased and those considering it to have decreased



Source: ECB.

[2] In Greece, the net percentage is -27 pp.

situation in which the impact of the crisis on credit was worse than elsewhere.

The message of the previous paragraph is corroborated by enterprises' views of the willingness of the banks to grant finance. Indeed, banks' willingness to give credit is one of the factors explaining the amount of credit available.

Spanish firms' net response to this question on the ECB's questionnaire (the results of which are shown in Exhibit 4), currently exceeds that of their European peers, with a value of 38.9 pp for SMEs (compared with 14 pp in the euro area) and 58 pp for large corporations (*vs*. 28 pp in the euro area). Among SMEs, there have been no differences between medium and larger enterprises in recent years, with micro-enterprises having much lower net responses: around 22 pp since the second half of 2014. Once again, firms with more than 50 workers pay no penalty for access to finance, and there is no difference between medium-sized enterprises (50 to 249 employees) and large ones (over 250 employees).

It is worth noting that in the latest survey, for all firm sizes, Spanish firms had higher net responses than those of the euro area regarding their opinion on the increasing willingness of banks to give credit. The difference from the euro-area average went from a minimum of 22 pp among micro-enterprises to a maximum of 32 pp among small and medium-sized enterprises. As the opinions of the enterprises in the survey confirm, the banking sector restructuring and recovery from recession have increased Spanish banks' willingness to give credit.

As the opinions of enterprises surveyed confirm, the banking sector restructuring and recovery from recession have increased Spanish banks' willingness to give credit.

Terms and conditions of bank loan financing

The greater availability of bank loans for Spanish businesses has been apparent since mid-2013, coinciding with the end of the recession. It has also been accompanied by an improvement in some, but not all, of the conditions on which credit is given. In the case of SMEs, the latest survey shows lower interest rates and an increase in the size of loans offered. However, there has also been an increase in collateral requirements and other financing costs have risen (such as charges, fees and commissions).

Specifically, the latest survey, referring to the period October 2015-March 2016, yields the following results in the case of Spanish SMEs (Exhibit 5):

a) The difference between the percentage of SMEs considering interest rates to have increased and the percentage thinking they have dropped is -39.6 pp, a bigger figure than in the past two surveys, in absolute terms. From 2012 until the first half of 2014 the net response percentages were positive, such that more firms considered interest rates to have risen than to have fallen. Since then, firms considering interest rates to have fallen have predominated. In the most recent survey, the net percentage exceeded euro-area SMEs' average in absolute terms (-30.1 pp).

b) In the case of other costs of financing, although the net percentage of responses has been falling steadily since 2012, it has always remained positive. This means more Spanish SMEs consider these costs to have increased than the opposite. In the latest survey. the net percentage was 6.7 pp, although clearly below the euro area figure (22.9 pp).

c) The requirement for collateral before granting finance always obtains a net positive response (although it has been decreasing over time),

such that the collateral Spanish banks require SMEs to post has continued to rise. In the latest survey the figure is 8.2 pp, which is less than half the European average (18.8 pp).

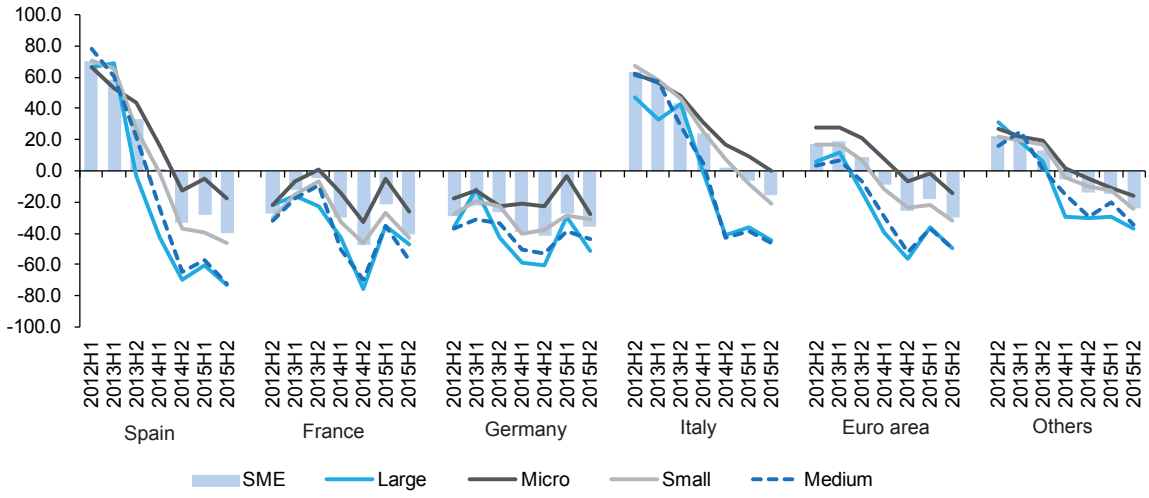
d) Finally, the average size of loan or credit line has increased, with a net percentage of positive responses of 22 pp in Spain compared with 10.9 pp in the euro area. Therefore, in line with the greater availability of credit, the size of loan or credit line has also increased.

For large corporations, the drop in interest rates has been more marked, with the difference between SMEs and large corporations in Spain being above the euro-area average. In the latest

Exhibit 5

Terms and conditions of bank loans. Difference between the percentage of firms considering them to have increased and those considering them to have decreased

a) Interest rates



b) Other costs of financing

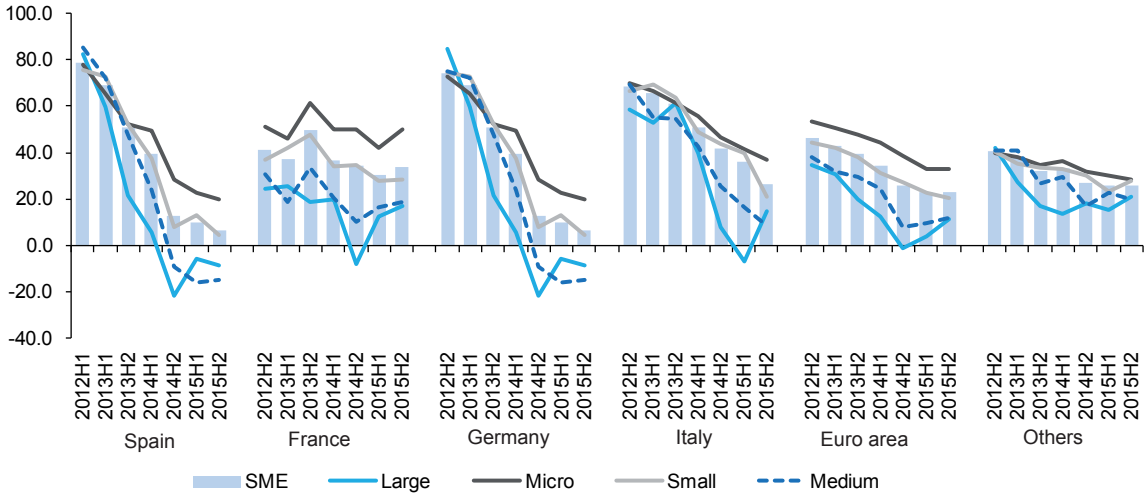
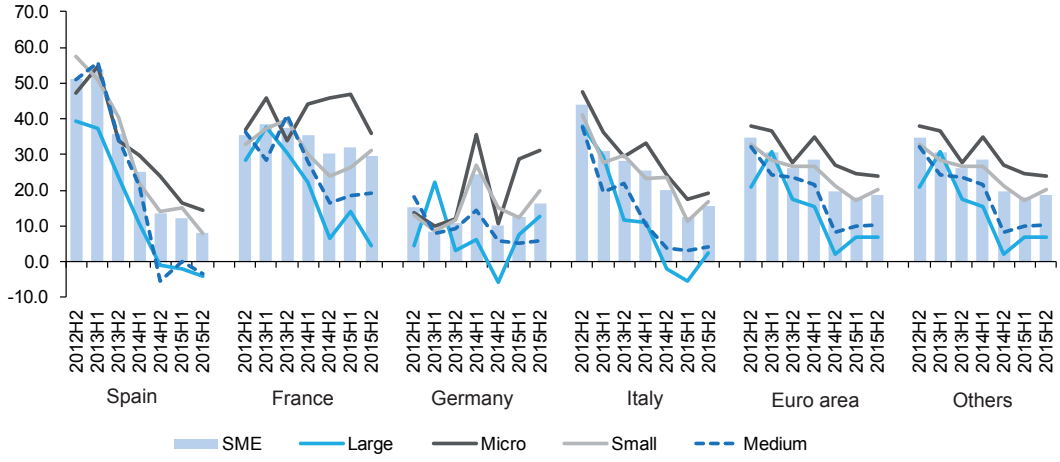


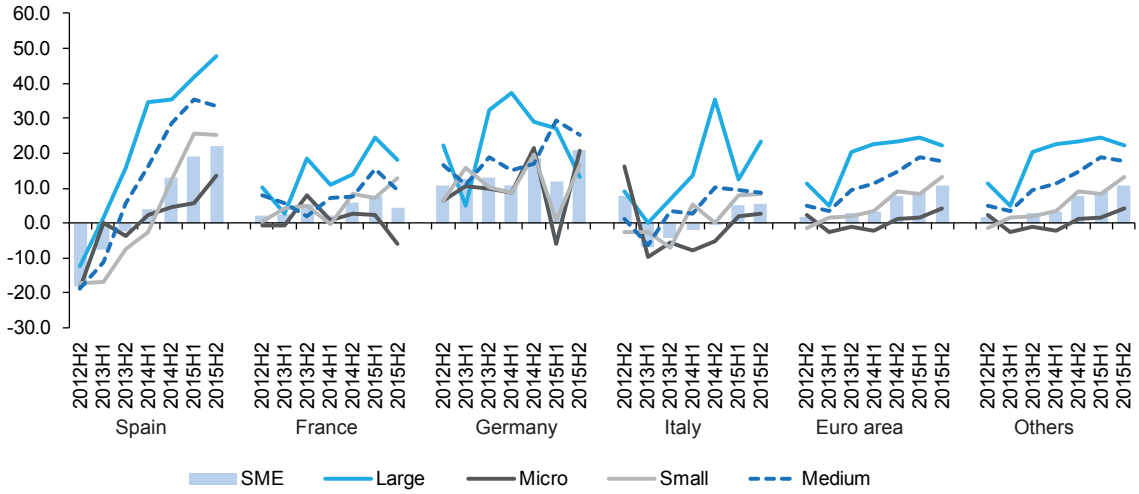
Exhibit 5 (continued)

Terms and conditions of bank loans. Difference between the percentage of firms considering them to have increased and those considering them to have decreased

c) Collateral requeriments



d) Available size of loan or credit line



Source: ECB.

survey, the figure was almost twice as big among large corporations (-73.4 pp) as among Spanish SMEs, which had net percentage of responses of -39.6 pp. Although interest rates have also come down for micro-enterprises, the net percentage is much smaller (-17.7 pp in Spain and -14.5 pp in the euro area).

Firm size is decisive in the case of non-interest financing costs, as in the case of Spanish micro and small enterprises, those that consider these costs to have risen predominate (with net percentages of 20 and 4.4 pp, respectively). This contrasts with the view of medium-sized enterprises and large corporations, where the majority consider these costs to have dropped

(-15 and -8.7 pp, respectively). In the euro area, independent from firm size, the net percentages are positive, but decreasing with size.

Banks also impose higher collateral requirements on smaller enterprises when granting credit. In medium-sized and large Spanish firms, the percentage considering banks to have reduced their guarantees is largest, with net percentages of -3.5 and -4 pp, respectively. By contrast, among other firms, there is a larger percentage stating that collateral requirements have increased, with values of 8 pp among small businesses and 14.6 pp among micro-enterprises. In relation to the euro-area average, the position of Spanish firms of all sizes has improved relative to the euro-area average, with lower net percentages.

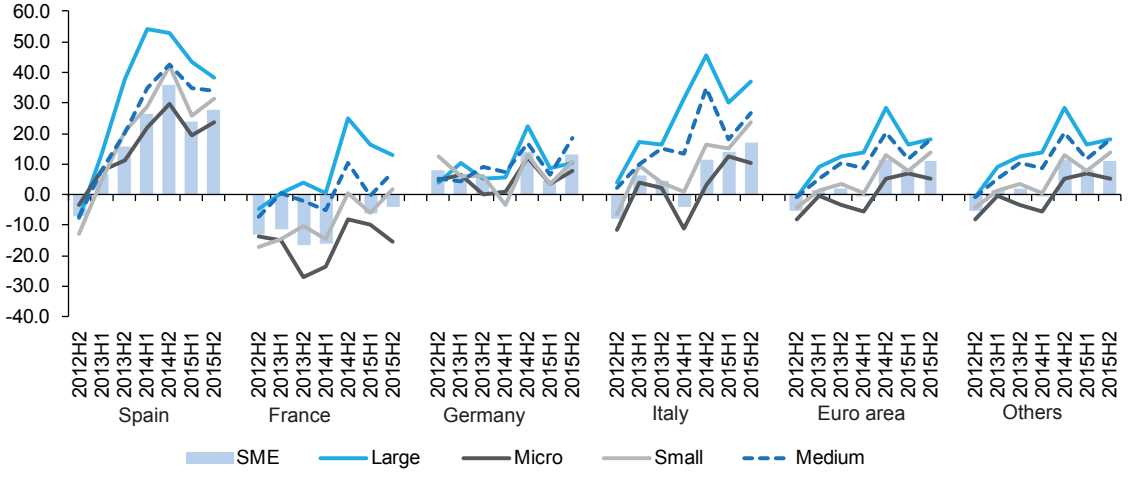
Finally, the average size of loans or credit lines granted to Spanish businesses of all sizes has increased, although once again, the increase among micro and small enterprises has been smaller. Thus, in the latest survey, compared with a net response percentage of 47.6 and 33.4 pp for large and medium-sized business, the value among micro-enterprises is 13.7 pp. Since early 2014, firms reporting an increase in the size of bank finance have predominated, and the net percentage has increased steadily since then. At present, these net percentages are larger in Spain than in the euro area for all sizes of business.

Will the availability of bank loans increase in the future?

The information presented so far shows the clear improvement that has taken place in terms of Spanish enterprises' access to credit and the conditions under which they obtain finance. Is this likely to continue improving in the immediate future? To answer this question, the ECB survey asked firms about their expectations for the next six months. Given that the most recent survey took place between March 10th and April 21st, 2016, the expectations cover the period to October 2016.

Exhibit 6

Change in euro area enterprises' expectations regarding the availability of bank loans. Difference between the percentage of firms considering it to have increased and those considering it to have decreased



Source: ECB.

Exhibit 6 shows the net response percentages to this question. A positive value implies that an improvement in the availability of bank loans is expected, while a negative value indicates reduced availability of bank financing.

For all firm sizes, both in Spain and elsewhere in the euro area, expectations have been improving since the end of 2012, when they emerged from negative territory. In the latest survey, all net response percentages were higher in Spain than in the euro area as a whole, with a minimum difference of 16 pp among medium-sized enterprises and a maximum of 19.9 pp among large corporations.

Focusing on the case of Spain, large corporations are the most optimistic about the recovery in the availability of bank loans, as just 5.7% consider there will be less bank loans available in the next six months, compared with 43.9% holding the opposite view. Within this widespread optimism, microenterprises are the least optimistic, as for 9.1% of them, credit will become less available in the future, compared with 32.8% that believe it will be more readily available. In the case of SMEs, the net percentage of responses is 27.7 pp, 10.5 pp less than among large corporations.

Concluding remarks

In a country like Spain, where SMEs account for 99.9% of businesses and contribute 73.3% to employment and 62.8% to GVA,[3] it is extremely important that SMEs be able to access bank finance on favorable terms. This is even more so the case bearing in mind that their small size makes bank finance by far their main source of borrowing.

Although the conditions under which SMEs were able to access finance worsened drastically in Spain at the onset of the crisis (particularly during the sovereign-debt crisis in 2010) and reached worrisome levels in 2012 with the fragmentation of the European market, since then, their access to credit has progressively improved.

The latest ECB survey on enterprises' access to financing, published in June 2016, shows that access to bank finance continues to improve in Spain (the data cover the period up to March 2016; the previous survey covered April to September 2015). The following key messages emerge from this latest survey:

- Access to finance, which became the main problem for Spanish SMEs, is no longer a particularly serious issue, as only 10.3% of SMEs report it as their main difficulty, a similar percentage to SMEs elsewhere in the euro area. Right now their main problem, by far, is finding customers (reported by 31.7%, almost 5 pp more than in the euro area).

- Large corporations have always enjoyed better access to bank finance on better terms. The good news is that the extent to which SMEs lag behind them has narrowed over time. Nevertheless, SMEs comprise a set of firms of varying sizes, in which micro-enterprises (those with fewer than 10 employees) face the worst conditions for access to bank finance. Nevertheless, these conditions have also improved.

- As regards the availability of bank loans, the improvement seen by SMEs has been so strong that, in the last survey, the difference between the percentage holding the view that it had increased and those holding the opposite view was 29.8 pp, three times the average for euro-area SMEs. This is also the highest value of any country in the euro area. This net percentage is much higher among large corporations (52.7%), while micro-enterprises have the lowest percentage (19.7%). In any event, this latter

[3] The percentages in the EU are somewhat smaller than in Spain: 66.9% in terms of employment and 57.8% in the case of GVA.

value is much higher than that for European micro-enterprises (1.4 pp). This is the first time in the euro area that the percentage of micro-enterprises stating that more bank loans are available exceeds that stating the contrary.

- The conditions on which SMEs are able to access bank finance have improved substantially in terms of lower interest rates and larger loans or credit lines, and the improvement has been bigger in Spain than in the euro area as a whole. However, SMEs considering costs (such as fees and commissions) to have increased and that banks are demanding more collateral remain in the majority, although the net percentage of positive responses (rise/fall) is smaller than in the euro area. Among Spain's medium-sized businesses and large corporations, the net percentages are negative (-8.7 and -15 pp, respectively), compared with positive values for their euro area counterparts.

- Everything seems to suggest that the availability of bank loans will continue to increase over the coming months, as the enterprises considering that it will outnumbers those considering the opposite, with a difference of 27.7 pp in the case of SMEs, almost three times the euro-area figure. Spanish firms are more optimistic than their European peers, regardless of size, with Spain's large corporations presenting a net response percentage of 38.2 pp.

With these messages, if the stock of credit continues to drop in Spain, it is not a reflection of a problem of supply, as businesses themselves take the view that banks have become more willing to lend. Therefore, the drop, which is constantly slowing, is the logical consequence of the necessary process of deleveraging. Moreover, credit conditions have improved in terms of interest rates and average loan and credit line sizes. By contrast, the percentage of Spanish firms that consider other financing costs (such as fees and commissions) and collateral requirements to have increased remains higher.

If progress continues to be made towards European Banking Union (which should correct the fragmentation of the European financial market), the economic recovery consolidates (and with it the demand for solvent credit), and the ECB's measures are effective (above all the forthcoming TLTRO II liquidity auctions, at rates that may be negative), enterprises' conditions of access to bank finance should continue to improve.

References

European Central Bank (2016a), *Survey on the Access to Finance of Enterprises in the euro area. October 2015 to March 2016*, June.

– (2016b), *Financial integration in Europe*.

European Council (2012), *Towards a genuine Economic and Monetary Union*, Brussels June 26th.

Recent trend in leverage across Spain´s institutional sectors

Daniel Fuentes Castro[1]

Spanish households and firms have made a considerable deleveraging effort since the beginning of the crisis. Conversely, growing public debt levels have kept overall leverage ratios high, and remain the weakest link in the country´s deleveraging process.

The credit boom in Spain in the run-up to the crisis translated into private borrowing rates which amply exceeded those of Spain's main economic peers. These levels have fallen considerably in recent years, very significantly in the case of the corporate sector. Spanish household leverage has fallen from 135% of their gross disposable income (GDI) in Q2008 to 106% at year-end 2015, although still above the Eurozone average. Corporate deleveraging has come down over the past three and a half years by 28% of GDP and currently stands below Eurozone levels. However, the growth in government borrowing, which closed 2015 at 99.2%, means that the leverage ratio presented by the resident sectors as a whole continues to constitute a source of vulnerability for the Spanish economy.

The net lending or borrowing position, the net international investment position and external borrowing

The Spanish economy's net lending position amounted to 22.7 billion euros in 2015. This was an exceptional performance relative to the historical series and was shaped by the trend in oil prices, strong service sector readings and a reduction in the investment income deficit compared to prior years.

The improvement in the net lending position in 2015 (2% of GDP *vs*. 1.4% in 2014) was driven mainly by the reduction in the energy bill, from 3.8% of GDP in 2014 to 2.5% last year. This mitigated the adverse impact of the growth in imports (a sign of renewed domestic demand strength) and the slight deterioration in the services trade surplus.

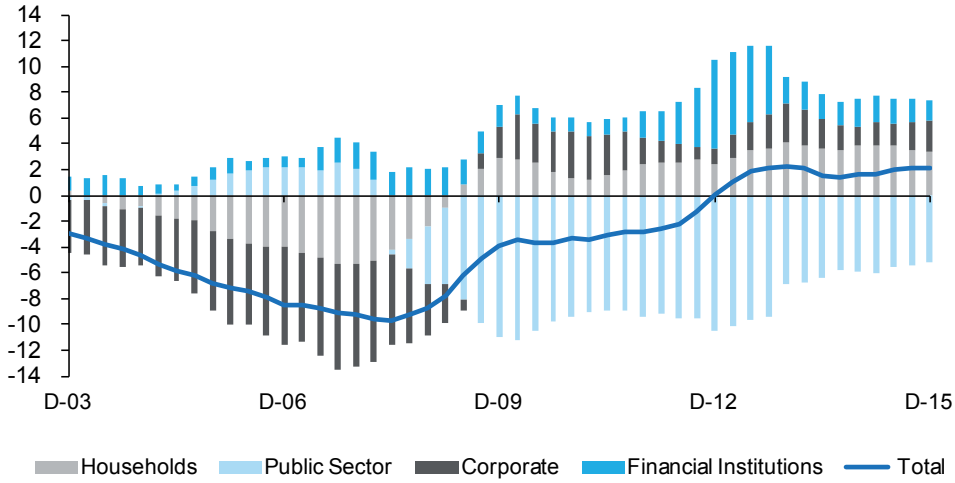
Spain's net lending position coupled with GDP growth drove a 5.3 point improvement in the net international investment position in 2015 to -90.5% of GDP.

The improvement in Spain's net lending position coupled with nominal GDP growth has driven a

[1] A.F.I. – Analistas Financieros Internacionales, S.A.

Exhibit 1

Net lending/borrowing position by institutional sector
(% of GDP)



Sources: Bank of Spain, INE, AFI.

5.3 point improvement in its net international investment position (NIIP) to -90.5% of GDP. Although this level remains high in the European context and is significantly conditioned by valuation effects, it is showing signs of gradual improvement.

The breakdown of the NIIP by institutional sector shows the deterioration in the public administrations' debtor position, which increased by 2.8 points to 46.4% of GDP, whereas the debtor position of Spain's households and non-financial corporates declined. The public administration alone accounts for nearly half of the economy's total NIIP debtor position. Stripping out the Bank of Spain (whose debtor position relative to the Eurosystem increased in 2015), the Spanish economy's NIIP would stand at -79.9% of GDP.

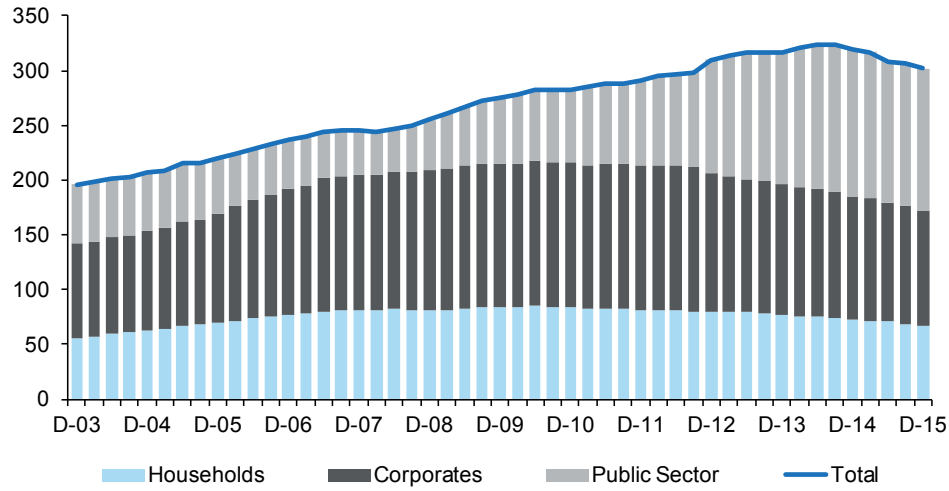
Unlike the NIIP, which reflects the difference between the residential sectors' external assets less their liabilities with the rest of the world, gross external debt only accounts for claims by non-residents "which imply the realisation in the future of principal or interest payments, or both (all financial instruments except equity interests and financial derivatives)" (Bank of Spain, 2016). The Spanish economy's external debt is currently equivalent to 167.9% of its GDP, which is higher than the German equivalent but lower than the French ratio. Excluding the Bank of Spain's liabilities (which are not subject to refinancing risk), external debt stands at 140.1% of GDP, a ratio which ranks it along the middle within the European context (Bank of Spain, 2016).

Borrowing, the institutional sectors as a whole

Overall borrowing by the Spanish economy's non-financial institutional sectors peaked at 323% of GDP in the third quarter of 2014, some 80 points above the level registered at the onset of the economic crisis. Between 2008 and 2012, private borrowing barely budged, coming down only very slightly, whereas public borrowing embarked on a considerable upward trend, which continues today.

Exhibit 2

Leverage ratios by institutional sector
(% of GDP)



Sources: Bank of Spain, INE, AFI.

The role played by automatic stabilisers has been crucial in the transfer of debt between the sectors. In this respect, two factors stand out: the drop in tax revenue (from 40.9% of GDP in 2007 to 34.8% in 2009, since which time it has been gradually recovering, reaching 38.2% in 2015) and the increase in jobless claims, which doubled between 2007 and 2010.

Although the private sector has deleveraged significantly, the overall leverage ratio presented by the resident sectors as a whole remains above 300% of GDP.

These two factors were compounded by explosive growth in public debt service costs (from 17 billion euros in current 2008 euros to 35 billion euros in 2015) and the rise in pension costs (from around 98 billion euros in 2008 to some 132 billion euros in 2015), the latter driven by structural issues not directly related to the economic crisis.

In the past three years, particularly since the start of the economic recovery, the private sector has deleveraged significantly, to the extent that leverage across Spain's non-financial corporates is now below the Eurozone average. Nevertheless, the leverage ratio of the non-financial resident sectors as a whole remains above 300% of GDP.

Household leverage

Spain's households have deleveraged by around 30 points from the peak of Q2008 to 106% of their gross disposable income today. Although that is still 11.4 points above the Eurozone average, the gap between household leverage in Spain relative to the Eurozone average was over 40 points at one

Spanish household leverage has fallen from 135% of their gross disposable income (GDI) in Q2008 to 106% at year-end 2015, leaving it still 11.4pps above the Eurozone average.

point. Against this backdrop, Spain's households still have a long way to go in order to bring their leverage in line with that of their neighbours.

Having increased sharply, the household savings rate, which peaked at 13% of gross disposable income (four-quarter moving average), unquestionably shaped by cautiousness at the height of the crisis, has declined and remains at around 10%. The current household savings rate – 9.4% in Q415 – is not substantially different from the levels witnessed before the credit bubble burst.

The household investment rate, however, is at an all-time low, suggesting that the deleveraging process has yet to run its course. Having gradually decreased in the first years of crisis, the investment rate would appear to have bottomed out at 4.3%, a level at which it has been stuck for the last two years and significantly below the levels observed during the pre-crisis years.

ECB monetary policy has been important in facilitating household deleveraging, considering the high percentage of floating-rate loans outstanding in Spain (according to the IMF, 98% of Spanish mortgages are floating-rate loans).

The drop in Euribor has driven a decline in the capital income paid by Spanish households, freeing up far more disposable income than would have been released by the deleveraging effort alone.

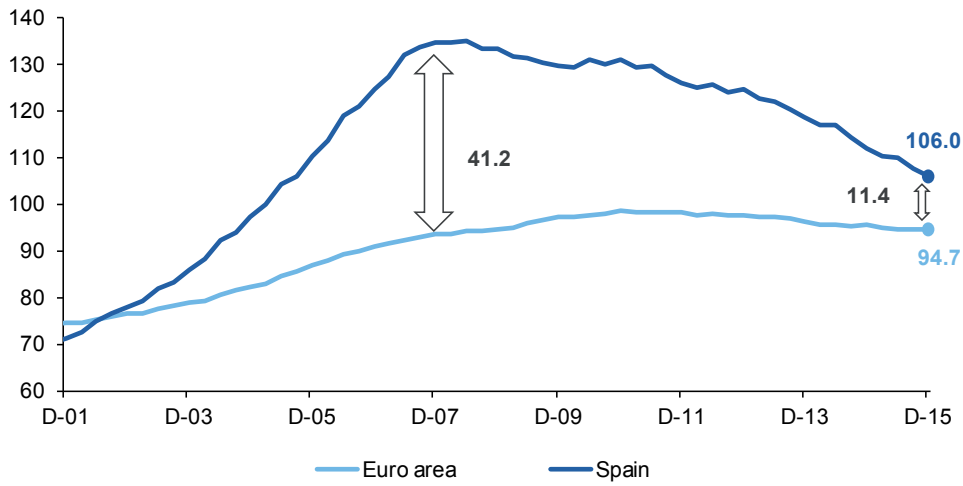
The downtrend in Euribor towards negative rates could release around 2.8 billion euros of extra income for households this year.

From the standpoint of the banking sector, this drop in capital income from households translates into a significant drop in interest income (from loans to households).

The decline in 12-month Euribor towards negative rates could release around 2.8 billion euros of

Exhibit 3

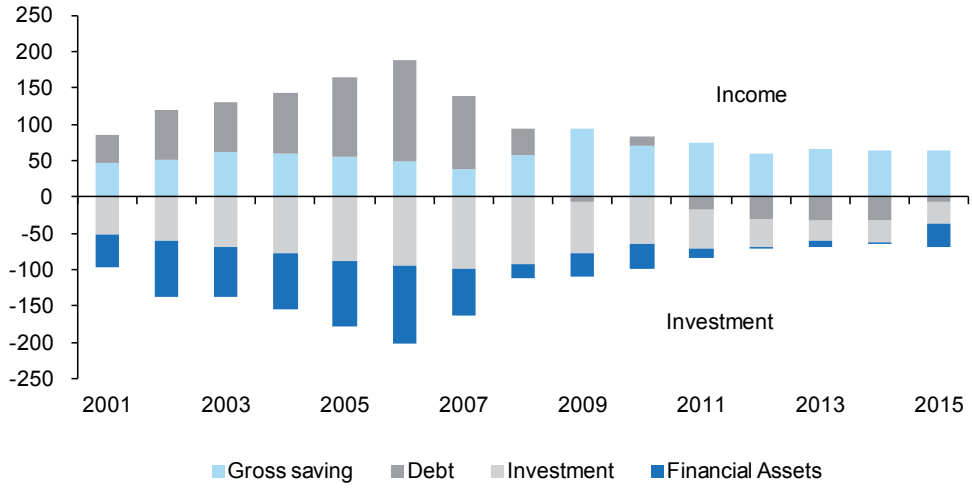
Trend in household leverage in Spain and the Eurozone
(% of GDP)



Sources: ECB, AFI.

Exhibit 4

Gross disposable household income: Sources and uses
(€ billion, cumulative 12 months)

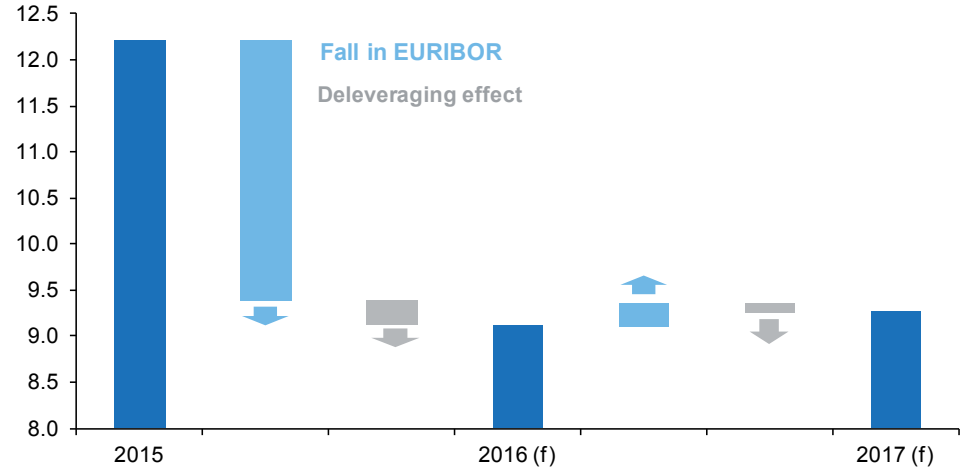


Sources: Bank of Spain, AFI.

extra income for households this year. However, from 2017, this phenomenon will cease to have any additional impact, reflecting the fact that the rates charged to borrow money in Spain are already extremely low (the second lowest among the European banks).

Exhibit 5

Impact of the drop in EURIBOR on household income
(€ billion)



Sources: Bank of Spain, INE, AFI.

Non-financial corporate leverage

Whereas household deleveraging began when the credit bubble burst and has continued steadily since then, Spain's non-financial corporates embarked on this process later, but with greater intensity.

This sector's leverage ratio declined from a peak of 133% of GDP in Q212 to 104.8% by year-end 2015. In three and a half years, Spanish companies have deleveraged by an amount equivalent to 28 points of GDP to levels which are below those of their Eurozone counterparts on average.

In three and a half years, Spanish companies have deleveraged by an amount equivalent to 28 points of GDP to below Eurozone average levels.

Initially, corporate deleveraging was accompanied by sharp contraction in business volumes which in turn led to heavy job losses. Subsequently, the process gradually transformed into a virtuous circle in which debt has continued to come down, while investment has slowly picked up.

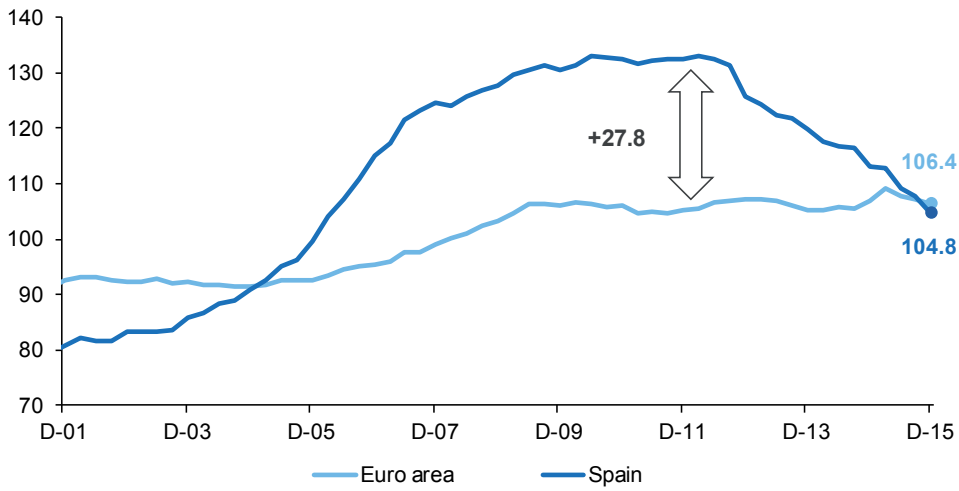
The corporate investment rate appears to have stabilised at around 90% of gross disposable income, a level which looks as if it might be the 'new norm' and is lower than the average registered during the boom years in the run-up to the crisis (above 150%, peaking at 203% in 2007).

Corporate deleveraging looks set to continue in the coming years, albeit perhaps with less intensity. There is no technical criterion for formally defining the optimal leverage ratio for non-financial corporates but economic theory points to levels slightly above those observed in the pre-crisis years when this ratio hovered around 80%.

Regardless, the numbers at hand point to a deleveraging effort by Spanish companies with

Exhibit 6

Trend in non-financial corporate leverage in Spain and the Eurozone
(% of GDP)



Sources: ECB, AFI.

benefits for their competitiveness and resilience vis-a-vis future shocks.

The ECB's corporate bond buyback programme

Bonds account for a negligible percentage of the financial structure of Spain's companies as a whole. And among SMEs, they are virtually non-existent. In companies with annual revenue of over 50 million euros, bonds account for just 6% of total borrowing. Logically, this percentage rises significantly – to 40% – in the case of the IBEX-35 stocks (excluding the banks).

The non-financial corporates included in Spain's benchmark blue chip stock index owe around 150 billion euros of bank debt. Most of this is in the form of syndicated loans, a product to which foreign banks are significantly exposed. Assuming that 50% of this figure is held by Spanish financial institutions, this would be equivalent to close to 14% of all credit extended to non-financial resident corporates (540 billion euros) and represents the maximum amount of outstanding debt which could be replaced by bonds in the case of IBEX-35 corporates (a hypothetical maximum which would never be reached as bank financing will continue to play a meaningful role). Elsewhere, any such substitution process will necessarily be gradual, limiting its impact.

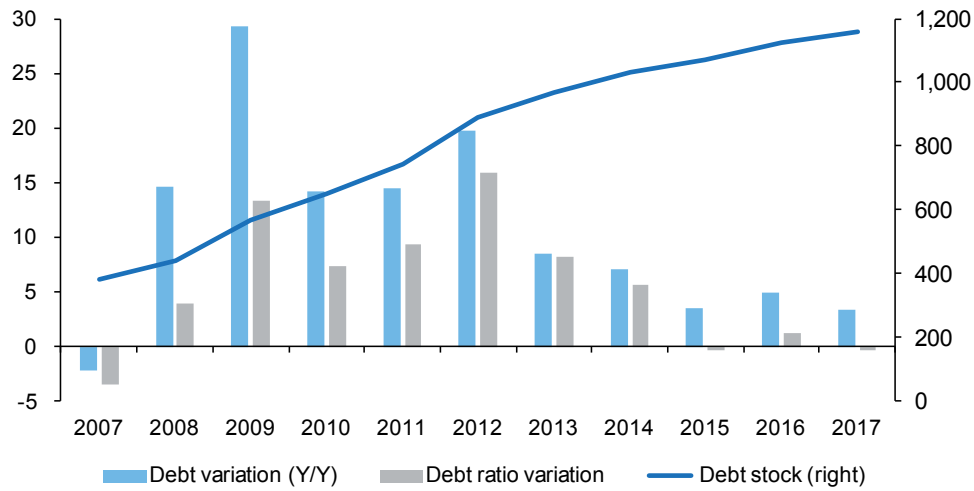
The above threshold needs to be grossed up by the loans extended by Spanish banks to other large-cap Spanish companies (those traded on Madrid´s general index, the IGBM in its Spanish initials), which could also replace bank financing with bonds. A good number of IGBM-listed corporates would also be able to tap the bond markets, making these companies candidates for participating in this source of financing substitution process.

Public sector leverage

The public deficit – at all levels of government – amounted to 5.0% of GDP in 2015 (without including financial aid), 0.8 points above the

Exhibit 7

Trend in public debt
(% YoY change, € billion)



Sources: 2016 - 2019 Stability Programme, *European Commission, AFI.*

target of 4.2% established in the Excessive Debt Procedure (EDP). In other words, of the anticipated 1.6 point fiscal consolidation effort (the deficit registered in 2014 was 5.8%) only 0.8 points was achieved.

By sub-sector, the culprits were the regional governments (which presented a deficit of 1.66% of GDP *vs*. a targeted 0.7%) and Social Security, which registered a higher deficit than in 2014 (1.26% of GDP in 2015 *vs*. 1.04% in 2014) (Maastricht criteria).

In contrast, the state government outperformed its target by 0.2 points (deficit of 2.7% *vs*. targeted 2.9%) and the local entities continued to present a surplus, albeit narrower than in prior years (0.44% of GDP), only partially mitigating the slippage at the regional government and Social Security levels.

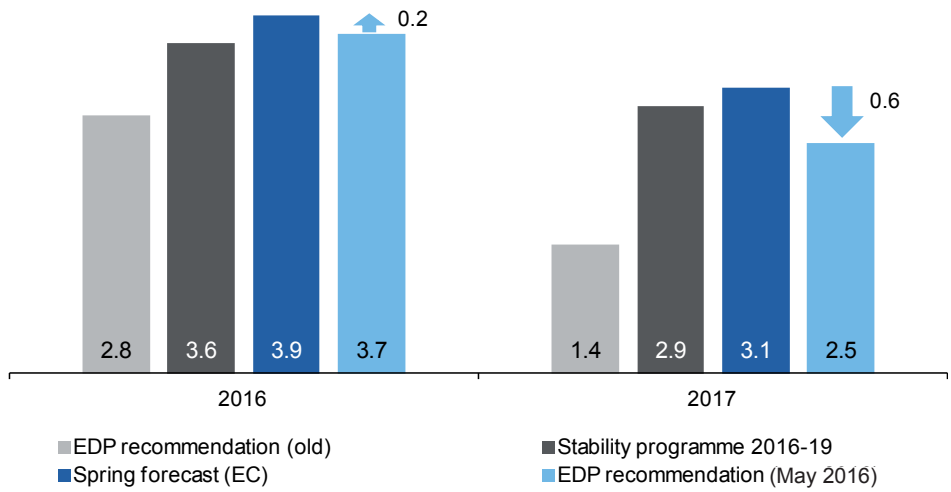
The stock of debt meanwhile climbed 3.5% higher year-on-year in 2015, albeit slowing from the growth registered in 2014 and 2013 of 7.0% and 8.5%, respectively. This trend in debt did not translate into a higher leverage ratio thanks to faster growth in nominal GDP (3.8%). In fact, for the first time since the start of the crisis, the public leverage ratio improved ever so slightly: 99.2% in 2015 *vs*. 99.3% in 2014.

For the first time since the start of the crisis, the public leverage ratio improved ever so slightly (99.2% in 2015 vs. 99.3% in 2014) albeit not supported by the trend in the primary deficit.

However, there was another factor causing the debt-to-GDP ratio to stabilise rather than rise above 100%, as forecast, in spite of such a high deficit (5% of GDP). Although the state registered a deficit of 28.2 billion euros, its net debt only increased by 8 billion euros. This phenomenon is mainly attributable to the difference in the prices at which government debt was issued and redeemed in 2015.

Exhibit 8

Public deficit targets
(% of GDP)



Sources: 2016 - 2019 Stability Programme, *European Commission, AFI.*

The drop in the public leverage ratio is not therefore attributable to an improvement in the primary deficit, which amounted to 2% of GDP in 2015, but rather to nominal growth and the impact of valuation effects.

Consensus forecasts point to continued growth in the Spanish stock of debt in 2016 and possibly 2017, pushing the leverage ratio above 100% of GDP. Conventional public debt sustainability analysis suggests that Spain would have to register a primary surplus of around 1.5% of GDP and nominal annual growth of at least 3% to bring the leverage ratio to 60% within a 20-year time horizon (Maastricht criteria).

Towards a new public deficit roadmap

In terms of the new public deficit targets, insofar as the 2015 slippage makes it impossible to slash the deficit to 2.8% in 2016 or 1.4% in 2017, as initially forecast, the 2016 - 2019 Stability Programme is targeting a deficit of 3.6% in 2016 and 2.9% in 2017 (Spanish Government, 2016). This means pushing back the 3% target, necessary for abandoning the corrective arm of the Excessive Deficit Procedure, by one year.

The Stability Programme also calls for a reduction in the primary deficit to 0.8% in 2016, and a further 0.6 percentage points correction in 2017. Spain is expected to present a primary surplus in 2018, a surplus projected to increase to 0.9% of GDP in 2019 (European Commission, 2016).

As for the targets for the various levels of government, the austerity requirement imposed on Social Security has been relaxed, although it will still have to reduce its deficit by 0.6ppt of GDP to 0.7% by 2019. The regional governments are required to balance their budgets by 2019, while the state is expected to register a deficit of 0.9% of GDP in 2019.

There have been no changes to fiscal policy on either the revenue or expenditure fronts. The target is still to keep the revenue-to-GDP ratio "slightly above 38%" and to drive "the ratio of expenditure-to-GDP down by over three points of GDP, from 43.2% of GDP in 2015 (excluding financial aid) to 40.1% in 2019."

The public deficit, under pressure from automatic stabilisers and the structural increase in pension spending, constitutes the weak link in the Spainish economy's deleveraging chain.

The European Commission, meanwhile, is estimating a public deficit in Spain of 3.9% in 2016 and 3.1% in 2017 so that without additional measures the deficit will not hit the 3% target until 2018. The Commission believes however that with additional tightening equivalent to 0.2ppt of GDP in 2016 and 0.6ppt in 2017, Spain could achieve a deficit of 3.8% this year and 2.5% next year.

This diagnosis coincides with the crux of the report released by AIReF (2016), Spain's so-called independent fiscal responsibility authority, on May 10th. In a nutshell, the AIReF believes that a deficit of 3.6% is feasible in 2016 albeit conditional upon additional fiscal consolidation equivalent to 0.4ppt of GDP.

Conclusions

The ECB's monetary policy has been important in facilitating household deleveraging, considering the high percentage of floating-rate loans outstanding in Spain. The drop in Euribor has driven a decline in the capital income paid by Spanish households, freeing up far more disposable income than would have been released by the deleveraging effort alone. Despite the progress made, Spain's households still have a long way to go in order to bring their leverage in line with that of their neighbours.

In three and a half years, Spanish companies have deleveraged by an amount equivalent to 28 points of GDP to levels which are below those of their Eurozone counterparts on average. Corporate deleveraging looks set to continue in the coming years, albeit perhaps with less intensity, presumably settling at levels that are slightly higher than those observed before the crisis, when this ratio hovered at around 80%.

As for the outlook for stabilisation in the public leverage ratio, consensus forecasts point to continued growth in the stock of debt in 2016 and possibly 2017, with the leverage ratio already *de facto* above 100% of GDP. Conventional public debt sustainability analysis suggests that Spain would have to achieve a primary surplus of around 1.5% of GDP (deficit of 2% in 2015) and nominal annual growth of at least 3% to bring the leverage ratio to 60% within a 20-year time horizon.

References

AIReF (2016), *Reports on the Macroeconomic Projections and Draft Update of the Stability Programme of the Kingdom of Spain for 2016-2019*, Independent Authority for Fiscal Responsibility (AIRef), May 15th.

Bank of Spain (2016), "Balance of Payments and International Investment Position," "Quarterly report on the Spanish economy," *Economic Bulletin*, May, Bank of Spain.

European Commission (2016), "Spring 2016 Economic Forecast: Staying the course amid high risks," *Institutional Paper* 025, May.

Spanish government (2016), *Update of the 2016 - 2019 Stability Programme*, April.

The dynamics of public debt and economic growth in Spain

Vicente Esteve[1] and Cecilio Tamarit[2]

Lessons from Spanish history teach us that there is a correlation between an increase in public debt and a reduction in growth prospects. Policy makers should consider this as part of the incentive for fiscal consolidation in their efforts to meet ambitious Stability and Growth Pact targets.

Long term debt sustainability – and its relationship with growth – is one of the key issues facing the Spanish economy today and a pressing question in the minds of many investors. Despite progress made in fiscal consolidation in recent years, public indebtedness levels today are above 100% of GDP. In the case of Spain, it is not easy to clearly establish a particular threshold level in the relationship between debt and growth. However, looking at the dynamics and evolution of these two variables during two historical periods (1851-2000 and 1965-2013), some interesting findings emerge. Looking at both periods in their entirety, an increase of 10% in the public debt to GDP ratio has been associated with a reduction in GDP growth between 0.17%-0.38%. However, during the second sub-period of 1851-2000, an increase in the debt ratio of 10% has been associated with a drop in growth of 0.7%. These findings are particularly important to bear in mind for fiscal policy makers when assessing public debt sustainability and when pursuing the objective of achieving the 60% of GDP target adopted in the Stability and Growth Pact.

The financial crisis that began in the United States in the summer of 2007 rapidly spread throughout international financial markets to reach the EU. The euro area went into recession in 2008 and, somewhat overtaken by events, the European Commission established a Keynesian European Economic Recovery Plan (EERP) in December of that year with the aim of coordinating the national plans already under way.

Given that the short-term challenge for the European economy was to maintain the liquidity and solvency of the financial system to stave off economic collapse and that there was a strong international consensus on the need for expansionary economic policies (at the level of the G20, as well as that of the EU), the role of monetary policy became that of cutting interest rates to the minimum and injecting massive amounts of money to avoid a socially unacceptable economic

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contraction. Fiscal policies initially sought to stabilise financial markets (by means of injections of public capital, asset purchases and guarantee operations), and then aimed to allow flexible use of automatic stabilisers, before finally applying discretionary expansionary measures. The inevitable result was an increase in the deficit and public debt due to shrinking tax revenues (very closely linked, in countries such as Spain, to the property market and rising financial asset values) and higher spending. This fact was particularly critical in certain countries with substantial foreign debt, such as Greece, Ireland, Portugal and Spain. The Greek crisis demonstrated the capacity for market contagion through agents' shifting expectations resulting from the debt accumulation dynamic in the absence of concrete reform and adjustment plans either nationally or collectively promoted, in this latter case by the EU. Although the fiscal policy measures referred to may have helped soften the economic cycle, the discretionary fiscal measures and bank bail-outs played a large part in the rapid rise in the public-debt-to-GDP ratio in many countries. In this connection, Reinhart and Rogoff (2010) have highlighted the negative effects on growth that high debt levels can have.

In 2008, there was a strong international consensus on the need for expansionary economic policies. The inevitable result was an increase in the deficit and public debt due to shrinking tax revenues and higher spending.

From the economic policy standpoint, an analysis of this relationship is a crucial factor at the centre of the debate over Europe's current fiscal consolidation strategy. There is a broad consensus that most European countries need to undertake significant fiscal consolidation to improve their fiscal position and thereby stabilise and reduce levels of debt, given the risks to their budgetary sustainability (IMF, 2013). However, there is less consensus over the pace of this consolidation process. Two main factors need to be taken into account when setting out an optimal path for fiscal consolidation. The first is the economy's expected growth rate and the short-term fiscal multiplier, and the second is the sustainability gap, or the size of the medium-term fiscal adjustment needed. As regards the former, there is a certain amount of agreement that the fiscal multiplier depends on the fiscal variable, the country and the period considered. *Ceteris paribus,* multipliers tend to be higher in a context of a sluggish economy, lack of monetary support, and credit restrictions. In principle, the existence of non-linearities in terms of economic growth as a result of fiscal adjustments would imply extending the period for consolidation and deleveraging to avoid premature exit strategies, of which Japan at the end of the 90s is widely considered to be an example. However, although fiscal consolidation may have negative short-term impacts, the cost of not consolidating can be greater still, given the rising expectations of a default or liquidity crisis (Corsetti, 2012). As regards the second factor, the sustainability gap, simply a matter of arithmetic and current calculations, it seems to be at unusually high levels relative to historical data (European Commission, 2012).

Determining a credible and politically feasible path of fiscal adjustment means a delicate balance of forces needs to be achieved, depending on each country's specific characteristics. It is therefore worth determining the nature of the relationship between the level of debt and growth over the long term in each case. Given the state of the Spanish economy, this study may be particularly timely, as there are fears that high levels of debt could harm economic growth, prolonging the time taken to recover from the crisis and leading to economic stagnation. What is more, an important implication of a fiscal austerity policy is that it can raise the debt ratio over the short term, as the fiscal gains may be partially outweighed by the drop in output. Even if this effect is only short term and debt levels gradually come down, it can nevertheless have a negative impact if financial markets focus on the

short-term effect on the debt ratio or if economic policy-makers insist on fiscal tightening to achieve official targets for the debt ratio.

In Spain's case, the way the economy has evolved has been a clear example of rising debt causing a turnaround in market expectations regarding the country, triggering a liquidity crisis that could easily have turned into a solvency crisis. The strategy pursued since then has led to a reduction in the deficit. This reduction has been considerable but remains insufficient to reverse the rate of debt accumulation, which has now reached one of its highest levels ever in Spain. It is therefore worth analysing how the level of debt has affected Spain's growth in the past.

The foregoing describes the backdrop against which the topic addressed in this article is set. The first section therefore analyses the trend in Spain's public debt. The following section completes the analysis with an estimate of the long-term relationship between Spain's public debt and real economic growth using databases covering the periods 1851-2000 and 1965-2013. The final section offers some concluding remarks.

Evolution of public debt in Spain: State of play and outlook

The government has expressed its satisfaction with the fiscal adjustment, while at the end of 2015 public debt totaled 1,081,190 million euros (99.2% of GDP), more than 63 percentage points of GDP higher than its level in 2007 (35.5% of GDP). The EU's latest projections forecast the public debt stock stabilising in the next two years as a percentage of GDP (2016: 100.3%; 2017: 99.6%), but 40 points from the Stability and Growth Pact target (60% of GDP).[3]

The total public deficit at the end of 2015 also remained high, at 55,136 million euros (5.1%), although the imbalance has been reduced by more than 6 percentage points since its peak in 2009 (11% of GDP). The public deficit registered in 2015 overshot both the EU's autumn projections (4.7% of GDP, November 2015) and those of the Spanish government's Stability Plan for 2015-2018 (4.2%, April 2015).

Such a large stock of public debt implies serious difficulties for fiscal policy. First of all, it makes it necessary to refinance large sums in national and international capital markets, exacerbating the Spanish economy's vulnerability, as became evident during the euro area sovereign-debt crisis from 2010 onwards. To be more precise, each year, the Spanish general government has to borrow over 20% of GDP, making it highly dependent on capital markets.

A large stock of public debt makes it necessary to refinance large sums in national and international capital markets, exacerbating the Spanish economy's vulnerability.

Secondly, such a large volume of public debt means, despite the current low interest rates (underpinned by ECB monetary policy), substantial interest payments on the accumulated stock of public debt (35,676 million euros or 3.3% of GDP in 2015).

Thirdly, to compensate for these interest payments and balance the budget overall, while reducing or at least stabilising the stock of public deficit, the general government needs to produce a significant primary surplus (before debt servicing). However, this means raising taxes or cutting productive public spending, particularly public investment, which may have a strongly negative effect on economic growth and, ultimately, on employment.

[3] This article is based upon the projections of the European Commission (2016a, 2016b and 2016c).

Lastly, in the framework of Economic and Monetary Union (EMU), these high levels of public debt may significantly reduce the counter-cyclical effect of fiscal policy, as monetary policy is in the hands of the ECB and there is no option of devaluing the national currency.

It will be difficult to sustain public finances unless fiscal consolidation is pursued further, but this problem is not new. The Spanish economy has undergone recurrent episodes in which it has proven difficult to sustain budgetary equilibrium and the debt stock without extraordinary measures. The list of episodes includes: Philip II: 1557, 1560, 1575, 1597; Philip III: 1607; Philip IV: 1627, 1647, 1652, 1662; Charles II: 1666; Charles IV: 1798; Cádiz Cortes: 1812-1813; Ferdinand VI: 1814, 1817, 1823, 1825, 1828; Isabella II: 1835, 1841, 1844, 1851, 1867; Sexenio Democrático and 1st Republic: 1871; Alfonso XII: 1876, 1881; Alfonso XIII: 1900, 1915-1919, 1927-1928; 2nd Republic: 1935, 1939.

Exhibit 1 shows the trend over time in the stock of public debt relative to GDP (%) from 1850 to 2015. The current state of the public debt dynamics reveals an increase in line with other periods of historically high debt levels: 1st Cuban War 1868-1878 during the reign of Alfonso XII and the Cuban Crisis of 1898 during the regency at the start of the reign of his son Alfonso XIII.

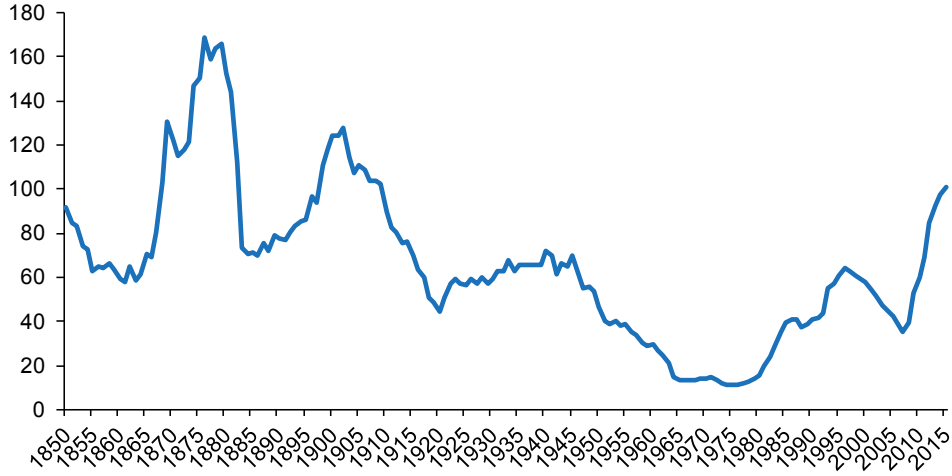
The current state of the public deficit in relation to GDP is no less important historically: as Exhibit 2 shows, it has not been at the present level since 1950. And these recent figures for the public deficit do not include[4] the multitude of specific debt issues to cover the financing needs of various "special funds" the Spanish treasury has had to cover (the so-called "deficit-debt adjustment effect" which will be discussed below).

In order to assess the public debt stock over time in Spain as a percentage of GDP, we will use the following breakdown of the debt ratio dynamic into three components:

$$b_t = \frac{(i_t - g_t)}{(1+g_t)} b_{t-1} - d_t + dda_t \qquad [1]$$

Exhibit 1

Stock of Spanish public debt as % of GDP 1850-2015

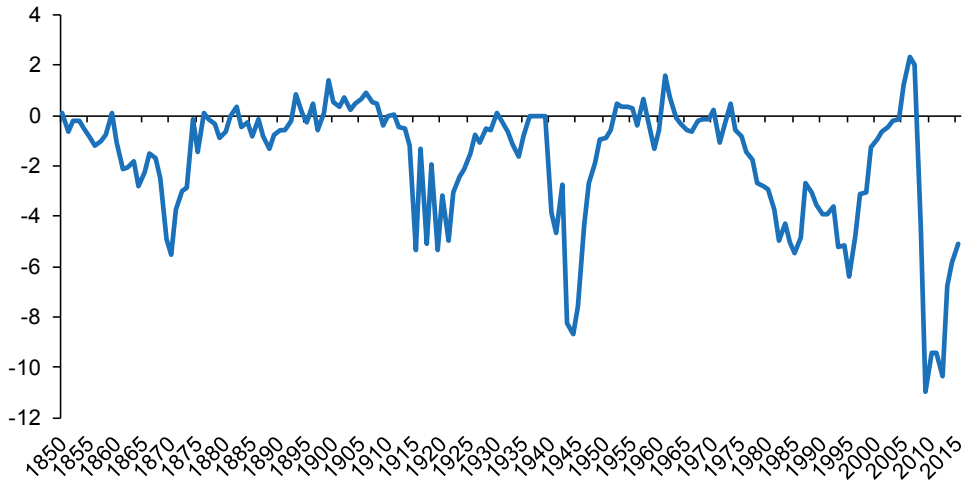


Source: Authors' own elaboration.

[4] These are included in the case of public debt stock figures.

Exhibit 2

Total Spanish public deficit as % of GDP 1850-2015



Source: Authors' own elaboration.

where b_t represents the debt stock (as % of GDP), d_t is the primary public surplus or deficit (as % of GDP, excluding interest on the debt), i_t implicit nominal interest rates on public debt, g_t the nominal growth rate of the economy (real growth rate + inflation rate) and dda_t is the "deficit-debt adjustment" component.

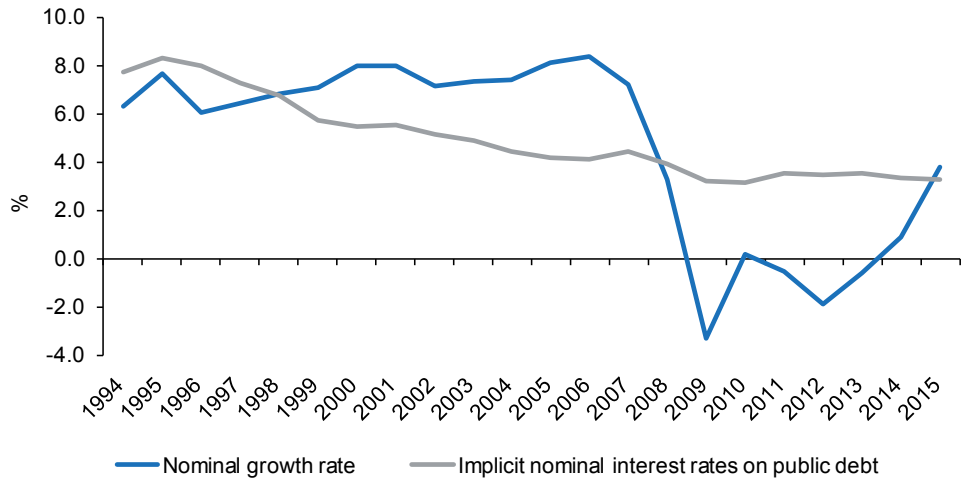
The above expression implies that in order to stabilise the public debt stock relative to GDP, three non-exclusive conditions have to be met: (1) nominal growth of the economy (note that deflation increases the debt) must be greater than the implicit nominal interest rate on the public debt (debt interest component or "snowball effect"); (2) a public primary surplus needs to be generated ("fiscal adjustment" component); and, (3) the "deficit-debt adjustment" has to be reduced or eliminated ($dda_t = 0$).

The first component of the public debt dynamic is the so-called "snowball effect". Exhibit 3 shows how this component progressed between 1994 and 2015. The implicit nominal interest rate on the debt has been obtained from the debt-service ratio and the public debt stock. The snowball effect, which increases the stock of public debt (the interest rate on the debt exceeds nominal economic growth), appeared in 2008 at the start of the international financial crisis. It has been decreasing since 2012 and at the end of 2015 the gap had closed, such that if it remains at current levels from 2016 on, it will not have an effect on the public debt stock. It is therefore essential that the economy grow at faster nominal rates in order to turn the effect negative and put downward pressure on the volume of debt, either with growth outpacing real interest rates or through deflation, or both.

The second component in the public debt dynamic is the primary government deficit or surplus. Between 1964 and 2015, this progressed as shown in Exhibit 4. The primary surpluses during the property boom (1996-2007) turned into a primary deficit in 2008, reaching a maximum of -9.3% of GDP at the end of 2009. Moreover, despite the fiscal adjustments made, it has still not been possible to achieve a fiscal surplus, such that

Exhibit 3

"Snowball effect" in the Spanish economy 1994-2015



Source: Authors' own elaboration.

at the end of 2015 there was still a deficit of 1.6% of GDP. The European Union's latest forecasts suggest a small primary deficit of 0.6% of GDP in 2016 and a small primary surplus in 2017 (+0.2% of GDP).

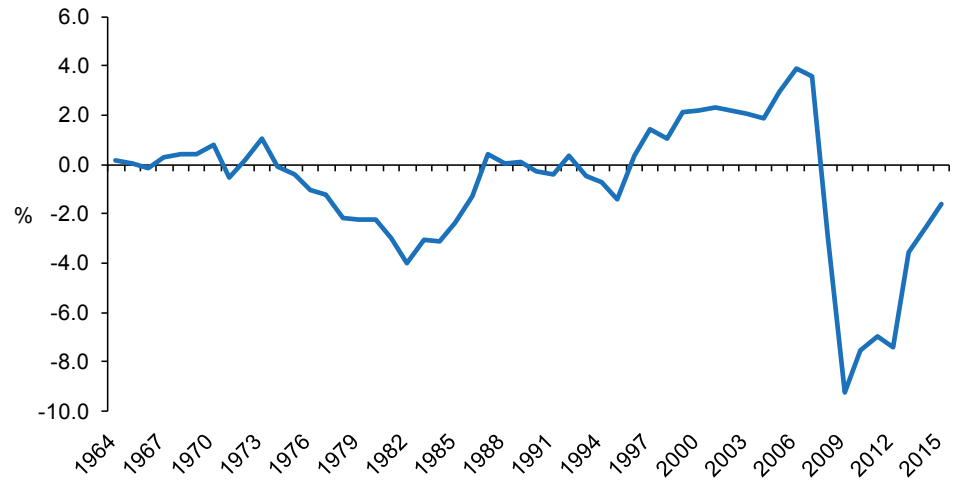
The third component of the public debt dynamic is the so-called "deficit-debt adjustment" effect. This component includes all public debt issues that are not classed as public deficit (they do not arise out of the difference between government revenues and expenditure) but are classed as public debt. They arise out of the State's need to borrow in order to pay for financial assets not directly related to the public budget. These items include (but are not limited to):[5]

- ✓ EFSF (European Financial Stability Facility), loans for the bail-out of Ireland, Greece and Portugal.
- ✓ Fund to support the Hellenic Republic (bilateral).
- ✓ Participation in ESM (European Stability Mechanism), which replaces the EFSF for future bail-outs.
- ✓ FROB (Fund for Orderly Restructuring of the Banking Sector).
- ✓ FAAF (Financial Assets Acquisition Fund).
- ✓ Supplier payment finance fund (FFPP).
- ✓ FADE (Electricity-system deficit amortisation fund).
- ✓ Possible bail-out of the toll motorways going into receivership in 2016 (2400-5000 million euros).
- ✓ Possible third bail-out for Greece in 2016 (disbursements this year of the total of Spain's 10.5 billion euro share).

[5] But not the FLA (Regional Liquidity Fund) covering debt maturities or to meet the autonomous regions' authorised borrowing requirements in the year. (This does not increase the consolidated general government debt.)

Exhibit 4

Spanish public primary surplus or deficit as % of GDP 1964-2015



Source: Authors' own elaboration.

It should be borne in mind that net acquisitions of financial assets to finance the funds listed above led to an increase in public debt between 2008 -2015 (unrelated to the public deficit funding needs) of 33,270 million euros (3% of GDP), equal to 50% of the public deficit adjustment made between 2009-2015 (5.9 percentage points of GDP).

Lastly, the public debt statistics leave out the general government's "contingent debt," which comprises guarantees on debt contracted by other institutional sectors. These guarantees are not registered as liabilities on the general government accounts, given that the guaranteed debt is registered as a liability for the agent receiving it.

Nevertheless, these guarantees are contingent liabilities for the public finances, such that if the guarantee were to be executed in whole or in part, the general government would assume the whole debt. The balancing item would be a capital transfer paid to the original debtor, therefore, representing an increase in the general government deficit and debt.

In late 2015, the volume of contingent liabilities was slightly over 10 percentage points of GDP (107,913 million euros), as a result of the various guarantees granted to the banking system (guarantees for medium-term issues of bank debt, 2008-2009), to the European Financial Stability Facility (EFSF), the management company for the assets deriving from bank restructuring (SAREB) in the framework of the process of banking restructuring, the Electricity System Deficit Securitisation Fund, and issues of SME Financing Securitisation Funds, etc.

Taking all of these factors into consideration, the levels of sovereign debt, not only in Spain, but across the euro area, clearly imply a future flow of public primary surpluses that may slow the possible recovery of the most heavily indebted economies, risking driving them into a process of "secular stagnation" from which it will be difficult to escape. To understand the mechanisms making this scenario possible, it is worth taking a closer look at the economic consequences of high debt levels.

The economic consequences of over indebtedness: Empirical evidence for the Spanish economy over the period 1851-2013

In this section we present the results of our analysis of the Spanish economy over an exceptionally long period of time: 1851 to 2013. Unlike other studies, which use panel data and short time intervals, our approach has been to look at just one country's time series data using advanced cointegration techniques that allow us to detect possible breakpoints, and the existence of parametric instability without imposing any functional form *a priori.* We also estimate elasticities for the various different regimes found.[6]

In this study, we used time-series data on the Spanish economy for two periods: 1851-2000 and 1964-2013. The data sources for the first period are Comín and Díaz (2005) and Carreras, Prados de la Escosura and Rosés (2005) and that for the second period the Bank of Spain (2014).

The results of the estimation are shown in Tables 1 and 2 for the full sample period, 1851-2000 and 1965-2013, respectively. The results imply that the null hypothesis for the deterministic cointegration between g_t and b_t cannot be rejected in the three cases put forward, with a 1% significance level, where g_t is the real GDP growth rate and b_t represents the debt stock as a percentage of GDP. Moreover, the estimated value of the long-term elasticity, γ, is always negative and significantly non-zero. This estimation provides empirical evidence that public debt has a negative effect on real growth of the Spanish economy. For example, over the period 2007-2013, the stock of public debt measured as total liabilities relative to GDP, b_{21t}, grew by 84 percentage points, which, according to our estimates would be associated with a cumulative drop in the rate of real growth of 2.18 percentage points.

Table 1

Estimates of long-term relationships: Stock-Watson-Shin cointegration contrasts 1851-2000, [$g1_t$; $b1_t$]

Estimated parameters	Complete sample 1851-2000	First period 1851-1939	Second period 1940-2000
c	5.51 (6.0)	0.35 (0.1)	6.74 (5.3)
γ	-0.038 (-3.2)	0.011 (0.5)	-0.070 (-2.1)
R^2	0.38	0.19	0.72
C_μ	0.072	0.060	0.050

Note: t statistics in brackets.

Source: Authors' own elaboration.

Table 2

Estimates of long-term relationships: Stock-Watson-Shin cointegration contrasts 1965-2013

Estimated parameters	Complete sample	
	[$g2_t$; $b21_t$]	[$g2_t$; $b22_t$]
c	4.42 (6.8)	4.35 (7.3)
γ	-0.026 (-1.7)	-0.017 (-1.5)
R^2	0.83	0.83
C_μ	0.094	0.094

Note: t statistics in brackets.

Source: Authors' own elaboration.

In order to see how the elasticity has developed over the long term, Table 1 again estimates this parameter in the two sub-periods of the 1851-2000 sample.[7] The results show that in neither case can the null hypothesis of deterministic cointegration between g_t and b_t be rejected with a 1% significance level. Moreover, the coefficient in the first regime (1851-1939) is positive, but very low and of limited significance. By contrast,

[6] For more details of the technical aspects of the econometric estimation, see Esteve and Tamarit (2016).

[7] The data in the sample for the period 1965-2013 are insufficient to perform the DOLS estimate in the first regime (1965-1971).

in the second regime (1940-2000) the long-term coefficient is negative and significant. From the economic point of view it implies that an increase of 10 percentage points in the stock of debt relative to GDP would cause a drop of 0.70 percentage points in the real economic growth rate. This value is more than twice that estimated for the full 1851-2000 sample (0.38 percentage points).

Thirdly, we analysed the possible existence of a non-linear relationship between public indebtedness and real economic growth using the methodology proposed by Hansen and Seo (2002).[8] The cointegration contrasts allow linearity to be rejected in favour of a non-linear regime with two periods. These findings are consistent with the existence of non-linear behaviour in Spanish fiscal policy, such that fiscal policy-makers only reduce the deficit (and cumulative debt) when so high as to bring the long-term sustainability of public finances into question. However, it is not easy to clearly establish a particular threshold level in the relationship between debt and growth.

An increase of 10 percentage points in the stock of debt relative to GDP would cause a drop of 0.70 percentage points in the real economic growth rate.

Concluding remarks

Despite the progress made on the process of fiscal consolidation, as of late 2015, public indebtedness had not yet begun to drop. The priority of fiscal policy must remain, firstly, through stabilisation, and then, a gradual reduction in the ratio of the stock of public debt to GDP, to bring it down to levels closer to the 60% target. This means the fiscal consolidation process will need to continue over the coming years.

First of all, we analysed how Spain's public debt changed over time and the variables that will be key to determining debt sustainability in the future.

Secondly, we have presented the main findings of our study analysing the long-term relationship between public indebtedness and real growth in the case of the Spanish economy, based on data from the periods 1851-2000 and 1965-2013.

The findings make it possible to establish a relationship of linear cointegration between the public debt to GDP ratio and real GDP growth with a vector (1, -0.038) for the whole sample period analysed (1851-2000). For the more recent period (1965-2013) we have used two different definitions of gross public debt, depending on whether the Excessive Deficit Procedure or total general government liabilities methodology is considered. In the first case, the vector is (1, -0.026), while in the second it is (1, -0.017). These results imply that an increase of 10% in the public debt to GDP ratio would be associated with a reduction in GDP growth of between 0.17% and 0.38%. The level of public debt therefore has a significant effect on GDP growth. For example, public debt in the period 2007-2013 rose by 84%, such that, according to our estimates, this increase could be associated with up to 2.18 percentage points less long-term GDP growth.

Moreover, our results suggest that cointegration relationships have changed over this period. The long-term elasticity estimate in the model incorporating a structural change shows a downward trend over the long term, indicating the presence of a fiscal "fatigue" or "saturation" process (from a non-significant 0.011 to -0.07). This would indicate that in the second sub-period, there has been an increase in the debt ratio of 10% associated with a drop in growth of 0.7 percentage points. This value is twice that estimated for the period as a whole (-0.038). Indeed, for the first sub-period, we find the existence of a "decoupling" (where the debt does

[8] The results can be consulted in Esteve and Tamarit (2016).

not affect growth significantly but does have a positive coefficient) or "saturation" (where the elasticity of growth relative to debt drops over time, less than proportionally, but with a positive coefficient), while in the second sub-period the long-term elasticity again becomes negative and significant.

Finally, the cointegration comparisons instead support the hypothesis of a non-linear regime with two periods for the more up-to-date sample range. These findings are consistent with the existence of non-linear behaviour in Spanish fiscal policy, such that fiscal policy-makers only reduce the deficit (and cumulative debt) when it becomes so high as to jeopardise the long-term sustainability of the public finances. However, it is not easy to clearly establish a particular threshold level in the relationship between debt and growth.

References

Bank of Spain (2014), *Cuentas Financieras de la Economía Española 1980-2013,* Bank of Spain, Madrid.

Carreras, A.; Prados de la Escosura, L., and J. Rosés (2005), Chapter 17 in Carreras, A., and X. Tafunell (eds.), *Estadísticas Históricas de España: Siglos XIX y XX,* Fundación BBVA, Bilbao, second edition.

Comín F., and D. Díaz (2005), Chapter 12 in Carreras, A., and X. Tafunell (eds), *Estadísticas Históricas de España: Siglos XIX y XX,* Fundación BBVA, Bilbao, second edition.

Corsetti G. (2012): "Has austerity gone too far?," *VoxEU,* 2 April.

Esteve, V., and C. Tamarit (2016), "Public debt and economic growth in Spain, 1851-2013," *Working Paper,* No. 779/2016. Funcas.

European Commission (2012), "Fiscal sustainability report 2012," *European Economy,* No.8, December.

— (2016a), *Cyclical Adjustment of Budget Balances,* Spring.

— (2016b), *General Government Data,* Spring

— (2016c), *Statistical Annex of European Economy,* Spring.

Hansen, B. E., and B. Seo (2002), "Testing for two-regime threshold cointegration in vector error-correction modelsm," *Journal of Econometrics,* 110: 293-318.

IMF (2013), Global Prospects and Policy Challenges, *Note for the Group of Twenty,* February.

Reinhart, C. M., and K. S. Rogoff (2010), "Growth in a time of debt," *American Economic Review,* 100 (2): 573-78.

Shin, Y. (1994), "A Residual-Based Test of the Null of Cointegration Against the Alternative of No Cointegration," *Econometric Theory,* 10 (1): 91-115.

Stock, J. H., and M. W. Watson (1993), "A Simple Estimator of Cointegrating Vectors in Higher Order Integrated Systems," *Econometrica,* 61 (4): 783-820.

SOCIMI impact on Spain´s real estate market

Noelia Fernández and María Romero[1]

Only several years in existence, Spain´s listed real estate investment vehicles, known as SOCIMI, are generating a lot of attention and channelling significant sums of both local and foreign investment into Spain´s real estate market. Although it is still too premature to draw definitive conclusions, if current investment trends continue, the recent recovery in the real estate sector could expect to gain further momentum.

There are currently 19 SOCIMI – real estate investment vehicles – listed on Spain´s stock markets. Between them, they boast a market capitalisation of over 7 billion euros and total assets of more than 9 billion euros. Based on 2015 figures, two-thirds of the increase in the real estate sector's market cap since the lows of May 2012 is attributable to SOCIMI. Although it is still too soon to draw conclusions regarding SOCIMI's real merit in reactivating the Spanish real estate market, the momentum in these entities' share prices, their substantial market caps and their recent investments in rental properties (offices, retail premises and hotels) suggest that SOCIMI's investors are expecting their properties to revalue – mirroring the trend in the sectors of the economy underpinning the recovery underway.

Regulation of Spain's SOCIMI, listed real estate investment vehicles, broadly equivalent to REIT, or Real Estate Investment Trusts, dates back to 2009; however, it was not until 2013 that they emerged as major vehicles for investing in real estate in Spain. Since then, almost 20 of these entities have become listed, channelling a significant sum of investment into real estate assets (generally non-residential) and attracting international investors to the construction and real estate services sectors once again. This article analyses these vehicles' main characteristics and takes a look at their recent stock market performance and their role in reactivating this important sector of the Spanish economy.

Although Spain first regulated SOCIMI in 2009, they did not emerge as significant real estate investment vehicles until 2013.

SOCIMI penetration of the Spanish real estate market

Spain introduced SOCIMI in 2009[2] with the overriding goal of injecting liquidity into real estate assets against the backdrop of a widespread

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

[2] For further information, see Spanish Law 11/2009, of October 26th, 2009, regulating SOCIMI.

recession, which had hit the real estate market particularly hard. However, it was not until 2013, which is when the original regulations were amended,[3] that these vehicles began to take off. As mentioned above, SOCIMI are similar in structure to REIT, developed earlier in the US and other European markets, such as the UK and France.

The corporate objective of a SOCIMI is to "invest, directly or indirectly, in urban real estate assets, including housing, retail premises, residences, hotels, garages and offices, among others, for the purpose of renting them." They operate by raising financing from investors – institutional and/or retail investors – which they then invest in properties earmarked for rental.

SOCIMI are public limited companies *(sociedades anónimas)* that are traded on either the continuous market or Spain's alternative stock market (hereinafter, the MaB in its acronym in Spanish). They must have share capital of at least 5 million euros and at least 80% of their assets must be real estate assets earmarked for rental. These properties must be held for rental for at least three years. There are no restrictions on SOCIMI's leverage but they are required to distribute part of their rental income (at least 80% of rental income and 50% of gains from disposals) in the form of dividends. They benefit from a favourable tax regime, barely paying any taxes.

There are currently 19 SOCIMI trading in Spain, 15 of which trade on the MaB,[4] while the bigger

Table 1

Key characteristics of the SOCIMI

Characteristics	Legal requirements
Minimum share capital	5 million euros.
Asset composition	≥ 80% in urban properties earmarked for rental, land for the development of properties meeting this criterion (development must start within three years) and equity investments in other SOCIMI.
No. of properties leased	≥ 8 units.
Duration of house leases	≥ 3 years.
Rental income composition	≥ 80% must come from the lease of properties or dividends from or stakes in the profits of other SOCIMI.
Distribution of profit	• 100% of the profits obtained from dividends from or stakes in the profits of other SOCIMI. • ≥50% of the gains generated from the sale of properties and shares in other SOCIMI. • ≥80% of other profits.
Special income tax regime	• Tax rate (if requirements are met): 0% on rental income from leased properties. • Tax rate (if requirements are not met): 30% on rental income from leased properties. • Tax rate: 19% of taxable income corresponding to dividends or interests in profits distributed to shareholders.
Other taxes	• Exemption from property transfer tax normally due on incorporation, equity issues and non-monetary contributions. • Credits of 95% on the acquisition of houses for rental and land for development.

Source: AFI.

[3] For further information, see Spanish Law 12/2012, of December 27th, 2012, enacting several fiscal measures designed to further the consolidation of public finances and shore up economic activity, the legislation which ultimately paved the way for the development of these vehicles.

[4] The SOCIMI listed on the MaB as of June 2016 are Promorent, Entrecampos, Mercal Inmuebles, Autonomy Spain Real Estate, Corpfin Capital Prime Retail II, Fidere, Obsido, Trajano Iberia, Uro, Zaragoza Properties, Corpfin Capital Prime Retail III, Heref Habaneras, Inversiones Doalca, Java I Inversiones Inmobiliarias and Zambal Spain.

firms (Merlin Properties, Lar España, Axia Real Estate and Hispania) are traded on the main market. Between them, they boast a market capitalisation of over 7 billion euros and total assets of more than 9 billion euros. Based on 2015 figures, two-thirds of the increase in the real estate sector's market cap since the lows of May 2012 is attributable to the SOCIMI.

Only several years in existence and having proven capable of drawing remarkable interest from foreign investors (particularly in the case of those listed on the main market), the SOCIMI appear to be playing a significant role in reactivating the real estate market. The benefits the SOCIMI offer investors in terms of taxation, diversification and liquidity, coupled with the flexibility they afford as a real estate investment vehicle, mean we are likely to see continued growth in the number of SOCIMI in the years to come.

Today there are 19 SOCIMI trading in Spain, split between the continuous market (4) and the MaB (15).

Table 2
Snapshot of Spain's SOCIMI

	Market	Listing date	No. of days traded	Market cap* (€ m)
Merlin Properties	Continuous	June - 14	529	2,875
Hispania activos inmobiliarios	Continuous	Mar - 14	602	1,220
Lar España Real Estate	Continuous	Mar - 14	609	498
Axia Real Estate	Continuous	July - 14	522	876
Promorent	MAB	Dec - 13	670	4
Entrecampos	MAB	Nov - 13	674	104
Mercal Inmuebles	MAB	July - 14	527	29
Autonomy Spain Real Estate	MAB	Sept - 15	211	85
Corpfin Capital Prime Retail II	MAB	Sept - 15	210	23
Fidere	MAB	June - 15	274	196
Obsido	MAB	Sept - 15	225	6
Trajano Iberia	MAB	July - 15	251	97
Uro	MAB	Mar - 15	348	218
Zaragoza Properties	MAB	Sept - 15	218	67
Corpfin Capital Prime Retail III	MAB	Jan - 16	124	15
Heref Habaneras	MAB	Feb - 16	117	22
Inversiones Doalca	MAB	Mar - 16	92	162
Java I Inversiones Inmobiliarias	MAB	Mar - 16	92	19
Zambal Spain	MAB	Dec - 15	163	564
Total				7,079

*Note: * As of 17/06/2016.*
Sources: BME (2016), Bloomberg, AFI.

The role played by SOCIMI in shaking up the real estate market

The interest sparked by the SOCIMI in the financial community in the last two years is evident in their stock market performance. Their annualised monthly share price gain from IPO to date averages 6.0%, amply evidencing investor appetite in this segment. These vehicles unquestionably constitute a real alternative for investors in light of the performance and returns offered by other asset classes and markets. The rental yield on housing, for example, stood at 4.5% in 2015, which is far higher than the returns offered by other classes of financial assets, such as fixed income (the yield on the Spanish 10 year bond barely inched above 2% in the secondary market), term deposits (which offered annual remuneration of a scant 0.5%) and equities (1%).

This strong stock market performance is underpinned by: (i) the upward trend in rental yields; and (ii) the outlook for rental property revaluation.

Rental income is shaped mainly by the class of assets leased and where the assets are located.

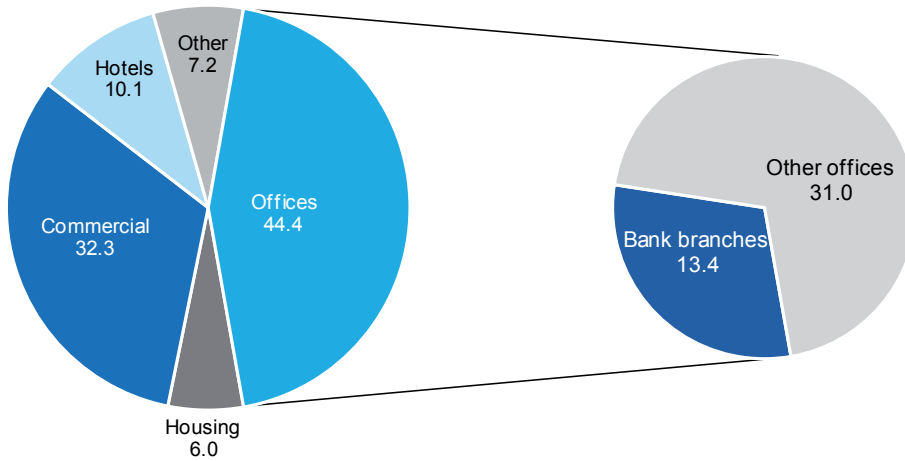
First of all, virtually all of the SOCIMI's real estate assets are located in city centres (often in prime locations) or close by (although increasingly these vehicles are looking for assets in areas further removed from centres of economic activity), typically generating higher rents than if the assets were located in other locations.

Secondly, the SOCIMI have concentrated their investments in: (i) offices (which represent nearly 45% of all leased real estate assets); (ii) retail premises (which represent nearly one-third of the total) and (iii) hotels (a little over 10% of the total), mirroring the sectors of the economy underpinning the recovery underway, in turn paving the way for relatively higher and/or rising rents. Some of the key drivers are itemised below.

In terms of the office segment, the economic recovery has boosted the creation of new jobs and new companies (employment increased by 3% in 2015, while the number of companies, according

Exhibit 1

Breakdown of the SOCIMI asset portfolios
(% of total assets)



Sources: Madrid Stock Exchange, CNMV, the SOCIMI, AFI.

to the national statistics bureau, increased by 2.2% year-on-year) and driven growth in the profitability of Spain's non-financial corporates (4.4% in 2015). These factors have prompted a search for more and better workplaces and renting has emerged as a good alternative to the upfront outlay required to acquire a property, particularly in the case of start-ups.

Retail premises, meanwhile, have benefitted from the growth in household consumption, which jumped 3.1% year-on-year in 2015. This growth in consumer spending has been channelled mainly into large retail establishments (whose sales rose by 4.1% in 2015, compared to 2.6% in the case of smaller retailers), precisely the category in which the SOCIMI have been investing during the last two years.

Lastly, the hotel segment, relatively less important in the SOCIMI's asset portfolios, looks set to grow in weight in light of the tourist flows and expenditure benefitting the hotel sector (particularly foreign tourism). In 2015, more than 68 million tourists visited Spain (marking an all-time record) and spent nearly 3% more per visitor than in 2014. Geopolitical tensions in countries with which Spain shares certain characteristics (climate, cultural attractions, etc.), coupled with an improved hotel offering, are two of the factors drawing international tourists and the SOCIMI are beginning to take note.

As stated previously, the growth in demand for these three asset classes, which is also evident in relatively higher occupancy rates, is mirrored by the trend in the yields associated with each. According to CBRE (2016), yields continued to rise in 2015, to the tune of 4% in the case of offices (annual growth) and 5% in the case of shopping centres, albeit slowing with respect to prior years.

Strong investment in non-residential real estate assets in the past two years evidences the SOCIMI's positive valuation expectations for these classes of properties. Recall that under prevailing sector regulations, the SOCIMI can sell these properties and benefit from the resulting capital gains three years after their acquisition and lease. In 2015, again according to CBRE data (2016), investment in these asset classes reached 13 billion euros (an all-time high), at least 40% of which was invested by the SOCIMI.

SOCIMI's heavy recent investments in offices, commercial premises and hotels are supported by their outlook for revaluation of these classes of property.

Although it is still too soon to tell definitively whether the SOCIMI are truly reactivating the Spanish real estate market, on account of their short existence, among other factors, their recent investment track records, share price performances and market caps point to upside in the valuations of the assets they are investing in. Very welcome news for the construction and real estate services sector, which continued to account for 17% of Spanish GDP in 2015, despite having contracted sharply in the wake of the crisis.

Conclusions

Although Spain first regulated SOCIMI in 2009, they did not emerge as important real estate investment vehicles until 2013. Today, a total of 19 SOCIMI are traded in Spain, four of which are listed on the main market and 15 on the alternative market.

Although it is still too soon to say to what extent the SOCIMI have contributed to reactivating Spain's real estate market, their stock market momentum (the annualised monthly gain between their respective IPOs and today averages 6%), their sizeable market cap. (7 billion euros) and their recent investing track record (9 billion euros in real estate assets) evidence positive investor expectations regarding the valuations

of the properties they are leasing (mainly offices, commercial premises and hotels).

If this proves to be the case, recent real estate sector momentum, in terms of sales, business volumes and asset prices, could gain further traction.

References

BME (2016), *2015 Market Report. Spain's Securities Markets in Review.*

CBRE (2016), *Spain Real Estate Market Outlook 2016.*

García Montalvo, J. (2015), "Spanish financial sector and real estate exposure: situation and outlook," *Spanish Economic and Financial Outlook,* No. 248, September-October: 71-87

Peña, I. (2016), "SOCIMI: Real estate market investment vehicle," *Empresa Global,* No. 161, April: 39-41.

Centre-periphery integration: Building European production chains

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Significant differences exist in European production chains across distinct groups of EU countries (core, southern-periphery, and eastern-periphery) in terms of trade specialisation, as well as sectoral and geographic focus. However, overall, EU integration has led to an intensification of international fragmentation strategies of production and the formation of transnational networks.

This paper examines the recent evolution and configuration of cross-border production chains in the EU by looking at trade in parts and components. The analysis seeks to establish the main countries and sectors involved, and the geographical patterns of these networks that have emerged as European integration has advanced. In particular, it looks at the role played by the EU's core economies and those of the southern and eastern periphery. The results show the existence and growing importance of cross-border production chains with a strong regional dimension where Germany plays a central role, as well as the existence of strategies of fragmentation of production towards the southern peripheral economies, such as Spain and Portugal (particularly in sectors such as motor vehicles), and more recently towards the eastern periphery (in the industries of telecommunications apparatus and equipment).

Introduction

Since the turn of the century, global trade has been exposed to a highly competitive environment that has encouraged the emergence of new production and organisation strategies. These include, in particular, the international fragmentation of production, driven by improvements in information and communication technology, lower transport costs, the progressive liberalisation of trade, and the increased number of countries taking part in global trade, with growing presence of low wage countries.

This strategy enables companies to segment their value chains into physically separable phases or tasks that are then relocated to ever more scattered geographical locations. By doing so, they are trying to locate the different phases of the value chain in the most efficient location, *i.e.* where the relative costs are low and where they have a favourable environment for production. The natural outcome of the spread of this strategy is for transnational production networks to take hold and expand. This translates into more intensive trade and tighter economic links between countries. These production networks

[1] University of Castile-La Mancha. This research has benefited from the support of the researcher training starter project granted under the agreement between the Toledo Provincial Council and the University of Castile-La Mancha (UCLM) to support research activity on the Toledo campus, and the UCLM research groups funding programme.

are therefore the result of exploiting companies' comparative advantages at each stage of the value change and of applying new, more efficient, organisation and planning processes (Arndt and Kierzkowski, 2001).

Companies in the EU's more mature economies are adopting production fragmentation strategies, dispersing their value chains beyond national borders to exploiting cost and location advantages of the new Member States on the eastern periphery, just as they did with the countries on the southern periphery in the eighties.

The emergence of new players in global trade, with clear cost advantages, has had a clear influence on the process of network creation and/or reorganisation. These new players include the economies of South-East Asia, and closer to home, those of Eastern Europe, which recently joined the European Union (EU). Specifically, they have encouraged companies in the EU's more mature economies to adopt strategies of fragmentation, dispersing their value chains beyond their national borders, with a view to exploiting cost and location advantages of the new Member States on the eastern periphery, just as they did with the countries on the southern periphery in the eighties.

The aim of this study is to contribute to the still somewhat scant empirical literature on EU production networks by investigating their configuration and analysing how they have evolved in the recent past (1995-2010) by examining parts and components trade.[2] For the purposes of this analysis, 12 EU economies have been selected. These have been classified as core economies with the greatest economic weight in the EU context (Germany, France, Italy and the United Kingdom); economies of the southern periphery (Spain, Portugal, Greece and Ireland); and economies of the eastern periphery (the so-called Visegrad countries of Poland, the Czech Republic, Slovakia and Hungary). This study will make it possible to determine how the existence of different comparative advantages within the EU has stimulated the creation of transnational production chains in which some Member States are particularly active. It will also try to identify the geographical pattern of these production chains and what industries are involved in these cross-border networks spanning various European countries.

This paper is subdivided into six sections. After the introduction, the size and evolution of parts and components trade in Europe's core and peripheral countries is studied in order to ascertain the extent to which production has been fragmented and the degree of integration in cross-border production networks. The subsequent section will focus on exploring each country's form of integration in these networks, as a function of the prevalence of specialisation in the manufacture and export of parts and components or in their import. The next section looks at the types of sector networks that are most involved in this process. The following section looks at the spatial configuration of European networks by studying the geographical pattern of the parts and components trade. The paper ends with some concluding remarks.

Determining what countries make up cross-border European networks

An approximate idea of the phenomenon of transnational production sharing in EU countries can be obtained by analysing the relevance and

[2] Similar descriptive analyses for the EU based on parts and components trade (although looking at a different selection of EU countries) can be found in the papers by Ando and Kimura (2013), Guerrieri and Vergara Caffarelli (2012), and, for Spain, in Blázquez *et al.* (2011). A new line of research has recently opened up in which the participation of global production chains is studied from trade measured in valued added terms with information from international input-output tables; Stehrer and Stöllinger (2015) and Amador *et al.* (2015) are studies for Europe taking an approach similar to ours but using this new methodology.

evolution of parts and components trade. This, by its nature, being a trade in intermediate goods, means that transnational exchanges of parts and components necessarily involve goods which are subsequently incorporated in manufacturing or assembly in another country. It is possible to distinguish between parts and components and finished goods using the breakdown of production given by the Standard International Trade Classification (SITC), as Yeats (2001) and Athukorala (2005) did in their pioneering studies. Following in their footsteps, we have used SITC Rev. 3, which disaggregates parts and components and final goods in category 7 "Machinery and transport equipment," which accounts for one of the largest shares of global trade in goods (around 40%). The breakdown of the items considered parts and components is shown in Table A1 of the statistical annex.

Data on trade in parts and components come from the United Nations COMTRADE database. A sample of 90 economies was selected as the source and destination of parts and components

Table 1

Strength of participation in cross-border production chains
(Percentage)

	Weight of parts and components trade		CARC of parts and components trade	Network integration index		Share in world parts and components trade		Relative trade balance	
	1995	2010		1995	2010	1995	2010	1995	2010
Core countries	31.2	32.0	5.2	0.84	0.87	21.8	17.1	8.2	5.4
Germany	28.4	33.1	7.1	0.77	0.90	8.2	8.6	18.0	13.1
France	32.8	32.7	4.5	0.88	0.89	5.0	3.6	6.0	-2.7
Italy	29.9	31.8	5.2	0.81	0.87	3.2	2.6	16.0	9.3
United Kingdom	36.4	28.1	1.3	0.98	0.77	5.2	2.3	-9.7	-14.2
Southern-periphery countries	32.6	32.5	4.6	0.88	0.89	3.2	2.3	-23.2	-12.1
Spain	28.9	33.2	6.4	0.78	0.90	1.7	1.6	-25.6	-14.0
Greece	25.4	19.6	3.7	0.68	0.53	0.1	0.1	-77.7	-60.7
Ireland	47.1	38.2	-0.9	1.27	1.04	1.0	0.3	-1.9	20.9
Portugal	29.3	31.1	5.3	0.79	0.85	0.4	0.3	-46.8	-21.3
Eastern-periphery countries	33.7	36.0	16.2	0.91	0.98	1.1	4.0	-20.0	-10.5
Slovakia	29.8	34.7	20.9	0.80	0.94	0.1	0.6	-18.7	-22.8
Hungary	37.6	33.1	13.3	1.02	0.90	0.4	0.8	-31.2	-17.0
Poland	26.6	33.7	18.0	0.72	0.92	0.3	1.2	-33.9	-8.5
Czech Rep.	37.7	41.2	15.6	1.02	1.12	0.4	1.4	-2.8	-3.1
World total	37.0	36.8	6.9	1.00	1.00	—	—	—	—

Note: The weight of parts and components trade is calculated for each country/area as follows: ($X_{P\&C}$ of country/ X_{total} of country), where totals refer to the machinery and transport equipment sector. CARC stands for cumulative annual rate of change. The network integration index is calculated by dividing each country's weight of parts and components trade by this weight for world trade. The relative trade balance is calculated as: ($X_{P\&C}$-$M_{P\&C}$) / $X_{P\&C}$+$M_{P\&C}$).

Source: Bank of Spain.

(Table A2 in the statistical annex), accounting for 97% of total parts and component trade by the selected European countries.

An initial indicator of the relevance of international production networks in the areas analysed is the dynamism of parts and components trade and its weight in total trade in machinery and transport equipment. The large and growing share of these flows in global trade clearly highlights the trend towards a strategy of international fragmentation of production. As can be seen in Table 1, in 2010, global parts and components trade accounted for approximately 37% of total trade in the machinery and transport equipment category, its share having remained stable since the mid-nineties. Of the European economies analysed, the only bloc to see a marked increase in the weight of parts and components trade was the eastern periphery. This is indicative of the dynamism of its integration in transnational production networks, in which all the economies of the region take part, except Hungary. In the other two blocs, the weight of the parts and components trade has been maintained, although in terms of individual countries, Germany and Spain have performed particularly strongly, advancing at a similar rate to the eastern periphery, while the increase in Italy and Portugal has been more moderate. At the other end of the scale are the United Kingdom, Greece, Ireland and Hungary, where there has been a drop in weight in the first decade of the century, suggesting a retrenchment in their integration in international production networks.

These changes in the weight of parts and components trade are the result of the dynamism of this trade in parts and components, which exceeds that of final goods. Indeed, trade flows in parts and components were highly active in the study period in all three groups of economies, and in all the Member States included in the study, except Ireland. The rate of growth was particularly high (above the world average) in Germany, and above all, in the economies of the eastern periphery, where cumulative annual rates of change are above 10% and were twice those of the world average in Hungary and the Czech Republic, and three times the world average in Poland and Slovakia.

The weight of the parts and components trade as a share of the total economy relative to the world average can be compared by calculating a network integration index, defined as the ratio between the two percentages. Thus, whereas in 1995, Ireland, the Czech Republic and Hungary stood out for their specialisation in parts and components trade relative to the world economy, in 2010, only Ireland and the Czech Republic did. This specialisation increased in the Czech Republic, declined somewhat in Ireland, and vanished entirely in Hungary. Taking the parts and components trade aggregates, other European economies in the study suffered from a lack of specialisation in this type of trade, and therefore, a lack of involvement in cross-border networks that is particularly marked in the case of Greece and the United Kingdom in recent years.

The importance of parts and components trade in each country is a first approximation to the impact of strategies of international fragmentation of production in each economy. It is also worth studying the share of a country's trade in parts and components in world trade in parts and components, as this would show how important each country is in global production sharing. As Table 1 shows, the core countries play the biggest role, accounting for approximately 17% of global trade in parts and components in 2010, after declining considerably since 1995. Within these countries, Germany's share of the global parts and components trade is largest, at close to 9%,

Germany remains one of the most active participants in the process of the international fragmentation of production and in participating in and shaping production networks.

and its share grew over the course of the period studied. Germany remains one of the most active participants in the process of the international fragmentation of production and in participating in and shaping production networks. Germany's major role has been apparent since the earliest studies on production networks in the EU (Kaminski and Ng, 2001 and 2005), having positioned itself as the main trading partner in parts and components for the economies of Eastern Europe. The shares held by the remainder of the core economies do not exceed 5%. The United Kingdom has shown the sharpest downward trend.

The eastern periphery's share of global parts and components trade comes to around 4% and has been rising in all the economies of the region. This seems to confirm Eastern Europe's increasingly important role in international production networks, a fact that has been noted in recent studies (Martínez-Zarzoso *et al.,* 2011; and Blázquez *et al.,* 2013). Within this group, the strong performance of the Czech Republic and Poland stands out, having achieved a share of over 1% of the global parts and components trade in 2010. The southern periphery has a smaller presence in global trade in parts and components (just over 2%), with only Spain achieving a significant share (1.6%). The southern periphery's share has dropped overall as a result of Ireland's loss of share, while that of the other three economies has remained stable.

Whereas the core countries, and Germany in particular, still account for a significant share of the global parts and components trade, the countries of the eastern periphery have emerged as new members of these shared production systems.

This trend in trade shares shows that in the case of the 12 European countries examined, the process of EU integration seems to have stimulated changes in the geographical configuration of international production chains. Whereas the core countries, and Germany in particular, still account for a significant share of the global parts and components trade, the countries of the eastern periphery have emerged as new members of these production networks.

In simple terms, we could try to deduce whether it is manufacturing and exports in the sector or assembling these parts and components that is more significant, based on the relative importance of parts and components exports and imports. The idea here is that, while imported parts and components must necessarily be destined for assembly into other more complex components or final goods (except those used as spare parts, which empirical literature puts at less than 10%), the sign adopted by the relative trade balance may be used as an, albeit imperfect, tool for determining which advantage prevails. In this way, a negative trade balance in parts and components indicates that imports prevail over exports and this sector or economy has advantages in assembling parts and components and a positive trade balance indicates that its advantages lie in producing and exporting them (Blázquez *et al.,* 2011).

As can be seen from Table 1, the bloc of core EU countries is the only area in which the value of exports of parts and components exceeds that of imports. This is a feature of advanced economies which have certain technological capabilities and a highly qualified workforce. These core countries therefore concentrate on producing and exporting higher value, more complex parts and components, and importing those of lower value with less technology content. Disaggregating the analysis at the country level shows that only Germany and Italy ran a surplus in parts and components trade in 2010, with the relative trade balance in the other two core economies deteriorating.

At the other end of the scale are the groups of countries on the eastern and southern periphery, which have a marked deficit in parts and

components trade, suggesting that assembly is more prevalent in these economies. In the case of the four economies of the southern periphery included in the study, the relative trade deficit in 2010 (with the exception of Ireland) improved markedly over the period studied. Ireland's change of sign is due to the drop in imports of parts and components (the only country in the study in which this occurred). This could be a sign of a loss of competitive advantage in the assembly business relative to other emerging economies. It should be noted that since joining the EU, the eastern periphery has improved its trade balance, halving its negative balance. This positive trend would indicate that this area has managed to make progress on developing competitive advantages in the production and export of parts and components. EU membership as well as their location advantages may have fostered the emergence of a competitive auxiliary industry, and encouraged parts and components suppliers to relocate to this region so they can be close to manufacturers relocated previously here. The availability of low wage labour has contributed to this process, wage costs being below those of their European partners, and the level of qualifications often being relatively high (Martínez-Zarzoso *et al.,* 2011; and Blázquez *et al.,* 2011). All four countries in the eastern periphery have a negative trade balance in parts and components, the only improvement being the positive trend in Hungary and Poland.

Exploring forms of participation in transnational production chains

As mentioned in the introduction, cross-border production chains are the result of the implementation of strategies of international production fragmentation in order to exploit each location's competitive advantages at each stage of the production process. This being so, the most appropriate means of exploring these advantages is to analyse revealed comparative advantage using the Balassa index (Balassa, 1965) for the various categories within parts and components trade. Understanding a country's trade specialisation relative to the world for each of the parts and components trade categories included in the analysis (154 parts and components subgroups and headings) should enable us to classify countries according to their prevailing type of specialisation.

Following Kaminski and Ng (2001), these indexes are calculated separately for exports and imports of parts and components, comparing each individual country's share of trade in each particular category (as a share of total trade in machinery and transport equipment) within the world economy:

$$RCA(X_{P\&C}) = (X_{P\&C} \text{ of country} / X_{P\&C} \text{ worldwide}) / (X_{total} \text{ of country} / X_{total} \text{ worldwide}) \quad (1)$$

$$RCA(M_{P\&C}) = (M_{P\&C} \text{ of country} / M_{P\&C} \text{ worldwide}) / (M_{total} \text{ of country} / M_{total} \text{ worldwide}) \quad (2)$$

If items with comparative advantages in parts and components exports prevail, this may be interpreted as a "forward" participation in cross-border networks, in that the economy actively uses international production fragmentation strategies in which specialisation in the production and export of parts and components predominates. In this case, the country would be positioned at the beginning of the cross-border production chain (upstream position). When categories with advantages in parts and components imports predominate, the intensive use of production fragmentation strategies would take place through the processing of these imported parts and components either for their incorporation in other more complex parts and components or their assembly into final goods, involving a "backward" participation in international production chains. In this case the country would be positioned in the later stages of the value chain (downstream position). When items with a comparative advantage in both facets (exports and imports) predominate, the implication is that the economy is more actively involved in cross-border production

networks, and the economy also focuses on intermediate tasks of phases within this production process shared across countries. By contrast, the absence of any comparative advantages in parts and components in either the purchase or sale of parts and components abroad means the economy has limited involvement in transnational production chains.

Exhibit 1 shows the significance of the parts and components trade in each European economy analysed in terms of the various parts and components items as classified in the four groups above. The information is given for the two years at each end of the study period, *i.e.,* 1995 and 2010.

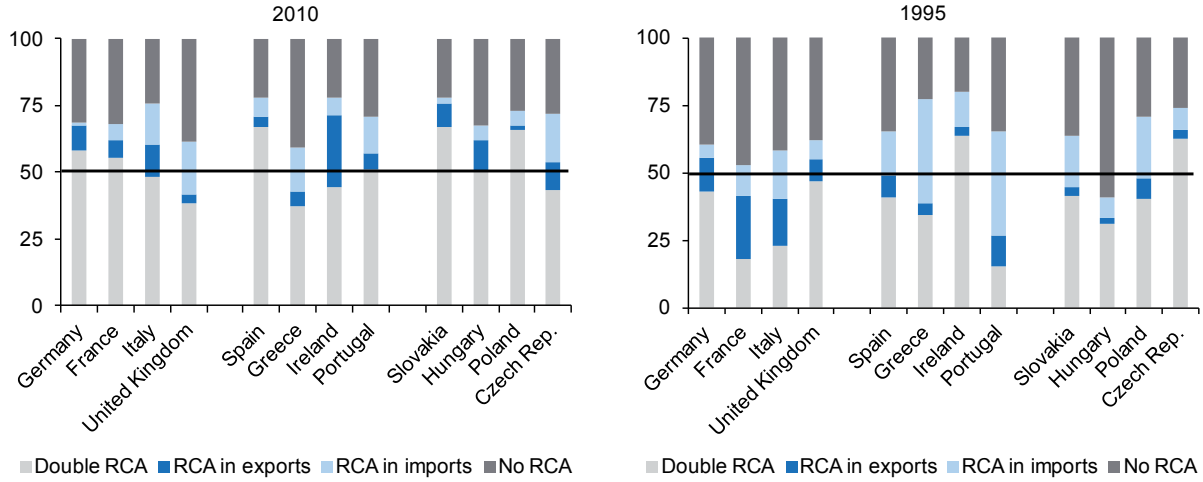
Starting with the most recent year, it can be seen that the items with a double specialisation *(i.e.,* in imports and exports) are central to parts and components trade in most of the European economies analysed (with the exception of the United Kingdom and Greece), where it may be inferred that they play a strong role in transnational production networks. Their prevalence in economies of the southern periphery, such as Spain, and the eastern periphery, such as Slovakia and Poland, is clear: parts and components categories with revealed comparative advantages in terms of both exports and imports account for two thirds of total parts and components trade. It is also interesting to note the case of the Irish and Czech economies, where, although parts and components categories with a double advantage predominate, they account for less than 50% of the total. In Ireland this is explained by the strong focus on branches with advantages in the production and export of parts and components (the highest in all the economies analysed, at over 25%) and in the Czech Republic by that of branches specialising in parts and components imports (with a share of close to 20%), suggesting the existence of advantages in assembly activities relating to these particular goods.

At the other end of the scale, in the United Kingdom and Greece, trade in items with a double specialisation is much less important (less than 40%), as they share the role with components for which there are no advantages. This supports the

Exhibit 1

Type of trade specialisation in parts and components in each economy

(Weight of each group of branches in total parts and components trade)



Source: Authors calculations using data from COMTRADE database (United Nations).

idea that these two countries are less involved in cross-border production networks.

Changes in trade specialisation in the case of some of the peripheral economies can be interpreted as a repositioning of these countries, with their rising up the value chain towards activities making a higher contribution to national value added.

The general trend over the study period observed in most countries was towards a bigger commitment to the integration of transnational production chains as trade in parts and components with a double comparative advantage progressed. This trend has usually been at the expense of branches in which there is no specialisation in the intermediate goods trade. Within this common pattern of development, some specific features of performance in countries, such as France, Portugal, Slovakia and Poland stand out. Here, double specialisation has also been accompanied by a drastic reduction in the share, in the case of the French economy, of the items with advantages on the export side, and in the case of the other three economies, of the items with advantages on the import side. These changes imply a repositioning of these economies within the production networks that may be particularly positive for peripheral economies such as Portugal, Slovakia and Poland, where it can be interpreted as a decline in the competitive advantages based exclusively on assembly operations, with their rising up the value chain towards more intermediate positions based on activities making a higher contribution to national value added.

Only four countries did not share in this progress of double specialisation: the United Kingdom, Ireland, Greece, and the Czech Republic. The case of the Greek economy differs in that this fact highlights a smaller participation in international production chains, while items with no specialisation are clearly gaining ground (and those with advantages in imports are losing ground). In the other three economies, the changes are due to a repositioning within transnational production chains, with shifts in their profiles of integration within them. Thus, in the United Kingdom, the retreat of double specialisation has been accompanied by increasing advantages in parts and components imports. In Ireland, there has been a shift towards branches with advantages in parts and components exports,and in the Czech Republic in both types of items.

Identifying each country's key sectors for cross-border production chains

This section examines what specific industries in the EU economies examined are integrated in global shared production systems and the form of their integration. Six industries stand out in the account breakdown in the machinery and transport equipment sector (see Table A1 in the statistical annex). To perform this analysis, each industry and country's revealed comparative advantages on both the export and import sides in 1995 and 2010 were calculated. The results are shown in Exhibit 2.

The first thing that stands out is that the various European countries do not share a common sectoral pattern of integration in international production networks, even within the blocs into which they are grouped. Starting with the core EU countries, only in the case of Germany and France was there a certain degree of sectoral match, showing a double comparative advantage, indicating that they have been clearly gaining participation in networks in sectors such as other transport equipment (with a much stronger advantage in imports than exports, suggesting the two countries share a specialisation in tasks at the end of the production chain) and, to a lesser extent, motor vehicles. For its part, the double specialisation of the United Kingdom and consequently its clear involvement in cross-border

Exhibit 2

Integration in cross-border production chains by sectors

(Indices of specialisation with respect to the world total in imports and exports of parts and components)

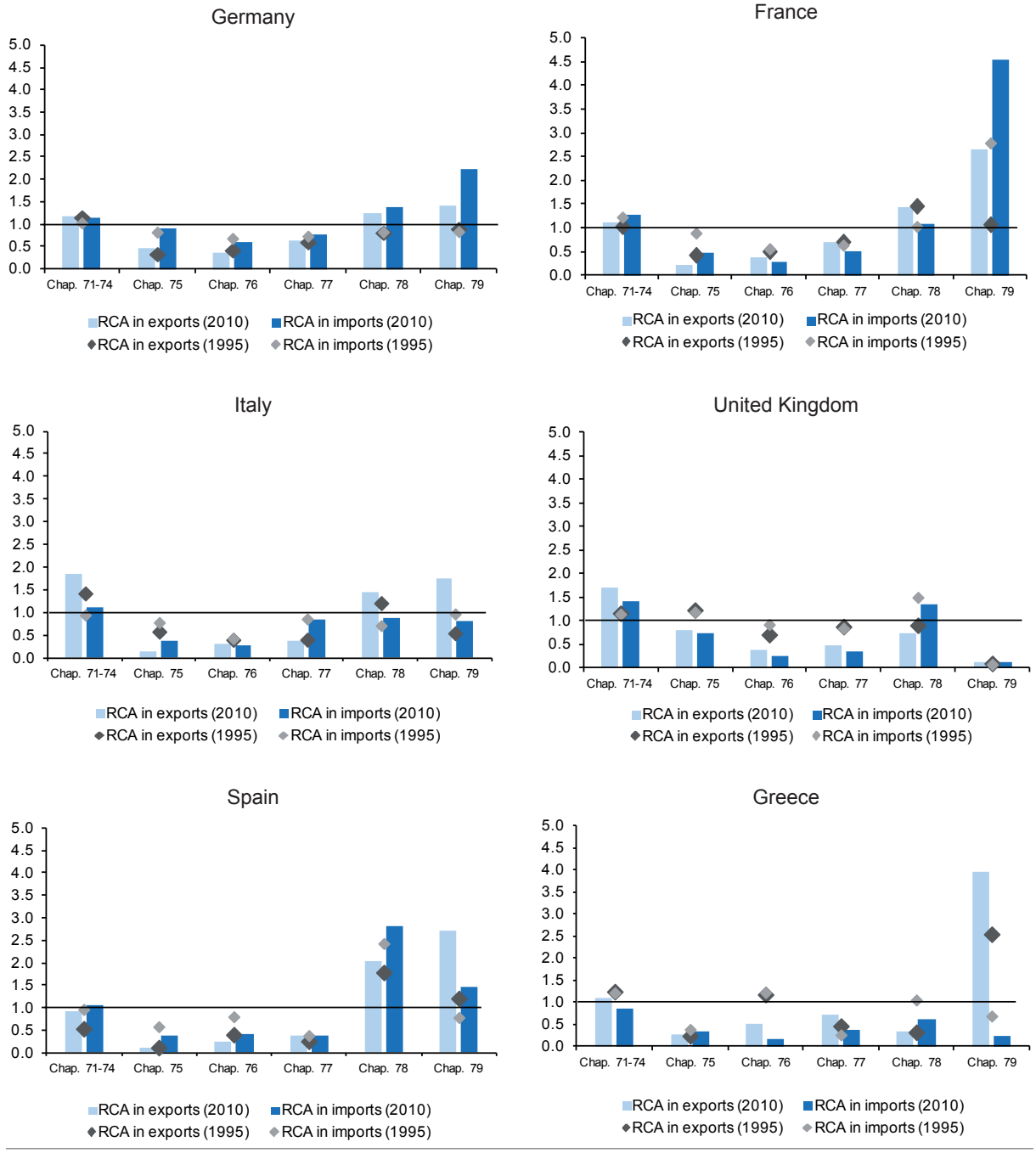
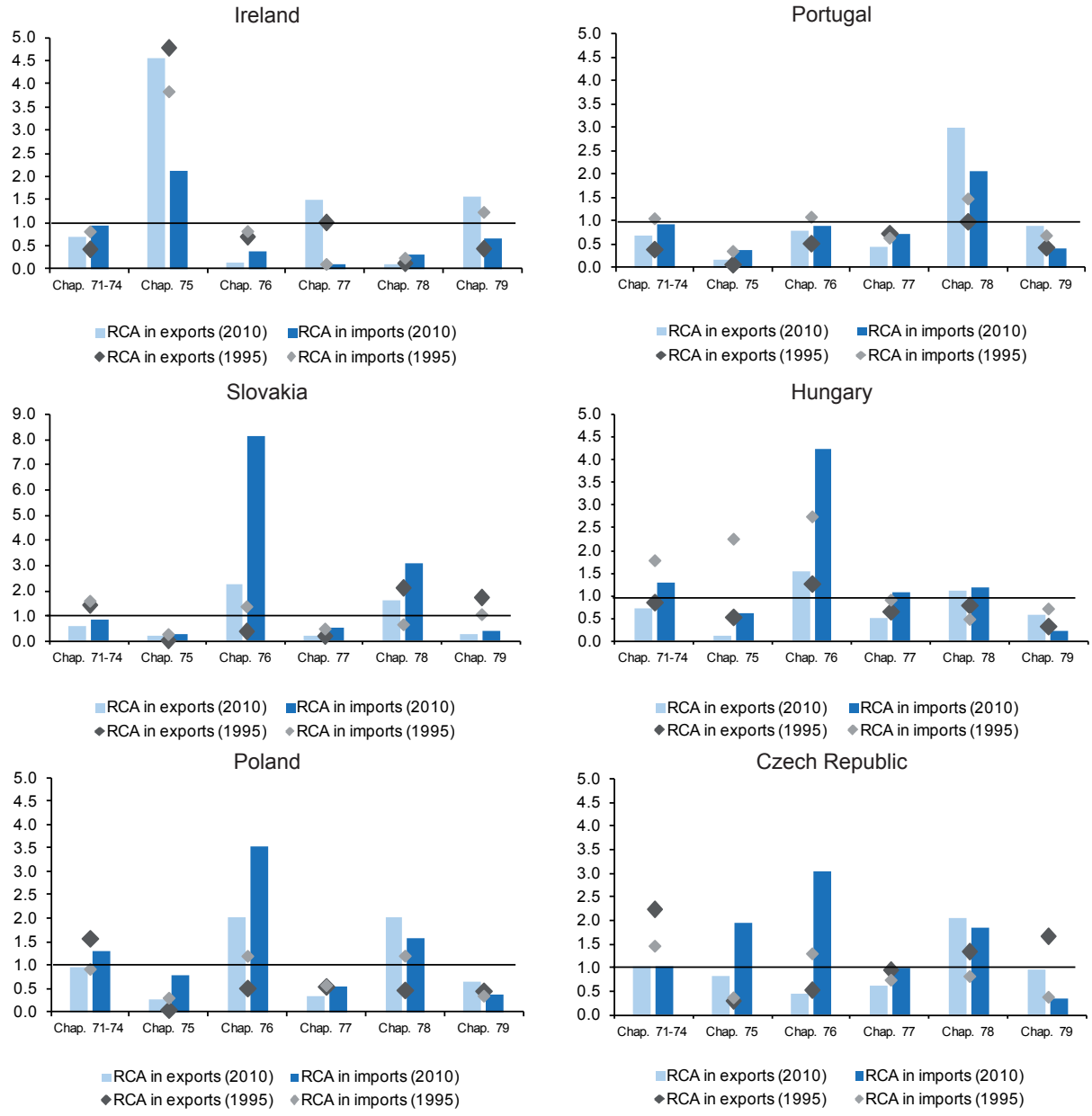


Exhibit 2 *(continued)*

Integration in cross-border production chains by sectors

(Indices of specialisation with respect to the world total in imports and exports of parts and components)



Note: Chapter 71-74: Machinery and mechanical equipment; Chapter 75: Office and data-processing equipment; Chapter 76: Telecommunications and sound recording and reproduction equipment and devices; Chapter 77: Machinery and electronic devices; Chapter 78: Motor vehicles; Chapter 79: Other transport equipment.

Source: Authors calculations using data from COMTRADE database (United Nations).

production chains is limited to machinery and mechanical equipment, and this specialisation is seen to have developed during the study period. Furthermore, Italian and British companies have been making strong use of fragmentation strategies, in the former case increasingly through parts and components production and export in the machinery and mechanical equipment, motor vehicles and other transport equipment industries, and secondly, through the import of parts and components in motor vehicles, while losing significance between 1995 and 2010.

The Iberian Peninsula has been strengthening its participation in cross-border production chains in the motor vehicles industry, where it has a double comparative advantage.

The network integration of the economies of the southern periphery is strictly limited to specific sectors. Thus, the Iberian Peninsula has been strengthening its participation in cross-border production chains in the motor vehicles industry, where it has a double comparative advantage (skewed more towards the initial phases of the value chain in the case of Portugal and the later stages in the case of Spain). In 2010, Spain also seemed to have become included in transnational production chains in the other transport equipment industry (specifically, aeronautics, according to Blázquez *et al.,* 2011), where although there is comparative advantage in both flows, it is significantly higher in the case of exports. Ireland only appears to be involved in networks in the office and data processing equipment sector. What is more, the data show that there has been a change in its profile of specialisation in this sector since the mid-90s, reducing its advantage in imports (which would be explained by a displacement of assembly activities in these manufactures to Eastern European countries such as the Czech Republic, and to Asia, in particular) and adopting a stronger role in producing and exporting parts and components, from which it may be inferred that it has moved up the value chain. Over the period analysed Ireland also achieved an incipient advantage in the production and export of parts and components in machinery and electrical apparatus and other transport equipment. To round off the southern periphery group, Greece does not have a comparative advantage in any of the areas of production, such that it is not possible to talk of solid network integration. However, the Greek economy does have a growing commitment to fragmentation strategies in the other transport equipment sector, where it has been enjoying specialisation in exports of parts and components.

As regards the eastern periphery, the bloc's integration in networks was clearly circumscribed to two sectors in 2010: telecommunications apparatus and equipment, and to a lesser extent, motor vehicles (having withdrawn from the machinery and mechanical equipment sector). For the first of these two sectors, the double specialisation of Slovakia, Hungary and Poland indicates a solid participation in the intermediate phases of the production process, which is clearly skewed towards assembly activities in line with its high and rising advantage in parts and components imports. In the case of the Czech economy, the competitive advantage exists only on the import side, as also happens in the office machinery and computers sector. For the motor vehicles sector, the acquisition of comparative advantages in both exports and imports of parts and components is evidence of the incorporation of the sector networks of Slovakia, Poland and the Czech Republic after their joining the European Union.

Geographical configuration of European networks

The analysis of the geographical pattern of parts and components trade for the three groups of countries in this study reveals two key matching features (Exhibit 3). Firstly, the predominance of trade with the EU-27 (with particular prevalence of trade from and to the core countries), and

secondly, the significance being acquired by the BRIC countries (Brazil, Russia, India and China), mainly as a source of imports, which suggests the growing integration of these countries in global networks.

Although parts and components trade by the core EU economies is mainly with their EU partners, the BRICs are gaining relevance as commercial partners.

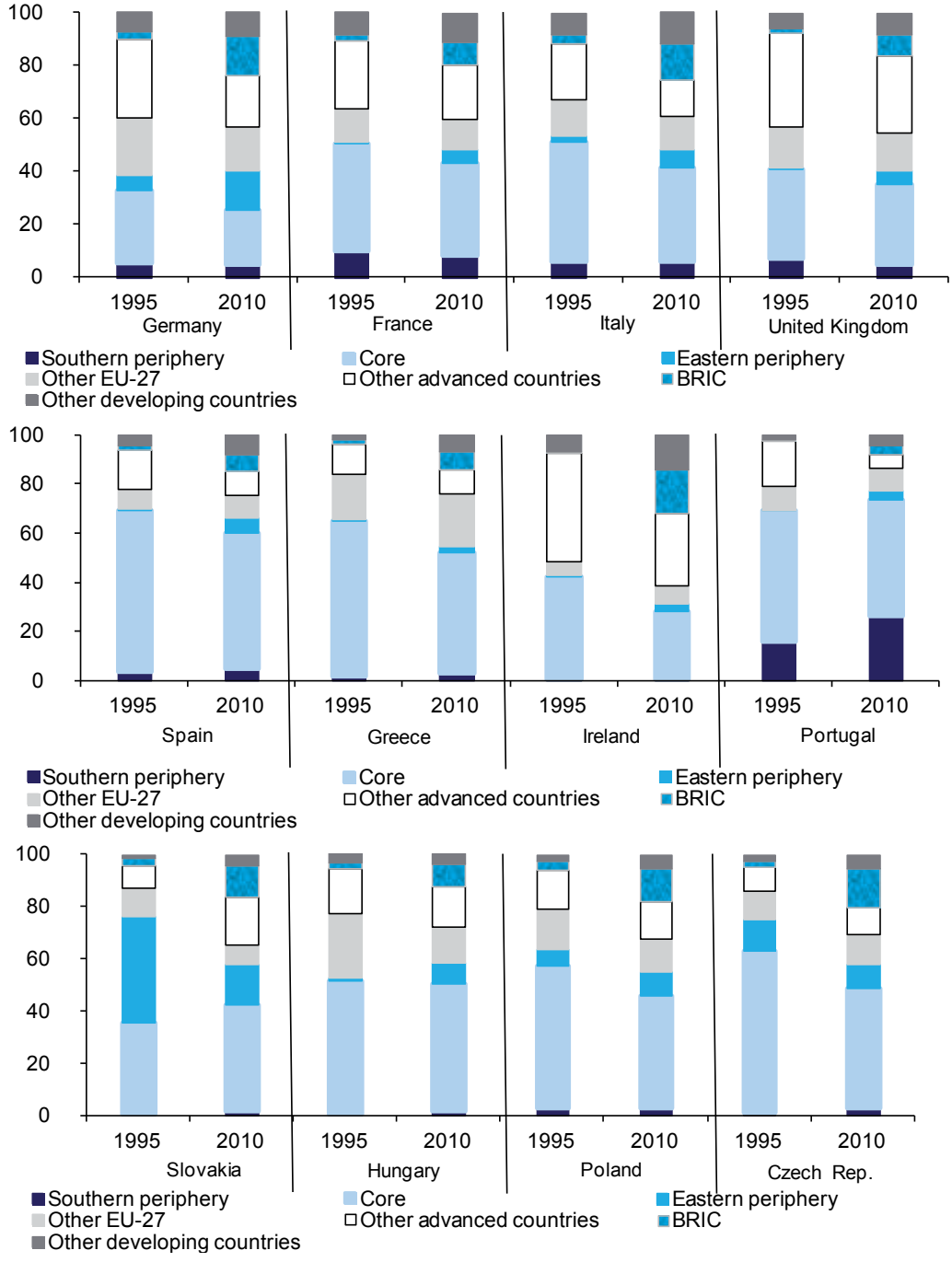
Closer analysis reveals the specific features of the different blocs. Analysing the geographical pattern of parts and components trade by the core EU economies first, we find that their trade is mainly with their EU partners, such that the EU-27 accounted for around 60% of foreign trade in the sector in 2010. This followed a slight loss of importance since the mid-90s, suggesting that these networks are primarily configured on a European scale. The weight of intra-bloc trade among these countries stands out, particularly in France and Italy, where in 2010, exchanges with other core economies accounted for 35% of the total (in the United Kingdom the figure is 30% and in Germany just over 20%). However, there has been a clear drop since 1995. It is worth noting that this decline contrasts with growing flows in the eastern periphery, particularly for Germany, which stands out as the economy that has been implementing production fragmentation strategies in Eastern Europe most energetically. Other advanced non-EU countries, which are second in importance as commercial partners in core countries' parts and components trade have also given way to developing countries, primarily the BRICs. Germany stands out as the core EU economy with the greatest geographical diversification in its foreign trade in parts and components. At the other end of the scale, the United Kingdom's participation is mainly focused on other core EU economies and other developed countries (particularly the United States).

The geographical pattern of parts and components trade of the countries of the southern periphery shows strong commercial links to the EU, at around 80% in 2010, except in the case of Ireland, where it is half that, due to the importance of its trade with other advanced non-European countries. Within the EU-27, the main partners are the core countries (50% again, with Ireland's figure being around 25%), although there has been a significant loss of weight, which only in Spain and to a lesser extent in Portugal is at least partly explained by the progress made by the eastern periphery. This means that, with the exception of Ireland, the countries of the southern periphery are mainly linked into production chains with the core EU economies and that Spain and Portugal are becoming involved in networks that also link to Eastern European countries, probably in the automotive industry. The Portuguese economy has established transnational networks mainly with Spain, given the latter's growing role as a key partner in parts and components trade. Outside of the EU, advanced economies are losing ground to developing economies. Growth in Ireland's trade with BRICs has been particularly strong, and is related to transnational chains producing office and computer equipment, in which China also plays a role (De Backer and Mirodout, 2014).

In terms of the geographical pattern of trade in parts and components by the countries of the eastern periphery, as with the other blocs, there is a clear bias towards the EU-27 (accounting for a share of approximately 70% in 2010), despite dropping considerably since the nineties (when it accounted for 80-90%). The core EU countries remain the main trading partner (accounting for almost half of the parts and components trade), after dropping significantly in the countries that accounted for the biggest share in 1995 (Poland and the Czech Republic). In other words, as in the case of the southern periphery, networks have primarily developed with the core EU countries. Trade within the eastern periphery is only significant in the case of Slovakia, where it accounted for 40% of the total in the mid-90s, subsequently dropping significantly to levels similar to those of the other

Exhibit 3

Geographical focus of the parts and components trade
(Percentage)



Source: Authors calculations using data from COMTRADE database (United Nations).

countries of the eastern periphery (10%). Flows with other EU economies have also lost ground in the eastern periphery's parts and components trade. By contrast, the BRICs have become much more important. Having started at negligible levels in 2010, with the exception of Hungary, they were over 10% in 2010, sharing progress, albeit more moderately, with the other developing economies. It therefore seems that the countries of the eastern periphery are switching some of the parts and components trade from the EU to the BRICs, highlighting a degree of geographical refocusing of transnational production networks towards emerging economies. Recent studies, such as those of Ando and Kimura (2013), suggest that the economies of Eastern Europe are taking shape as the nexus connecting the countries of East Asia (primarily China) with those of the EU. Network integration of the economies of the eastern periphery in telecommunications equipment sectors where the countries of South-East Asia (such as China) also play a significant role could also explain the closer commercial ties between the two regions.

Conclusions

This study has examined the recent evolution and configuration of cross-border production networks in the EU through trade in parts and components, in order to establish the main countries and sectors involved, and the geographical patterns of these networks following the progress of European integration. This progress has stimulated an intensification of international production fragmentation strategies by companies in the more mature EU countries towards peripheral countries in order to leverage their cost advantages. The study has been circumscribed to three specific groups of countries: the core countries (Germany, France, Italy and the United Kingdom), the southern periphery (Spain, Portugal, Greece and Ireland) and the eastern periphery (Poland, Slovakia, the Czech Republic and Hungary).

The analysis has highlighted the dynamism of parts and components trade in the three groups of European countries, which is indicative of a clear commitment to a strategy of international fragmentation of production and the formation of transnational networks. In the three groups of economies, the parts and components trade represents around a third of total sector trade, with the high share of Ireland and the eastern periphery (particularly the Czech Republic) standing out. It is this latter bloc that has gained in significance most. Its joining the European Union has undoubtedly facilitated its integration in these shared production systems led by the core EU countries, headed by Germany.

Analysing the trade specialisation in parts and components in these countries relative to the global economy has revealed the way in which these economies participate in these networks. Thus, it has been observed that for European economies (other than those of Britain and Greece), the bulk of trade in parts and components is concentrated in products with a double trade specialisation, *i.e.* both in imports and exports. This indicates close integration with networks, specifically in the intermediate phases of these production chains shared by various countries. Here Spain, Slovakia and Poland stand out, having a particularly large share of trade with double advantage. At the other end of the scale are the United Kingdom and Greece, with limited involvement in cross-border production systems, given the large share of parts and components trade in which there is no specialisation.

Looking more closely at the sector level, core countries such as Germany, France and Italy have established production networks in the motor vehicles and other transport equipment sectors in particular, where the first two play a particularly strong role in the intermediate phases, whereas Italy's specialisation is in the earlier phases, given its specialisation only on the exports side. The southern periphery shows a more heterogeneous sector behaviour, with Spain and Portugal involved in intermediate positions in international chains in the motor vehicles sector (and also in other transport equipment in Spain's case) and Ireland in the

office and data processing equipment sector (increasingly skewed towards specialisation in exports.)The eastern periphery has made a bigger commitment to joining shared production systems, specialising in intermediate segments, in motor vehicles, and particularly in telecommunications devices. Primarily in assembly in the latter case, given the strong advantage in imports of parts and components relating to this industry.

Lastly, analysis of the geographical focus of parts and components trade has shown the eminently regional nature of the networks in which Europe's countries take part, with strong predominance of trade with other EU member states (in which the core countries stand out). Nevertheless, this predominance has flagged somewhat since the mid-90s, while the BRIC countries have gained in importance. This suggests a degree of diversification in the geographical configuration of Europe's production networks, and responds to the search for new locations with higher cost advantages where the Chinese economy plays the leading role.

References

Amador, J.; Cappariello, R., and R. Stehrer (2015), "Global Value Chains: A View From the Euro Area," European Central Bank, *Working Paper,* no. 1761,

Ando, M., and F. Kimura (2013), "Production linkage of Asia and Europe via Central and Easter Europe," *Journal of Economic Integration,* vol. 28, no. 2: 204-240.

Ardnt, S., and H. Kierzkowski (2001), *Fragmentation, new production patterns in the world economy,* Oxford University Press, Oxford.

Athukorala, P. (2005), "Product fragmentation and trade patterns in East Asia," *Economic Paper,* vol. 7, no. 3: 233-256.

Balassa, B. (1965), Trade liberalization and revealed comparative advantage, *The Manchester School of Economics and Social Science,* no. 33: 99-123.

Blázquez, L.; Díaz-Mora, C., and R. Gandoy (2011), "El comercio de partes y componentes: una aproximación a la posición española en las redes de producción internacionales," *Principios,* no. 18: 31-36.

— (2013), "Production networks and EU enlargement: is there room for everyone in the automotive industry?," *Eastern European Economics,* vol.51, no.3: 27-50.

De Backer, K., and S. Miroudot (2014), "Mapping Global Value Chains," ECB *Working Paper,* no. 1677.

Guerrieri, P., and F. Vergara (2012), "Trade openness and the international fragmentation of production in the European Union: the new divide?," *Review of International Economics,* vol. 20, no. 3: 535-551.

Kaminski, B., and F. Ng (2001), "Trade and production fragmentation: Central European Economies in EU networks of production and marketing," *Policy Research Working Paper,* no. 2611, Banco Mundial.

— (2005), "Production disintegration and integration of Central Europe into global markets," *International Review of Economics and Finance,* vol. 14, no. 3: 337-390.

Martínez-Zarzoso, I.; Voicu, A., and M. Vidovic (2011), "Central East European Countries' accession into the European Union: role of extensive margin for trade in intermediate and final goods," *Empirica,* vol. 42, no. 4: 825-844.

Stehrer, R., and R. Stöllinger (2015), "The Central European Manufacturing Core: What is Driving Regional Production Sharing?," *FIW Research Reports* 2014/15, no. 02.

Yeats, A. (2001), "How big is global Production sharing?," in Ardnt, S., and H. Kierzkowski (Eds), *Fragmentation, new production patterns in the world economy*, Oxford University Press, Oxford.

Statistical Annex

Table A1

SITC rev. 3 accounts considered as parts and components

Chapters	Subgroups and headings
71. Power-generating machinery and equipment	711.9, 712.8, 713.19, 713.31, 713.32, 713.9, 714.9, 716.9, 718.19, 718.78, 718.99
72. Machinery specialised for particular industries	721.29, 721.39, 721.98, 721.99, 723.9, 724.39, 724.49, 724.67, 724.68, 724.88, 724.9, 725.9, 726.89, 726.9, 727.19, 727.29, 728.19, 728.39, 728.5
73. Metalworking machinery	735.9, 737.19, 737.29, 737.39, 737.49
74. General industrial machinery and equipment, n.e.s., and machine parts, n.e.s.	741.28, 741.35, 741.39, 741.49, 741.59, 741.72, 741.9, 742.9, 743.8, 743.9, 744.19, 744.9, 745.19, 745.29, 745.39, 745.68, 745.9, 746.99, 747.9, 748.39, 748.9, 749.9
75. Office machines and automatic data-processing machines	759.1, 759.9
76. Telecommunications and sound-recording and reproducing apparatus and equipment	764.9
77. Electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof	771.29, 772.2, 772.3, 772.4, 772.5, 772.6, 772.8, 774.29, 775.49, 775.79, 775.89, 776.1, 776.2, 776.3, 776.41, 776.43, 776.45, 776.49, 776.8, 778.11, 778.12, 778.17, 778.19, 778.29, 778.33, 778.35, 778.48, 778.69, 778.83, 778.85
78. Motor vehicles	784.2, 784.3, 785.35, 785.36, 785.37, 786.89
79. Other transport equipment	791.99, 792.9

Source: Authors' elaboration based on United Nations COMTRADE database.

Table A2

Countries included in the sample

Area	Countries in the sample
EU-27	Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Romania, Slovakia, Slovenia, Spain, Sweden, the United Kingdom.
BRIC	Brazil, Russia, India, China.
High-income countries	Australia, Canada, Croatia, Hong Kong, Israel, Japan, Kuwait, New Zealand, Norway, Oman, the Republic of Korea, Singapore, Switzerland, the USA.
Other developing countries	Algeria, Angola, Argentina, Saudi Arabia, Bolivia, Bangladesh, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, Egypt, Equatorial Guinea, Guatemala, Honduras, Indonesia, Iran, Iraq, Jordan, Kazakhstan, Lebanon, Libya, Malaysia, Mexico, Morocco, Nigeria, Pakistan, Peru, the Philippines, Qatar, Senegal, Serbia, South Africa, Sri Lanka, Syria, Thailand, Tunisia, Turkey, Ukraine, United Arab Emirates, Uruguay, Venezuela, Vietnam.

Source: Authors' elaboration based on United Nations COMTRADE database.

The performance and role of Spain's social economy throughout the crisis

Pierre Perard[1]

Spain was one of the countries most affected by the recent crisis since 2008. The resilience of Spain´s social economy, which currently accounts for 10% of the country´s GDP, has played a noteworthy role in mitigating some of the negative impacts of the crisis on society.

The social economy comprises a series of organisations combining economic efficiency and social utility, resting on shared values and principles. It is significant both economically and in terms of the number of people involved, and it is growing continuously in Europe. However, in most countries, it has a low institutional profile, particularly at times of economic growth and dynamism. Drawing on official statistics on the social economy in Spain, this article analyses the performance of the sector's main entities during the latest crisis. The aim is to assess how they have withstood the recession, and, in particular, determine whether this context has allowed them to utilise their specific capacities and characteristics. We find that the sector has not escaped from the recession, although some types of entities have been harder hit than others. Overall, the social economy has withstood the downturn better than the wider economy and has managed to significantly mitigate the effects of the crisis on society, highlighting its countercyclical nature.

Since the 1970s, there has been growing interest worldwide in the so-called "third sector," which comprises organisations that are neither public nor private for-profit enterprises. These are private entities whose purpose is to provide services to their members or to the community rather than profit for their owners. Whereas in the English-speaking world, the third sector, or non-profit sector, is based on a strict non-profit criterion, and therefore only includes non-market organisations, such as associations and foundations, in continental Europe, the third sector is synonymous with the social economy, and so also includes market organisations operating through business initiatives, such as cooperatives and mutual societies. Another characteristic feature of the social economy is the centrality of the principle of democratic governance ("one person, one vote") among its entities.

Despite the difficulty of defining and treating the social economy as a unified sector, and given its lack of institutional recognition throughout Europe, there is agreement over its relevant economic and social contribution. According to the main estimates (Chaves and Monzón, 2012; European Commission, 2011), at the start of the economic crisis (2009-2010), the

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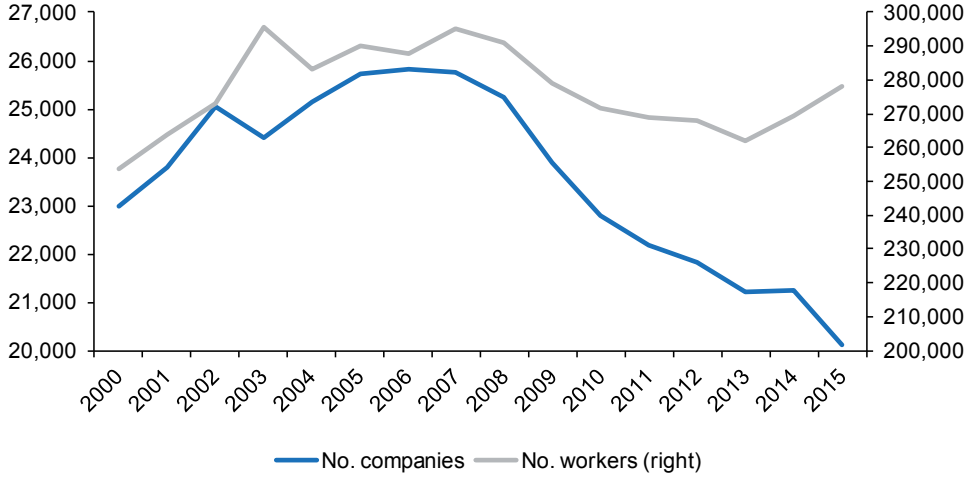
social economy represented 10% of all firms in the European Union and 6.5% of total paid employment. Between 2003 and 2010, paid work in the sector grew by 26.8% EU-wide. Spain stands out in the EU for the size of its social economy. Supported by the Constitution (Art. 129.2), the sector –comprised, in particular, by cooperatives and other similar structures, such as labour companies ("sociedades laborales") –accounted for over 10% of Spanish GDP and 6.7% of total employment at the start of the crisis in 2008 (Chaves and Monzón 2012; Chaves, Monzón and Zaragoza, 2013). Moreover, in 2011, Spain also became the first European country with a specific law regulating the social economy (Law 5/2011, March 29th, 2011). This recognises for the first time the set of structures making up the social economy, assigning them common principles and a role as social partners vis-à-vis the public authorities. The law also contains ambitious targets and measures to enact public policies to support the sector.

Spain stands out in the EU for the size of its social economy. The sector –comprised in particular by cooperatives and other similar structures, such as labour companies (sociedades laborales)– accounted for over 10% of Spanish GDP and 6.7% of total employment at the start of the crisis in 2008.

Although the dynamic is favourable and the outlook positive, the situation is nevertheless fragile. Against this backdrop, this article sets out to assess how these social economy entities have weathered the crisis. The evidence suggests that although the sector has not avoided the effects of the economic recession: i) it has been more resilient than the rest of the economy; and, ii) has acted as a shock-absorber against the impact of the crisis.

Exhibit 1

Change in the number of cooperatives and their workers



Note: Members in a cooperative have the option of choosing the social security contribution category to which they belong. Thus, for example, out of 278,177 cooperative workers in the second quarter of 2015, 198,394 were in the general system (or other non-self-employed categories) and 79,783 in the system for self-employed persons.

Source: The authors, based on data from the Ministry of Employment and Social Security. Second quarter of each year. Social security contribution systems: general and self-employed persons.

The negative impact of the crisis on the social economy

Like the rest of the economy, Spain's social economy was affected by the deterioration of the economic situation that became apparent in 2008. The crisis affected the sector in different ways and with differing intensities depending on the type of structures involved.

The impact on market-dependent entities (market sub-sector)

Cooperatives and labour companies, in which the company's share capital is mainly owned by workers and no member can hold more than a third, have been hard hit by the economic crisis. The main impact has been a weakening of their order books, threatening jobs and income, and even their ultimate survival.

Between 2007 and 2015, the number of cooperatives in Spain fell by 22% and employment in cooperatives contracted by 5.8% (11.3% to 2013, before the start of the economic recovery, as shown in Exhibit 1).

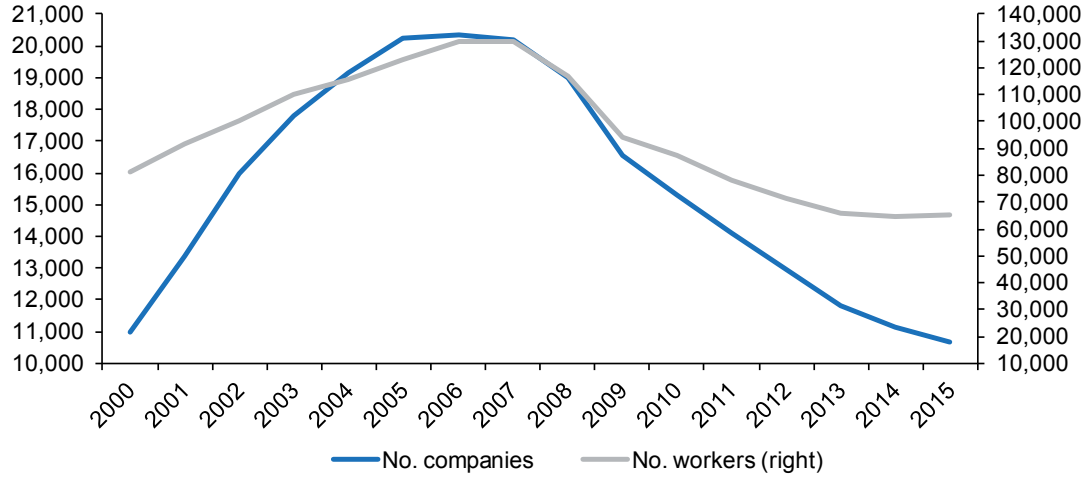
In 2007, 30% of jobs in labour companies were in construction, a sector that was devastated by the crisis in Spain, making them the hardest hit. The number of labour companies and jobs in these companies have fallen by 50% since the start of the crisis (Exhibit 2). There were only 10,675 entities in the second half of 2015 (89% limited liability, 11% joint-stock) employing 65,518 people.

The impact on entities dependent on public funding (non-market sub-sector)

Social economy entities that depend essentially on public funding, particularly associations and foundations, have not been left unscathed by the crisis. Indeed, they have been particularly affected by cuts in public spending. A general drop has been observed in income from public sources for the social action third sector in Spain, particularly

Exhibit 2

Change in the number of labour companies and their workers



Note: Second quarter of each year. Social security contribution system: general.
Source: The authors, based on data from the Ministry of Employment and Social Security.

as of 2011. Although public funding continues to provide the bulk of their income (55.3%, far exceeding the 25.3% of own funding and the 19.4% of private funding) there was a drop of 23.6% in public funding for the social action third sector between 2010 and 2013 (Plataforma de ONG de Acción Social, 2015). Associations and foundations have been unable to avoid some of the disastrous consequences of the dual challenge of declining external funding and increasing social demand, including: financial difficulties, deterioration of organisations and their capacity for action, staff cuts, and closures.

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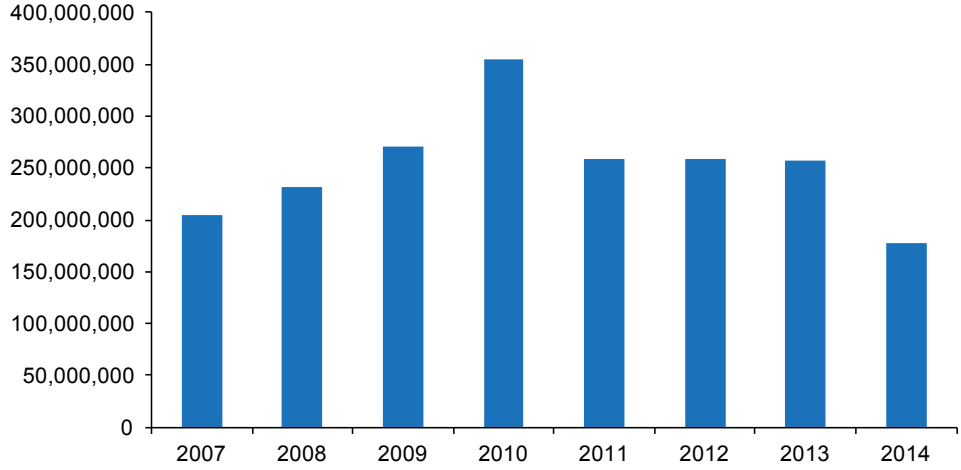
Special employment centres *(Centros Especiales de Empleo,* CEEs in their Spanish initials) have also suffered from a reduction in state aid and other cutbacks. Up until 2010, public subsidies for these centres, which aim to support the labour integration of disabled people, grew continuously (Exhibit 3). In 2011, there was a sharp drop (-27% from the previous year), and again in 2014 (-31% compared to the previous year).

As well as the centres' reduction in activity due to the crisis, the decrease in public subsidies led to a stabilisation of their workforce in 2011 and a dramatic fall in 2014, as Exhibit 4 shows (dropping from around 64,000 disabled workers in 2011 and 2013 to 47,131 workers in 2014).

As a comparison of Exhibits 3 and 4 shows, changes in subsidies are reflected directly in employment.

Exhibit 3

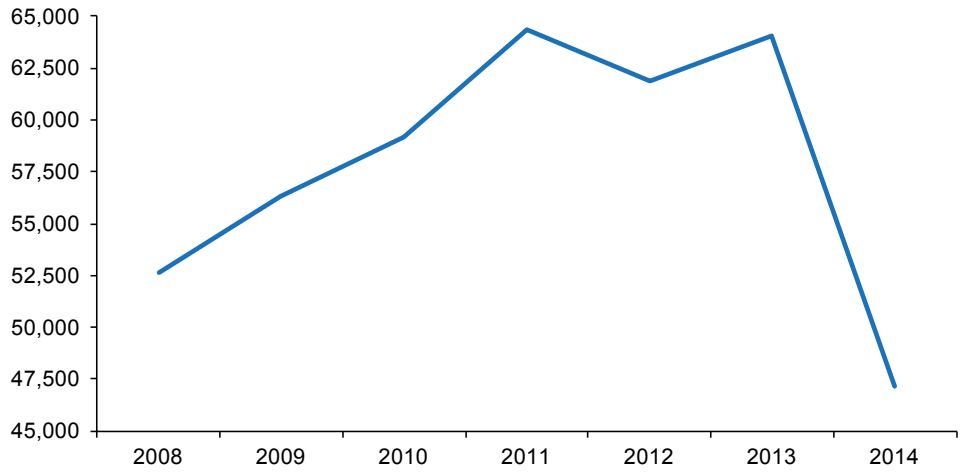
Change in the amount of public subsidies granted to CEEs for the labour integration of disabled people
(In euros)



Note: For 2014, the data corresponding to the Autonomous Region of Andalusia is not available.
Source: The authors, based on data from the Ministry of Employment and Social Security.

Exhibit 4

Change in the number of disabled workers at CEEs



Note: For 2014, the data corresponding to the Autonomous Region of Andalusia is not available.

Sources: The authors, based on data from the Public State Employment Service and the Ministry of Employment and Social Security.

The sector's resilience and its role as a shock-absorber throughout the crisis

Despite the aforementioned unfavourable factors, overall, the social economy has been more resilient than the economy as a whole, and has made it possible to limit the effects of the crisis significantly in several ways, such as: company survival, job creation, social and labour integration, combating exclusions, and social welfare.

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Company survival

An analysis of overall survival of companies created in Spain just before (2007) or during the recession (2009) suggests that social economy enterprises have withstood the crisis better than other businesses. According to harmonised business demographics data from the National Statistics Institute (INE), of the companies created in 2007 (356,358 in total), just 54.4% remained in business three years later (2010). The corresponding figure was 62% among cooperatives. As regards the companies created in 2009 (a total of 267,546), while approximately half (53.8%) remained after three years (2012), 56.9% of cooperatives and 62% of labour companies (limited and joint-stock) had survived. Labour joint-stock companies created in 2009 were more resilient throughout the crisis than the other companies created that year.

Job creation

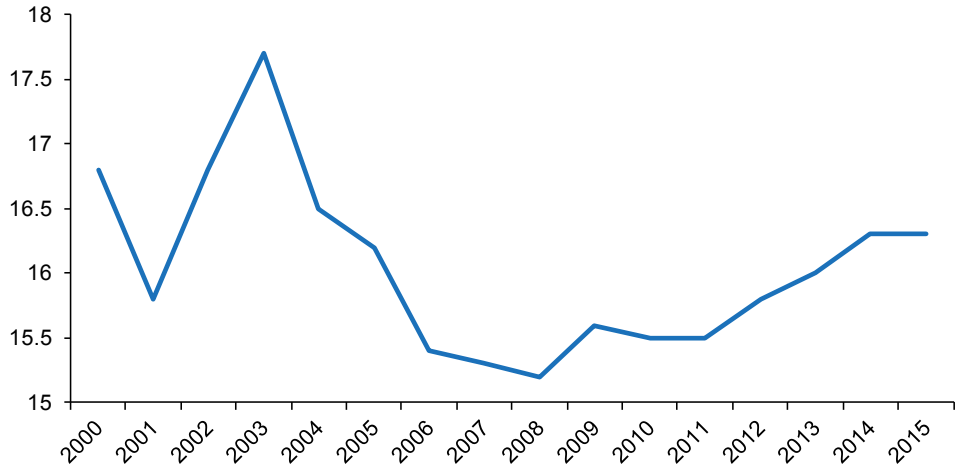
Cooperatives are also seen to have created more stable jobs than the rest of the economy. As Exhibit 5 shows, in 2007 there were 15.3 jobs in cooperatives for every 1000 workers in Spain. The equivalent figure in 2015 was 16.3, representing an increase in employment in cooperatives of 6% in proportion to the total number of people in work in the period 2007-2015. This increase is doubled when comparing the number of jobs in cooperatives with total employment in the Spanish private sector.[2]

The atypical trend of job creation by cooperatives during the crisis years helps explain the slight tendency of cooperative employment to act as a countercyclical buffer in times of crisis.

Led by worker cooperatives *(cooperativas de trabajo asociado),* whose aim is to provide their members with work ("worker members"), we can even see a significant increase in employment in cooperatives in absolute terms between 2007 and 2015 in key sectors such as education (19%) and health-care and social services (28%) – the sectors that saw most public-sector job losses in the crisis. This atypical trend during the recession, alongside their relative slowness to create jobs during periods of economic expansion (notice the drop in the curve in Exhibit 5 between 2003 and 2007 while Spain's annual economic growth was over 3%) reveals cooperative employment's countercyclical behaviour, a feature that has been noted in previous studies (Grávalos and Pomares, 2001; Díaz and Marcuello, 2010).

Exhibit 5

Change in the number of jobs in cooperatives per total 1,000 workers



Source: The authors, based on data from the Ministry of Employment and Social Security.

[2] According to INE data on private employment, the number of jobs in cooperatives rose by 11% in proportion to the total number of people working in the private sector over this same period, rising from 16.7 jobs in cooperatives for each 1000 private sector jobs in 2007 to 18.7 in 2015.

Social and labour integration

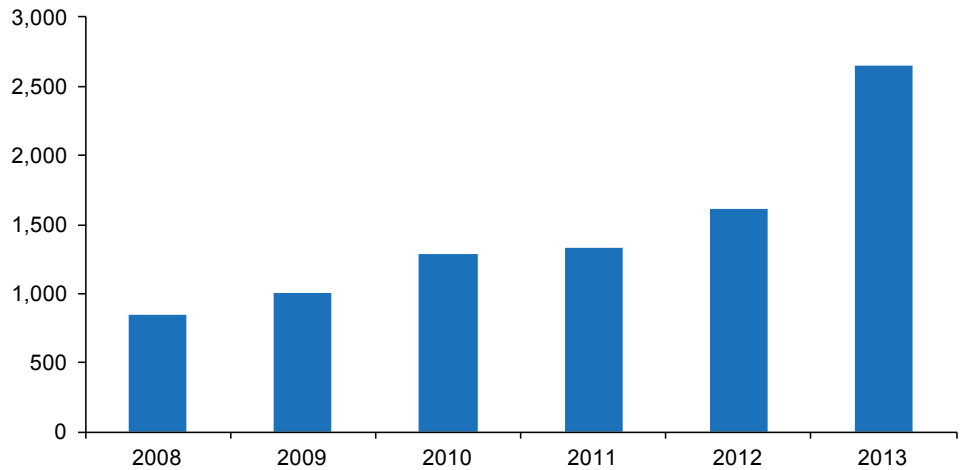
As well as reducing the amount of public money spent on social protection by turning potential recipients of social services into workers, taxpayers and consumers, special employment centres and reintegration enterprises *(empresas de inserción)* have been an effective mechanism for integrating people who would otherwise face major obstacles in the labour market and in society and so helping reduce their risk of facing poverty and social exclusion. This is particularly the case for disabled people.[3] The number of people working in reintegration enterprises (including recipients of a guaranteed minimum income, the long-term unemployed, people with drug dependency, etc.) has risen constantly over the last few years, according to data from the Federación de Asociaciones Empresariales de Empresas de Inserción (FAEDEI, 2014), based on a large sample of companies (Exhibit 6). In 2013, at least 905 people working in a company of this type (35% of reintegration workers) had previously been receiving a guaranteed minimum income.

Combating exclusion

In light of the considerable numbers of people requesting help of various kinds and the re-emergence of basic social needs, associations and foundations have adapted to the new environment by stepping up their activities and giving priority to the role of social protection. The social action third sector can be seen to have undergone a tangible shift towards providing welfare during the crisis, concentrating almost exclusively on addressing urgent needs and providing basic services (and not, for example,

Exhibit 6

Change in the number of people on reintegration programmes employed by reintegration enterprises



Source: The authors, based on FAEDEI data (2014).

[3] According to data from the *Atlas Laboral de las Personas con Discapacidad 2016* (Grupo SIFU and the University of Seville), the unemployment rate among disabled persons rose from 16% to 35% between 2008 and 2013. It grew more than the rate among persons without a disability (11.3% in 2008 and 26% in 2013), which represents a widening of the gap between the two groups from 5 to 9 points. The study also revealed that a third of the population with a disability is living in poverty and social exclusion, and that of the total number of disabled persons in work, 12.6% are at risk of poverty.

Table 1

Key facts on the role of the social action third sector during the early years of the crisis (2008-2010)

- Almost 1,000 new entities were created between 2008 and 2010, bringing the total number of social action third sector organisations in Spain to 29,746 in 2010.
- Spending by the social action third sector rose between 2008 and 2010 from 1.42% to 1.62% of Spanish GDP.
- The number of people employed by social action third sector organisations rose by over 100,000 between 2008 and 2010, bringing the total number to 635,961 in 2010.
- Direct personal care was provided by first level social action third sector entities 47.6 million times in 2010, 29.4% more than in 2007.

Source: The authors, based on data from Fundación Luis Vives (2012).

demanding rights, social advocacy or raising awareness). The upward trend in some of the figures for these organisations' expenditure at the start of the crisis (2008-2010), and the number of entities created, employees hired, or welfare services directly provided by them, confirms this increase in welfare activity (Table 1).

The social action third sector can be seen to have undergone a tangible shift towards providing welfare during the crisis, concentrating almost exclusively on addressing urgent needs and providing basic services (rather than, demanding rights, social advocacy or raising awareness).

Social welfare

Finally, analysis of how some of the aggregate figures on mutual insurance societies have changed during the crisis highlights the sector's good standing (Confederación Española de Mutualidades, 2008-2014): premium income, *i.e.* from sales of insurance, has risen by 27.6% since 2008, from 2,360 to 3,260 million euros at the end of 2014. Aggregate assets (equity) came to 38,880 million euros at the end of 2014, a figure 28.6% higher than at the start of the crisis. On this latter point, mutual insurance companies have also seen strong growth in their assets in relation

Table 2

Change in pension schemes and pension funds assets and those of mutual insurance companies (In euros)

Year	Pension funds				Mutual insurance companies	
	Individual scheme	Occupational scheme	Associated scheme	Total	Total	% pension funds
2008	49,209	28,866	983	79,058	27,950	35.35
2010	52,453	31,757	1,014	85,224	31,064	36.45
2012	52,901	32,840	795	86,536	34,835	40.25
2013	57,991	33,539	883	92,413	37,914	41.03
2014	64,144	33,810	861	98,815	38,880	39.35

Sources: The authors, based on Sáez and Sánchez (2005) and using data from Tornos Mas (2015).

to pension funds, which constitute the most widely used instrument in the complementary welfare market in Spain (Table 2). Mutual insurance companies' assets were equivalent to almost 40% of that of pension schemes and pension funds in 2014.

Concluding remarks

Like the Spanish economy as a whole, the social economy has been hit hard by the crisis. Nevertheless, the sector has proven to be particularly dynamic during the past few years, thus confirming its counter-cyclical nature. This trend has manifested itself in the recent performance of employment in cooperatives. More than just a shock-absorber for the impacts of the crisis, its structures, in conjunction with its combined economic and social utility, have performed a far from insignificant role in the country's economic recovery.

The third sector has been able to draw upon its unique principles of operation, management and governance – such as the limited distribution of its surpluses, the double quality rule, and its participatory governance – to establish long-term strategies and strengthen itself against cyclical fluctuations.

As well as its considerable capacity to provide welfare to the most vulnerable in society – whose number has grown significantly in the past few years – and foster their integration, and to develop external solidarity such as voluntary work[4] and networking – inter-cooperation – between social economy entities, these organisations have been supported in particular by the specifics of their legal basis to navigate and withstand the crisis. In particular, they have been able to draw upon their principles of operation, management and governance – such as the limited distribution of their surpluses, the double quality rule[5] and their participatory governance – to establish long-term strategies and strengthen themselves against cyclical fluctuations.

The crisis has therefore acted as a mechanism revealing the specific capacities of social economy entities to act in response to today's structural and cyclical changes. This new visibility for a sector which is often hidden in the background has stimulated the interest of the public and politicians in the social economy's structures and practices. This has been complimented by an increase in number of Spanish citizens appreciating these entities, not just as a palliative of the crisis or transition between cycles, but as an alternative economic model, with its own goals, specific features, and role in socio-economic relationships structuring society.

References

Chaves, R., and J. L. Monzón (2012), *L'économie sociale dans l'Union Européenne,* Rapport d'information élaboré pour le Comité économique et social européen par le Centre international de recherches et d'information sur l'économie publique, sociale et coopérative (CIRIEC), Brussels.

Chaves, R.; Monzón, J. L., and G. Zaragoza (2013), "La economía social: concepto, macromagnitudes y yacimiento de empleo para el Trabajo Social," *Cuadernos de trabajo social,* Vol. 26-1: 19-29.

Confederación Española de Mutualidades – CNEPS (2008-2014), http://www.cneps.es/

[4] It is estimated that almost 1.3 million people were working as volunteers in the social action third sector in 2013 in Spain, an increase of 31% on 2008. Volunteers take part and involve themselves actively in the sector's operations: in 2013 they were involved in intervention or direct welfare provision to beneficiaries in over 80% of entities (Plataforma de ONG de Acción Social, 2015).

[5] The double quality rule (*double qualité* in French) refers to the fact that users or beneficiaries of the activity are also members of the structure which creates it.

Díaz Foncea, M., and C. Marcuello (2010), "Impacto económico de las cooperativas. La generación de empleo en las sociedades cooperativas y su relación con el PIB", CIRIEC-España, *Revista de Economía Pública, Social y Cooperativa,* no. 67: 23-44.

European Commission (2011), "Social Business Initiative. Creating a favourable climate for social enterprises, key stakeholders in the social economy and innovation," communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM (2011) 682 final.

Federación de Asociaciones Empresariales de Empresas de Inserción – FAEDEI (2014), *Memoria Social 2013,* Madrid.

Fundación Luis Vives (2012), *Anuario del Tercer Sector de Acción Social en España,* Madrid.

Grávalos, M. A., and I. Pomares Hernández (2001), "Cooperativas, desempleo y efecto refugio," REVESCO, *Revista de Estudios Cooperativos,* no. 74: 69-84.

Plataforma de ONG de Acción Social (2015), *El Tercer Sector de Acción Social en 2015: Impacto de la crisis.*

Sáez Fernández, F. J., and M. T. Sánchez Martínez (2005), *Las Mutualidades de Previsión Social y los Sistemas de Protección Complementarios,* Universidad de Granada, Fundación Once, Documento de Trabajo, no. 3.

Tornos, E. (2015), *Balance social y económico de las Mutualidades. Propuestas ante los cambios normativos,* Confederación Española de Mutualidades.

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 amending the Accounting Circular and the Circular on the Central Credit Register (Circular 4/2016, published in the State Official Gazette (BOE) on May 6th, 2016)

The aim of this Circular is to adapt the Accounting Circular, and its Annex IX in particular, to the latest regulatory developments, while ensuring it remains compatible with the IFRS accounting framework.

I. Amendments to the Accounting Circular and the Circular on the Central Credit Register

The **main changes** to the **Accounting Circular** concern the following points:

- The changes to the Bank of Spain's organisation chart taking place in 2015 are reflected.
- In the case of the sale of capital instruments, the change in ownership is now deemed to take place on the settlement date rather than the contract date.
- New criteria for the amortisation of intangible assets.
- Adaptation of public and confidential statements and incorporation of new statements.

For their part, the **amendments to the Circular on the Central Credit Register** aim to adapt it to the accounting criteria for operations subject to credit risk under the new Annex IX, and amend the content of the data module on collateral.

II. New Annex IX of the Accounting Circular

■ General credit-risk management framework

The Circular stipulates that policies for **granting transactions** must include the following points: (i) the markets, products, customer types, currencies and applicable terms, and the requirements to be met by holders; (ii) the overall risk limits; (iii) the policy on lending to **related parties** or entities; (iv) the policy on financing **property developments**; (v) the criteria for the granting of transactions in **foreign currency**; and (vi) entities' **price policies**. The final point stipulates that if a transaction is granted at less than cost, its price will be taken as a sign that the transaction deviates from fair value. In this case, the transaction has to be registered initially at fair value, such that the difference between fair value and the amount drawn down is **recognised directly as an expense on the profit and loss account**, either immediately, or deferred as an adjustment to fair value, as applicable.

Moreover, it determines what will be considered a refinancing or renewal transaction, a refinanced, restructured or renegotiated transaction, and the circumstances under which a restructuring or refinancing is deemed to exist.

The **evaluation, monitoring and control of credit risk** contains the general principles for estimates of coverage of credit risk losses. **General allowances and provisions** are to be estimated collectively while **specific allowances and provisions** may be estimated individually or collectively, if a series of conditions are met.

Institutions are to develop **methodologies** for estimating all the specific allowances and provisions that are subject to **individualised estimates** and will use alternative solutions for **collective estimates** for comparative purposes. For the estimation of allowances and provisions on transactions that are subject to collective estimates (normal exposures, doubtful due to insignificant arrears and doubtful for reasons other than arrears), institutions that have not developed internal methodologies are to use **alternative solutions** provided by the Bank of Spain.

The types of guarantees that may be considered effective and the **requirements for their appraisal,** and the **procedures and minimum frequency of collateral appraisal** are established.

■ **Classification of transactions on the basis of credit risk due to insolvency**

Transactions are classified into three categories: **normal, doubtful** (due to customer arrears and for reasons other than arrears) and **write-off. The substandard category has been eliminated.**

- Within **normal exposures,** there is a **new subcategory of exposures subject to special monitoring**, which is to include transactions presenting weaknesses that may mean assuming losses greater than those on other similar transactions classified as normal exposures. A **carry-over effect** is also introduced whereby transactions involving a party that has accumulated refinancing or restructuring transactions are reclassified in the normal exposures under special monitoring category.

- **Doubtful exposures** may be classed in the following categories: due to customer arrears and for reasons other than customer arrears. In both cases, unless there are other reasons for their classification as doubtful exposures, transactions may be **reclassified as normal exposures** if the causes or reasonable doubts as to total reimbursement disappear and the holder does not have amounts more than 90 days past due on other transactions at the time of the reclassification.

- The **write-off** classification is to include debt instruments, whether due or not, for which the entity, after analysing them individually, considers the possibility of recovery to be remote due to serious and irreversible deterioration of the borrower's of the transaction's solvency. This classification entails the writing off of the full gross book value of the transaction and its total derecognition from the assets.

■ **Allowances and provisions for credit risk losses due to insolvency**

- The existence of **effective guarantees** will be taken into account and in the case of effective personal guarantees, the holder may be substituted by the guarantor for the purposes of calculating the allowances and provisions.

- Entities are to evaluate **assets classed as doubtful due to** customer **arrears** in order to estimate credit risk loss allowances and provisions, bearing in mind how long the amounts have been past due, the effective personal guarantees and collateral received, and the economic situation of the borrower and guarantors. Individual or collective allowances or provisions for transactions that are doubtful due to arrears should not be less than the general allowances or provisions applicable to them if classified as standard exposures under special monitoring.

  The Bank of Spain has estimated percentage allowances and provisions in the form of an **alternative solution** for the collective estimation of allowances and provisions on

exposures classed as doubtful due to arrears, according to the credit risk segment to which the transaction belongs and how long the amounts have been past due.

- Allowances and provisions for **transactions classed as doubtful for reasons other than arrears** have to be estimated individually, although when only automatic factors have been considered, a collective estimate may be made.

- Entities are to calculate **collective allowances and provisions for normal exposures under special monitoring** separately from those to which higher provisioning is required as a result of their greater risk.

■ **Real estate assets foreclosed or received in payment of debt**

The Circular determines the v**alue at which these assets should initially** be recognised. Real estate assets foreclosed or received in payment of debt are to be **valued at the time they are received,** taking the market value given in complete individual appraisals for reference as the starting point. The reference value must subsequently be updated at least once a year.

It is stipulated that institutions are to develop **internal methodologies** for estimating the discounts applicable to the reference value and costs of sale of assets foreclosed or received in payment of debt, complying with the principles and requirements established in the Circular. The **percentage haircuts** on the reference value that are to be used by institutions in comparison and benchmarking exercises and when preparing individual confidential reports is also given.

III. Entry into force and initial application

Institutions are to **apply amendments to the Accounting Circular and Annex IX prospectively** as a change in accounting estimates, and are to report on the changes in the notes to the individual and consolidated financial statements for 2016.

The Circular **will come into force on October 1st, 2016**, except for certain provisions concerning statements, which will come into effect earlier or later.

Bank of Spain Circular on the method of calculation to ensure member institutions' contributions to the Credit Institution Deposit Guarantee Fund are proportional to their risk profile (Circular 5/2016, published in the BOE on June 1st, 2016)

The Circular stipulates that once the amount of the contribution based on the volume of guaranteed deposits has been determined, it will be adjusted for each institution by means of **risk weighting** obtained by applying the method stipulated in Annex 1 of the Circular.

The main points are:

- The **calculation method** comprises the following six phases: (i) classification of member institutions in risk brackets; (ii) redimensioning of indicators; (iii) assigning a positive or negative sign to the indicators; (iv) calculating the aggregate risk indicator; (v) calculating the aggregate risk weighting and (vi) determining the contributions of the members of the Credit Institutions Deposit Guarantee Fund.

  This method will be **used for the first time to calculate member institutions' contributions in the 2016 financial year.**

- The calculation method will be based on the following **risk indicators and categories**, which will receive the weightings indicated in brackets:

  ✓ **Capital:** leverage ratio (12%) and common equity tier 1 ratio (CET1) (12%).

  ✓ **Liquidity and financing:** liquidity coverage ratio (LCR) (11%) and net stable funding ratio (NSFR) (11%).

- ✓ **Asset quality:** ratio of debt instruments in default (13%) and coverage ratio of debt instruments in default (5%).

- ✓ **Business model and management model:** ratio of risk-weighted assets to total assets (8%) and asset return ratio (8%).

- ✓ **Potential losses for the Credit Institution Deposit Guarantee Fund**: ratio of unencumbered assets (13%) and ratio of own funds and eligible liabilities (7%).

The values of the foregoing risk indicators will be **calculated on an individual basis** for each member institution, unless the institution is granted an exemption from the individual application of liquidity or prudential requirements. In such cases, they will be calculated on the basis of the single liquidity subgroup or on a consolidated basis, respectively. An explanation is also given on how to proceed when the information on the indicators is not available.

The Credit Institution Deposit Guarantee Fund may **raise or lower the contribution target** (by a maximum of 20%) depending on the following factors: **(i)** the counter-cyclical buffer rate applicable; and **(ii)** the potential impact of procyclical contributions on institutions' liquidity and solvency.

Spanish economic forecasts panel: July 2016[1]

Funcas Economic Trends and Statistics Department

Growth could reach 2.9% in 2016, two tenths more than in the previous Panel

The results for the first half of the year suggest the Spanish economy has grown steadily and faster than projected. Instead of the expected net deceleration, GDP growth in the second quarter could reach 0.7%, just one tenth less than in the previous quarter.

The revision of the growth forecast was largely due to the fact that household consumption grew more strongly than expected. Public consumption has also grown slightly more than anticipated. By contrast, the forecasts for construction investment and for exports have been revised downwards. Investments in capital goods could continue to grow in line with previous forecasts. Nevertheless, the contribution of domestic demand is less positive than predicted, while external demand is making a more negative contribution than foreseen in the previous Panel.

The forecast for 2017 remains unchanged at 2.3 %

The GDP growth forecast for 2017 remains unchanged at 2.3%, which suggests a stronger slowdown than predicted. The deceleration will come from slower domestic demand, particularly consumption by households and the general government. The external sector will continue to make a slightly negative contribution.

The quarter-on-quarter growth rate for the second part of the year should be around 0.4% – one tenth less than in the previous forecasts. Next year's quarter-on-quarter growth should stay stable at around 0.6%, with no change since the previous Panel.

Impact of Brexit

This growth profile does not fully take into account the potential impact of the United Kingdom's departure from the European Union. Brexit could have an impact on investment, tourism and international trade.

Deceleration in industry and robust growth in services

Growth of the industrial production index has slowed sharply, reflecting the deceleration in goods exports. Industrial production fell in May to a seasonally-adjusted annual growth rate of 1%.

The indicators for the services sector suggest a more positive direction, in line with the trend in

[1] The Spanish Economic Forecasts Panel is a survey run by Funcas which consults the 17 analysis departments listed in Table 1. The survey, which has taken place since 1999, is published bi-monthly in the first half 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.

household consumption. In May, spending by tourists visiting Spain grew at an annual rate of 7.8%, suggesting that 2016 will be a good year for the hospitality sector.

Prices are dropping more slowly due to the rise in the oil price

The annual inflation rate in June dropped below its level in the preceding months to -0.8%. Fuel and electricity prices rose, pushed up by higher oil prices. The core rate remains positive, at around 1%.

The projection for 2017 remains unchanged at 1.3%. The year-on-year rate for December is forecast to be 0.7% this year and 1.2% the next (Table 3).

Positive trend in employment

According to social security affiliation figures, the rate of employment growth remained strong in the first six months of the year, at around 2.9% in annualised terms. The number of registered unemployed has also fallen rapidly.

Employment is expected to grow by 2.6% in 2016 – a tenth of a percentage point higher than in the previous Panel – while the forecast for 2017 remains 2.0%. Using the consensus estimates for GDP, employment and wage growth to deduce the implicit productivity and unit labour cost growth estimates, productivity growth of around 0.3% is expected in 2016 and 2017, while ULCs are expected to change by a moderate 0.8% in 2016 and 1.1% next year.

The current account surplus will grow in 2016

The current account of the balance of payments posted a surplus of 1.5 billion euros in the first four months of 2016, compared with a deficit of 1.9 billion euros in the same period of the previous year. This improvement was driven by the increased goods and services surplus, resulting in particular from the strong performance of the tourism industry, and the reduction in the deficit on the income and transfers account.

For the current year as a whole, a surplus of 1.7% of GDP is forecast, which is two tenths higher than in 2015. The consensus forecast for 2017 suggests a surplus of 1.5%, *i.e.* one tenth more than in the previous Panel.

The government deficit will overshoot the target

The consolidated general government deficit in the first quarter came to 8.3 billion euros, 500 million euros more than the deficit in the year-earlier period. This deterioration was caused by a slowdown in tax collection combined with an increase in expenditure.

The consensus forecast for the general government deficit for 2016 remains unchanged at 4.1%, as does the forecast for 2017 at 3.2% of GDP. In both cases, these exceed the targets in the Stability Programme Update (3.6% and 2.9%).

Worsening perception of the global economy

Global economic growth has shown signs of stagnating at around 3%. The U.S. economy grew more slowly than in 2015, while growth in the euro area remained moderate. The emerging economies have cooled (China, Russia) or are in recession (Brazil). International trade has slowed, and, for the first time in recent history, is now growing at rates similar to or below that of world GDP growth. Brexit, the state of the financial sector in emerging countries, and financial market volatility have created a climate of uncertainty.

As a result, the majority opinion among panellists with regard to the current situation in the EU is

that, as a factor influencing the Spanish economy, it is neutral or unfavourable. This represents a worsening from the previous Panels. The situation is expected to remain neutral or worsen over the coming months. The situation outside the EU is also mainly considered to be neutral or unfavourable, in line with the previous consensus, and is expected to remain so over the coming months.

Long-term interest rates are low

Short-term interest rates (three-month EURIBOR) remain in negative territory. As in previous Forecast Panels, interest rates are still felt to be low for the state of the Spanish economy, but they are expected to remain stable over the coming months.

In recent weeks, long-term rates (Spanish ten-year debt) have been somewhat lower than those observed in the first two months of the year. The majority opinion among panellists is that this level is very low, but that it will remain stable over the coming months.

The euro has depreciated

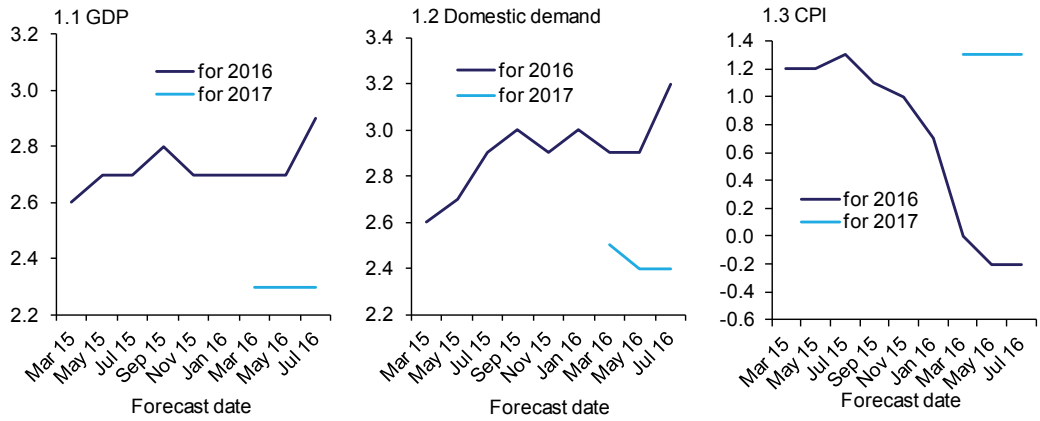
As a result of financial turbulence, the euro has depreciated in recent weeks to levels around 1.10 dollars. It is expected to remain stable over the coming months or to depreciate further.

Fiscal policy is expansionary

Fiscal policy is considered to be expansionary. The majority view is that the appropriate stance would be neutral. As regards monetary policy, there is still unanimity that it is expansionary, and that this is the appropriate stance.

Exhibit 1

Change in forecasts (Consensus values)
Percentage annual change



Source: Funcas Panel of forecasts.

Table 1

Economic Forecasts for Spain – July 2016

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

	GDP		Household consumption		Public consumption		Gross fixed capital formation		GFCF machinery and capital goods		GFCF Construction		Domestic demand	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Analistas Financieros Internacionales (AFI)	3.0	2.2	3.4	2.5	2.5	2.0	5.0	3.9	7.7	6.1	3.6	3.7	3.4	2.5
Axesor	3.0	2.2	3.4	2.2	1.4	0.1	3.8	4.0	6.6	4.1	2.5	4.7	3.3	2.2
Banco Bilbao Vizcaya Argentaria (BBVA)	2.7	2.7	2.7	2.4	1.6	1.8	4.1	4.5	5.5	4.7	3.1	4.1	2.6	2.6
Bankia	2.8	2.3	3.2	2.3	2.0	1.3	4.5	4.2	7.9	6.5	2.9	3.0	3.3	2.5
CaixaBank	2.8	2.2	3.2	2.2	1.9	0.8	3.4	2.9	5.9	2.5	2.0	3.2	3.1	2.0
Cemex	2.9	2.3	3.4	2.5	2.0	0.9	3.8	4.5	6.2	4.8	2.3	4.4	3.1	2.6
Centro de Estudios Economía de Madrid (CEEM-URJC)	2.7	2.3	3.0	2.6	1.5	1.1	4.4	3.9	5.3	4.2	4.2	4.0	2.9	2.5
Centro de Predicción Económica (CEPREDE-UAM)	2.7	1.9	3.0	1.6	2.1	1.3	3.9	4.9	6.4	4.9	2.6	4.8	3.1	2.2
CEOE	2.9	2.3	3.2	2.4	1.4	0.5	3.9	2.6	6.7	4.0	2.5	1.9	3.1	2.0
Funcas	3.0	2.3	3.5	2.1	2.1	1.0	4.2	5.0	7.5	7.3	2.3	3.6	3.3	2.5
Instituto Complutense de Análisis Económico (ICAE-UCM)	2.8	2.4	2.9	2.5	1.0	1.2	4.9	4.0	6.7	5.0	3.0	2.7	3.0	2.5
Instituto de Estudios Económicos (IEE)	3.0	2.5	3.7	3.4	2.6	0.6	3.5	3.2	6.3	4.1	2.7	3.8	3.2	2.5
Instituto Flores de Lemus (IFL-UC3M)	2.7	2.0	3.4	2.8	1.5	-0.3	4.1	4.2	8.5	8.0	1.7	2.0	3.2	2.3
Intermoney	2.8	2.0	3.2	2.0	1.6	1.0	3.7	2.7	5.6	3.0	2.7	2.4	3.1	2.1
Repsol	3.1	2.6	3.5	2.7	2.0	1.9	4.4	5.1	7.5	6.2	2.5	4.6	3.5	3.0
Santander	2.9	2.1	3.5	2.5	2.2	1.2	3.1	3.1	5.6	1.6	1.7	4.4	3.3	2.4
Solchaga Recio & asociados	2.7	2.3	3.1	2.6	2.0	1.0	4.3	3.7	6.8	5.4	3.0	3.5	3.1	2.5
CONSENSUS (AVERAGE)	2.9	2.3	3.3	2.4	1.8	1.0	4.0	3.9	6.6	4.8	2.7	3.6	3.2	2.4
Maximum	3.1	2.7	3.7	3.4	2.6	2.0	5.0	5.1	8.5	8.0	4.2	4.8	3.5	3.0
Minimum	2.7	1.9	2.7	1.6	1.0	-0.3	3.1	2.6	5.3	1.6	1.7	1.9	2.6	2.0
Change on 2 months earlier[1]	0.2	0.0	0.4	0.2	0.4	-0.1	-0.7	-0.3	0.1	-0.2	-1.0	-0.3	0.3	0.0
- Rise[2]	11	3	14	11	12	4	0	5	7	6	0	3	12	3
- Drop[2]	1	7	0	3	0	7	12	10	7	6	14	8	0	4
Change on 6 months earlier[1]	0.2	--	0.3	--	0.8	--	-1.0	--	-0.1	--	-2.0	--	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	2.3	3.0	2.3	0.6	0.3	4.5	2.9	--	--	--	--	2.8	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 – July 2016

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

	Exports of goods & services		Imports of goods & services		CPI (annual av.)		Core CPI (annual av.)		Labour costs[3]		Jobs[4]		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)	3.7	4.1	5.5	5.7	-0.3	1.2	0.8	1.0	0.8	1.4	2.7	2.0	20.0	18.8	1.9	1.6	-4.2	-3.2
Axesor	2.3	3.0	3.7	3.0	0.7	0.9	0.8	0.9	0.2	1.0	2.5	1.6	20.3	19.5	1.6	0.9	-4.6	-3.9
Banco Bilbao Vizcaya Argentaria (BBVA)	4.4	5.6	4.4	6.0	-0.3	1.7	0.9	1.3	1.8	1.1	2.4	2.2	19.8	18.5	2.1	2.5	-3.9	-2.9
Bankia	4.4	4.5	6.0	5.4	-0.3	1.4	0.8	1.1	0.8	1.1	2.4	2.0	20.0	18.5	2.0	1.8	--	--
CaixaBank	3.7	4.6	4.7	4.3	-0.2	1.9	1.0	1.1	0.5	1.0	2.5	1.9	20.0	18.7	1.6	1.4	-3.9	-3.1
Cemex	4.8	5.0	5.8	6.2	-0.2	1.5	0.8	1.0	--	--	2.7	2.5	19.5	18.5	2.0	1.5	-4.1	-3.5
Centro de Estudios Economía de Madrid (CEEM-URJC)	4.9	4.4	5.7	5.4	-0.2	1.2	0.9	0.8	--	--	2.3	1.8	20.0	18.5	1.6	1.4	-4.2	-3.2
Centro de Predicción Económica (CEPREDE-UAM)	3.6	5.0	5.0	6.3	-0.3	1.0	0.9	1.0	0.6	1.4	2.3	1.2	20.3	19.9	1.4	0.6	-4.2	-3.7
CEOE	4.6	5.2	5.6	4.7	-0.1	1.4	0.8	0.7	0.7	0.7	2.7	2.1	19.8	18.1	2.0	1.8	-4.1	-3.3
Funcas	4.0	4.3	5.4	5.3	-0.3	1.3	0.8	0.9	0.6	1.0	2.6	1.9	19.8	18.1	1.7	1.6	-3.8	-3.0
Instituto Complutense de Análisis Económico (ICAE-UCM)	5.6	5.5	6.0	6.0	0.5	1.3	2.9	--	--	--	2.5	2.1	20.4	19.0	1.7	1.5	-4.0	-3.0
Instituto de Estudios Económicos (IEE)	3.4	4.9	5.0	6.0	-0.2	1.1	--	--	0.7	1.1	2.9	2.2	20.0	18.3	1.7	1.6	-4.0	-3.0
Instituto Flores de Lemus (IFL-UC3M)	2.7	3.7	4.3	4.9	-0.4	1.1	0.8	0.5	--	--	2.9	2.6	19.7	18.2	--	--	--	--
Intermoney	3.5	3.4	4.9	4.0	-0.4	1.2	0.8	0.8	--	--	2.7	1.8	19.9	18.5	1.3	1.5	-4.1	-3.3
Repsol	3.8	5.1	5.4	6.6	0.0	1.3	0.8	0.9	0.8	1.0	3.2	2.7	19.8	18.0	1.7	1.6	-3.9	-3.1
Santander	2.7	2.9	4.0	4.1	-0.4	1.5	0.8	0.9	1.0	1.5	2.6	1.7	19.6	18.0	1.0	0.7	-3.2	-2.0
Solchaga Recio & asociados	4.0	4.5	5.6	5.4	-0.5	0.8	0.9	1.3	--	--	2.6	2.2	20.1	18.2	1.6	1.5	-4.6	-4.2
CONSENSUS (AVERAGE)	3.9	4.5	5.1	5.3	-0.2	1.3	1.0	0.9	0.8	1.1	2.6	2.0	19.9	18.5	1.7	1.5	-4.1	-3.2
Maximum	5.6	5.6	6.0	6.6	0.7	1.9	2.9	1.3	1.8	1.5	3.2	2.7	20.4	19.9	2.1	2.5	-2.7	-1.9
Minimum	2.3	2.9	3.7	3.0	-0.5	0.8	0.8	0.5	0.2	0.7	2.3	1.2	19.5	18.0	1.0	0.6	-4.6	-4.2
Change on 2 months earlier[1]	-0.9	-0.3	-0.7	-0.3	0.0	0.0	--	--	-0.1	0.0	0.1	0.0	-0.2	-0.2	0.1	0.1	0.0	0.0
- Rise[2]	2	3	1	1	5	3	--	--	1	1	9	4	3	4	5	3	2	1
- Drop[2]	13	10	14	11	5	6	--	--	5	3	1	7	9	7	2	2	4	4
Change on 6 months earlier[1]	-1.6	--	-1.7	--	-0.9	--	--	--	-0.2	--	0.2	--	-0.5	--	0.6	--	-0.7	--
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	-3.6	-2.9
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)	4.5	4.4	5.1	4.1	-0.4	1.0	--	--	--	--	2.5	1.8	19.7	18.3	1.9	2.0	-3.4	-2.5
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.

Table 2

Quarterly Forecasts - July 2016[1]

	Quarter-on-quarter change (percentage)							
	16-IQ	16-IIQ	16-IIIQ	16-IVQ	17-IQ	17-IIQ	17-IIIQ	17-IVQ
GDP[2]	0.8	0.7	0.4	0.4	0.6	0.6	0.6	0.6
Household consumption[2]	0.9	0.8	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

CPI Forecasts – July 2016[1]

Monthly change (%)				Year-on-year change (%)	
July-16	Aug-16	Sep-16	Oct-16	Dec-16	Dec-17
-0.6	0.1	0.3	0.7	0.7	1.2

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

Table 4

Opinions – July 2016
Number of responses

	Currently			Trend for next six months		
	Favourable	Neutral	Unfavourable	Improving	Unchanged	Worsening
International context: EU	1	9	6	1	10	5
International context: Non-EU	0	12	4	0	11	5
	Low[1]	Normal[1]	High[1]	Increasing	Stable	Decreasing
Short-term interest rate[2]	13	3	0	0	14	2
Long-term interest rate[3]	13	3	0	0	14	2
	Overvalued[4]	Normal[4]	Undervalued[4]	Appreciation	Stable	Depreciation
Euro/dollar exchange rate	3	8	5	1	9	6
	Is being			Should be		
	Restrictive	Neutral	Expansionary	Restrictive	Neutral	Expansionary
Fiscal policy assessment[1]	0	6	10	5	10	1
Monetary policy assessment[1]	0	0	16	0	0	16

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

[2] Three-month Euribor.

[3] Yield on Spanish 10-year public debt.

[4] Relative to theoretical equilibrium rate.

KEY FACTS:

Table 1

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

Forecasts in blue

		GDP	Private consumption	Public consumption	Gross fixed capital formation					Exports	Imports	Domestic Demand (a)	Net exports (a)
						Construction							
					Total	Total	Housing	Other construction	Equipment & other products				
Chain-linked 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		3.0	3.5	2.1	4.2	2.3	3.9	1.0	6.2	4.0	5.4	3.3	-0.3
2017		2.3	2.1	1.0	5.0	3.6	4.4	3.0	6.4	4.3	5.3	2.5	-0.2
2015	I	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	I	3.4	3.7	2.6	5.2	3.1	3.3	2.9	7.5	3.7	5.4	3.8	-0.4
	II	3.2	3.8	2.3	4.1	2.0	3.5	0.8	6.3	4.2	5.5	3.5	-0.3
	III	2.9	3.4	2.1	3.8	2.0	4.3	0.3	5.7	4.1	4.8	3.0	-0.1
	IV	2.6	3.1	1.6	3.7	2.1	4.7	0.3	5.3	4.1	6.0	3.1	-0.5
2017	I	2.3	2.6	1.2	4.5	3.2	4.4	2.3	5.8	4.9	6.5	2.7	-0.4
	II	2.1	2.1	1.0	4.6	3.4	4.3	2.7	5.8	4.1	5.5	2.4	-0.3
	III	2.3	1.9	0.9	5.1	3.7	4.2	3.2	6.5	3.9	4.6	2.4	-0.1
	IV	2.5	1.9	1.0	5.8	4.1	4.5	3.9	7.4	4.4	4.6	2.5	0.1
Chain-linked volumes, quarter-on-quarter percentage changes, at annual rate													
2015	I	3.7	3.2	8.0	6.4	5.2	0.5	8.9	7.6	4.1	10.7	5.6	-1.9
	II	3.9	3.2	3.0	9.5	7.7	4.2	10.4	11.4	5.8	6.3	3.9	0.0
	III	3.3	4.6	2.2	5.2	2.9	1.7	3.9	7.6	7.6	13.1	4.8	-1.4
	IV	3.2	3.0	1.7	4.7	2.5	2.4	2.7	6.8	3.8	1.1	2.3	0.9
2016	I	3.1	3.8	3.4	1.6	-0.8	5.0	-4.9	4.0	-2.1	1.4	4.3	-1.1
	II	3.1	3.7	1.8	4.9	3.2	5.0	1.8	6.8	7.8	6.9	3.4	-0.3
	III	2.1	3.0	1.4	4.0	3.1	4.7	1.8	5.0	7.1	10.0	2.9	-0.7
	IV	2.0	2.0	-0.2	4.2	3.2	4.0	2.5	5.3	3.8	5.9	2.2	-0.2
2017	I	2.1	1.5	1.8	4.8	3.4	4.0	3.0	6.1	1.2	3.2	2.3	-0.2
	II	2.1	1.8	1.2	5.3	3.9	4.5	3.5	6.7	4.3	3.0	2.2	-0.1
	III	2.9	2.0	1.0	5.9	4.2	4.5	4.0	7.7	6.2	6.5	2.6	0.3
	IV	3.0	2.2	0.0	7.0	5.0	5.0	5.0	9.1	6.1	5.7	2.7	0.3
		Current prices (EUR billions)	**Percentage of GDP at current 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		1,119.2	57.4	19.0	20.9	10.5	4.6	5.9	10.4	33.6	31.3	97.6	2.4
2017		1,157.3	57.4	18.8	21.6	10.8	4.8	6.0	10.8	34.4	32.6	98.2	1.8

**Seasonally and Working Day Adjusted.*
(a) Contribution to GDP growth.

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

Chart 1.1.- GDP
Percentage change

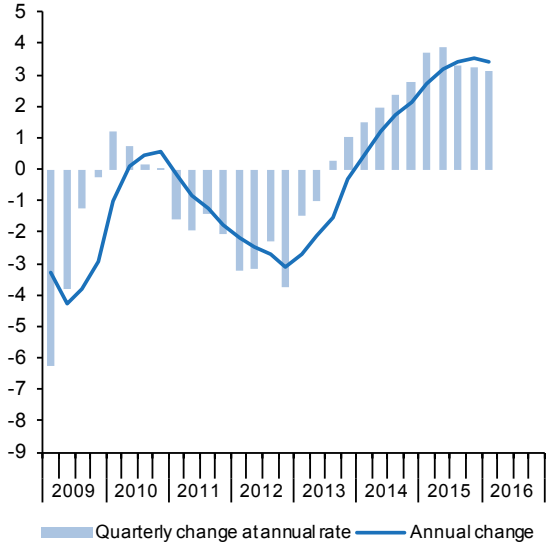


Chart 1.2.- Contribution to GDP annual growth
Per cent points

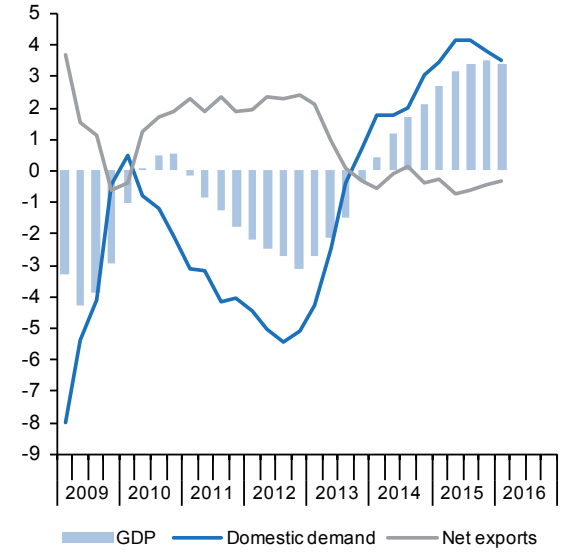


Chart 1.3.- Final consumption
Annual percentage change

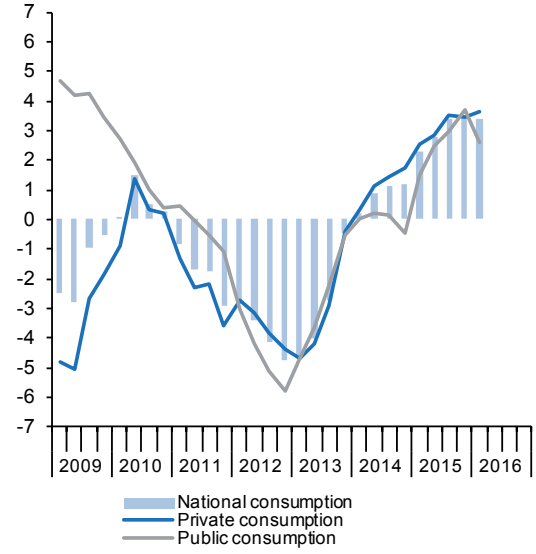


Chart 1.4.- Gross fixed capital formation
Annual percentage change

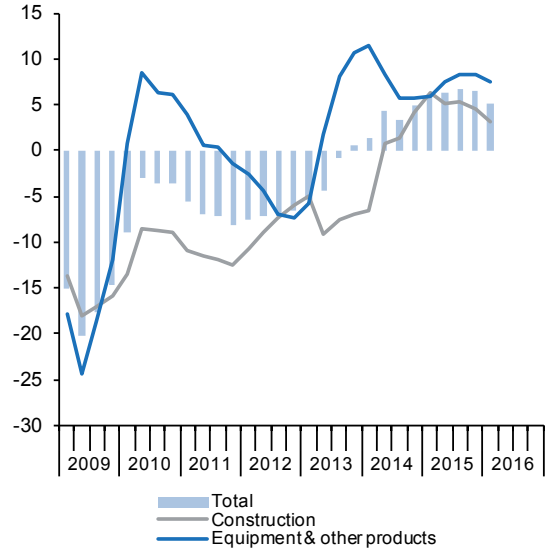


Table 2

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

Forecasts in blue

	Gross value added at basic prices												Taxes less subsidies on products
	Total	Agriculture, forestry and fishing	Manufacturing, energy and utilities	Construction	Services								
					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	
Chain-linked volumes, annual percentage changes													
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	3.4	2.4	2.6	3.1	4.9	5.3	2.5	1.1	3.9	1.2	3.6	3.5
2017	2.3	2.0	2.7	3.0	2.2	2.9	3.7	2.3	1.7	2.6	0.9	2.1	2.3
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
III	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 I	3.4	5.5	2.6	2.6	3.5	5.0	6.1	2.2	0.9	5.1	2.2	4.4	3.4
II	3.2	5.0	2.2	3.4	3.3	5.2	5.5	2.0	1.0	4.0	1.6	4.5	3.5
III	2.8	2.7	2.2	2.6	2.9	4.7	4.9	3.2	1.1	4.0	0.9	3.1	4.0
IV	2.5	0.5	2.5	1.8	2.7	4.9	4.6	2.8	1.4	2.7	0.1	2.3	3.2
2017 I	2.3	2.0	2.4	2.6	2.2	4.0	3.3	1.8	1.9	1.9	0.0	1.9	2.9
II	2.0	2.0	2.4	2.8	1.9	2.3	3.4	2.0	1.6	2.0	1.0	1.9	2.6
III	2.3	2.0	2.8	3.1	2.1	2.5	3.8	2.4	1.4	2.7	1.1	2.2	2.2
IV	2.6	2.0	3.0	3.5	2.5	2.9	4.2	2.8	1.6	3.6	1.6	2.5	1.2
Chain-linked volumes, quarter-on-quarter percentage changes, at annual rate													
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	3.1	-3.9	2.9	-0.5	3.7	4.8	8.8	7.8	-0.7	5.9	2.4	3.4	2.8
II	3.2	2.0	3.0	2.6	3.4	8.0	3.5	1.4	2.7	3.0	-1.5	2.8	2.1
III	2.0	2.0	1.8	2.5	2.1	3.5	3.0	1.0	2.5	1.0	0.5	1.5	3.0
IV	1.7	2.0	2.4	2.6	1.5	3.4	3.2	1.0	1.0	1.0	-1.0	1.5	5.0
2017 I	2.1	2.0	2.6	2.8	2.0	1.4	3.5	4.0	1.5	2.5	2.0	2.0	1.7
II	2.2	2.0	3.0	3.3	2.0	0.9	4.0	2.2	1.6	3.5	2.5	2.5	0.9
III	3.0	2.0	3.2	3.6	3.0	4.5	4.5	2.4	1.7	4.0	1.0	2.7	1.4
IV	3.2	2.0	3.2	4.4	3.2	4.9	4.7	2.6	1.8	4.5	1.0	3.0	1.0
	Current prices (EUR billions)	**Percentage of value added at basic prices**											
2009	1,006.1	2.3	16.6	10.6	70.4	22.0	4.4	5.7	8.9	7.3	18.2	4.0	7.2
2010	989.9	2.6	17.2	8.8	71.4	22.5	4.4	4.4	10.2	7.2	18.7	4.1	9.2
2011	983.7	2.5	17.4	7.5	72.6	22.9	4.3	4.2	10.9	7.4	18.7	4.2	8.8
2012	957.1	2.5	17.2	6.3	74.0	23.6	4.4	4.3	11.6	7.4	18.6	4.2	9.0
2013	941.3	2.8	17.1	5.6	74.5	23.8	4.3	3.8	12.0	7.3	19.0	4.2	9.6
2014	948.3	2.5	17.0	5.4	75.1	24.1	4.3	4.1	12.0	7.4	18.8	4.3	9.8
2015	981.8	2.5	17.0	5.5	74.9	24.5	4.2	3.9	11.7	7.6	18.7	4.4	10.1
2016	1,015.2	2.5	16.6	5.5	75.4	25.2	4.3	3.9	11.4	7.7	18.5	4.4	10.2
2017	1,048.1	2.6	16.7	5.5	75.2	24.7	4.3	4.3	11.3	7.9	18.3	4.4	10.4

**Seasonally and Working Day Adjusted.*

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

Chart 2.1.- GVA by sectors
Annual percentage change

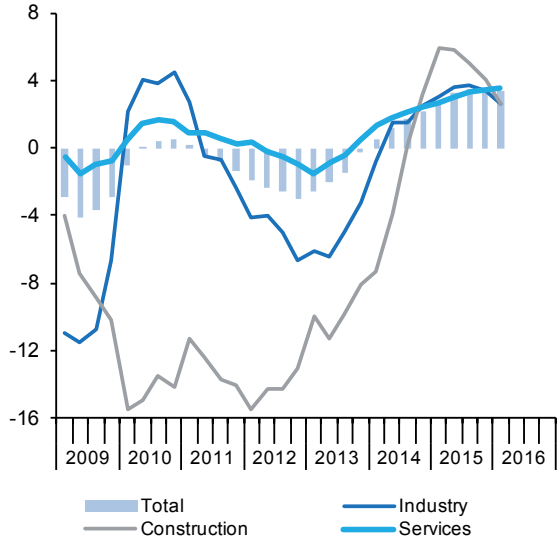


Chart 2.2.- GVA, services (I)
Annual percentage change

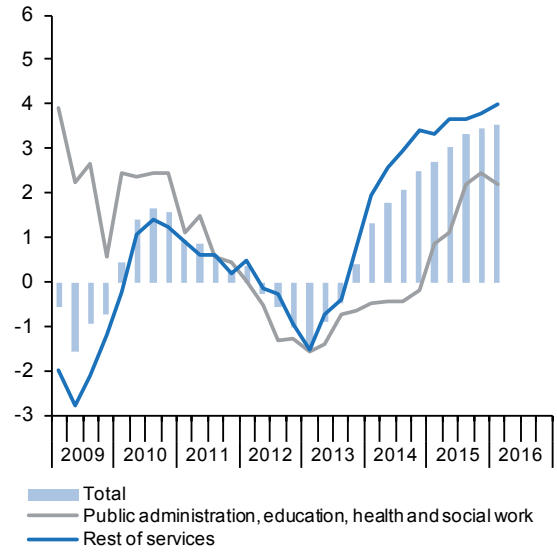


Chart 2.3.- GVA, services (II)
Annual percentage change

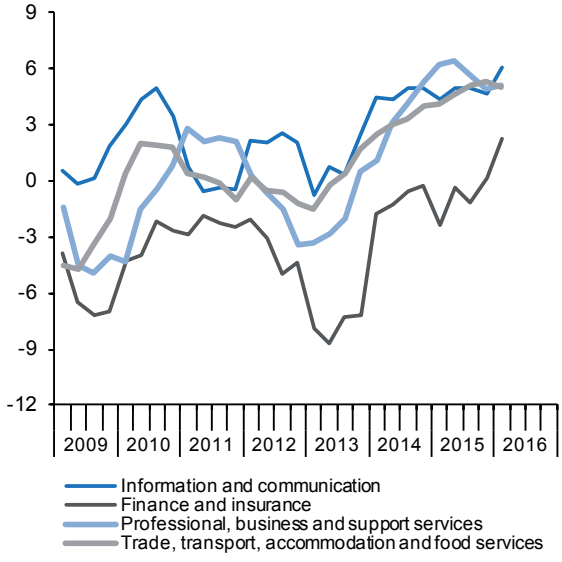


Chart 2.4.- GVA, structure by sectors
Percentage of value added at basic prices

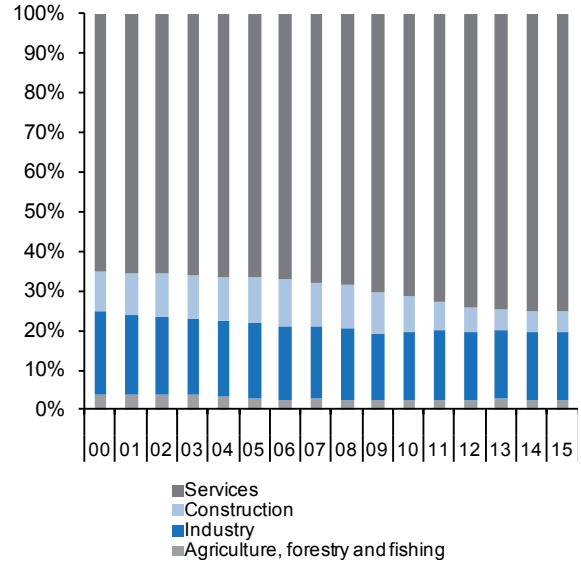


Table 3a

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

Forecasts in blue

		Total economy						Manufacturing industry					
		GDP, constant prices	Employment (jobs, full time equivalent)	Employment productivity	Compensation per job	Nominal unit labour cost	Real unit labour cost (a)	Gross value added, constant prices	Employment (jobs, full time equivalent)	Employment productivity	Compensation per job	Nominal unit labour cost	Real unit labour cost (a)
		1	2	3=1/2	4	5=4/3	6	7	8	9=7/8	10	11=10/9	12
Indexes, 2000 = 100, 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		127.2	108.6	117.2	149.6	127.6	93.8	101.2	--	--	--	--	--
2017		130.2	110.6	117.6	151.1	128.4	93.3	104.2	--	--	--	--	--
2014	II	119.3	102.5	116.3	147.9	127.2	94.5	93.9	67.8	138.6	166.3	120.0	93.8
	III	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
	II	123.1	105.5	116.6	148.4	127.3	94.1	97.5	70.0	139.4	166.5	119.5	93.1
	III	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	I	126.0	107.9	116.8	148.4	127.1	94.1	100.3	71.0	141.1	165.9	117.5	93.2
Annual percentage 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		3.0	2.6	0.4	0.6	0.2	-0.3	3.5	--	--	--	--	--
2017		2.3	1.9	0.4	1.0	0.6	-0.5	2.9	--	--	--	--	--
2014	II	1.2	1.0	0.2	-0.5	-0.7	-0.2	2.4	-0.1	2.4	1.5	-1.0	-0.7
	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	0.2	-0.3	-0.5	-0.3	4.3	3.1	1.2	-0.2	-1.3	-0.1

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

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

Chart 3a.1.- Nominal ULC, total economy
Index, 2000=100

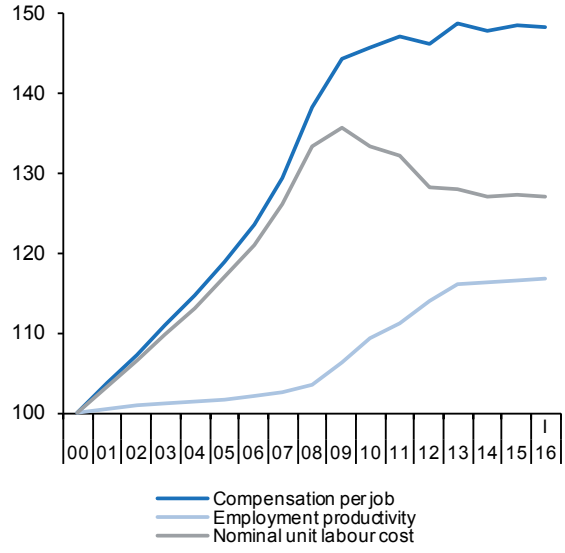
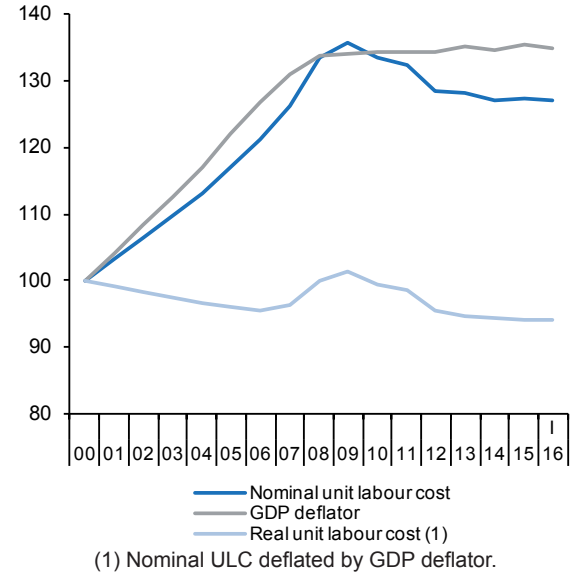


Chart 3a.2.- Real ULC, total economy
Index, 2000=100



(1) Nominal ULC deflated by GDP deflator.

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

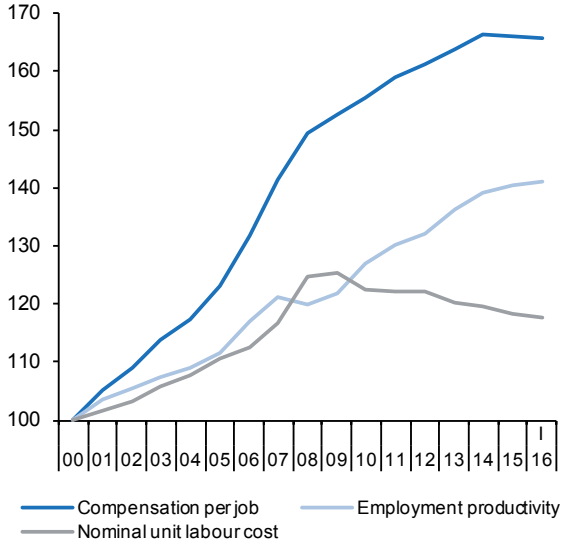
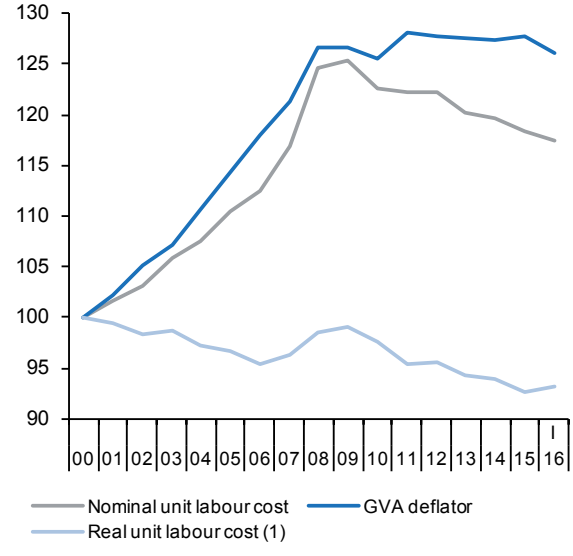


Chart 3a.4.- Real ULC, manufacturing industry
Index, 2000=100



(1) Nominal ULC deflated by GVA deflator.

Table 3b

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

Forecasts in blue

		Construction						Services					
		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 = 100, 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		66.6	52.8	126.0	--	--	--	148.6	132.0	112.6	--	--	--
2017		68.6	54.6	125.8	--	--	--	151.8	134.4	113.0	--	--	--
2014	II	60.7	48.1	126.1	172.3	136.7	97.1	139.4	124.6	111.9	139.9	125.0	92.9
	III	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	I	64.3	51.4	125.1	171.4	137.0	95.6	142.1	126.9	112.0	141.1	126.0	91.8
	II	64.2	52.0	123.6	171.3	138.6	97.7	143.6	127.9	112.3	140.6	125.2	92.3
	III	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	I	66.0	51.9	127.2	168.8	132.7	92.7	147.1	131.2	112.1	141.0	125.7	91.8
Annual percentage 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		2.6	2.0	0.6	--	--	--	3.1	2.8	0.3	--	--	--
2017		3.0	3.2	-0.2	--	--	--	2.2	1.8	0.3	--	--	--
2014	II	-3.9	-4.7	0.9	0.0	-0.9	-1.2	1.8	1.8	0.0	-0.8	-0.9	-1.3
	III	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
	II	5.8	7.9	-2.0	-0.6	1.4	0.6	3.0	2.6	0.4	0.5	0.1	-0.6
	III	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	I	2.6	0.9	1.7	-1.6	-3.2	-3.1	3.5	3.4	0.1	0.0	-0.2	0.0

(a) Nominal ULC deflated by GVA deflator.

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

Chart 3b.1.- Nominal ULC, construction
Index, 2000=100

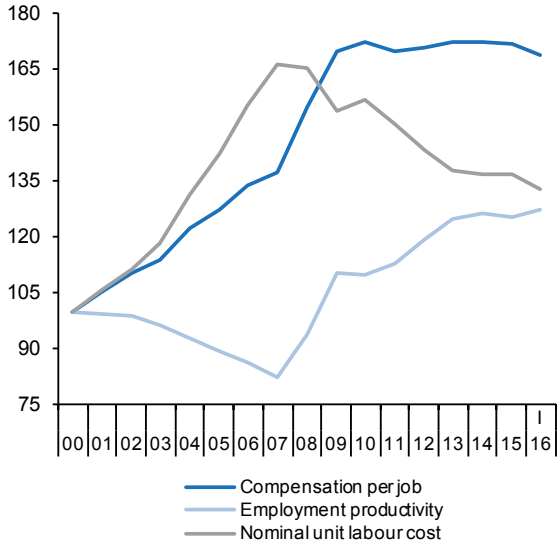
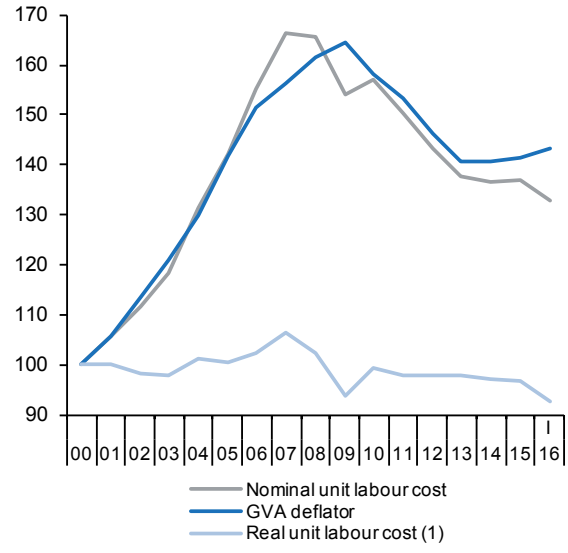


Chart 3b.2.- Real ULC, construction
Index, 2000=100



(1) Nominal ULC deflated by GVA deflator.

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

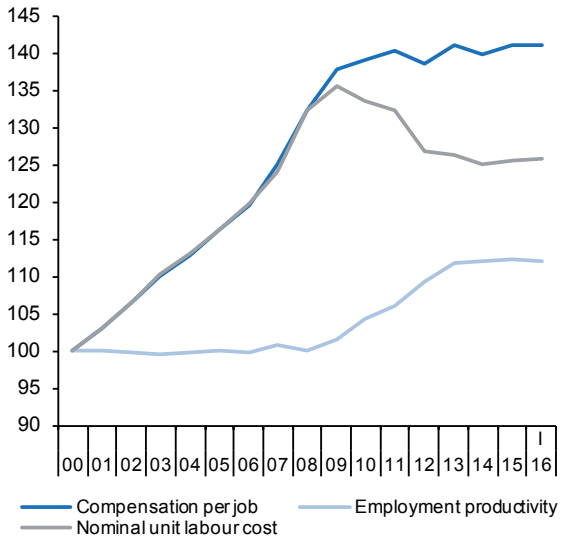
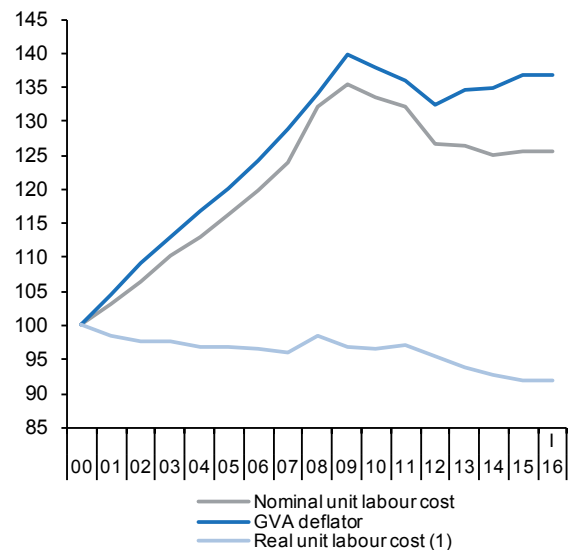


Chart 3b.4.- Real ULC, services
Index, 2000=100



(1) Nominal ULC deflated by GVA deflator.

Table 4

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

Forecasts in blue

	Gross domestic product	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 Billions, 4-quarter cumulated transactions										**Percentage of GDP**		
2009	1,079.0	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	1,080.9	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	1,070.4	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	1,042.9	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	1,031.3	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	1,041.2	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	1,081.2	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	1,119.2	527.5	475.5	116.3	5.3	1,124.5	-11.1	1,113.4	855.0	258.3	47.1	42.5	10.4
2017	1,157.3	543.4	491.8	122.2	10.8	1,168.1	-11.3	1,156.8	882.4	274.4	47.0	42.5	10.6
2014 II	1,033.1	486.2	445.6	101.3	-5.9	1,027.2	-13.0	1,014.2	804.8	209.3	47.1	43.1	9.8
III	1,036.6	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	1,041.2	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	1,049.2	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	1,059.7	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	1,070.5	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	1,081.2	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	1,089.3	513.8	463.3	112.2	-0.3	1,089.1	-10.6	1,078.4	835.6	242.8	47.2	42.5	10.3
	Annual percentage changes										**Difference from one 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	3.5	3.4	3.3	4.6	-712.0	4.1	1.5	4.1	2.9	8.3	0.0	-0.1	0.1
2017	3.4	3.0	3.4	5.0	104.9	3.9	1.5	3.9	3.2	6.2	-0.2	0.0	0.2
2014 II	-0.1	-0.3	-0.6	3.5	46.9	-0.2	3.9	-0.3	0.2	-2.2	-0.1	-0.2	0.3
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
II	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
III	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	3.8	3.8	2.9	7.8	-92.5	4.2	-7.5	4.3	2.8	9.8	0.0	-0.4	0.4

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

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

Chart 4.1.- National income, consumption and saving
EUR Billions, 4-quarter cumulated

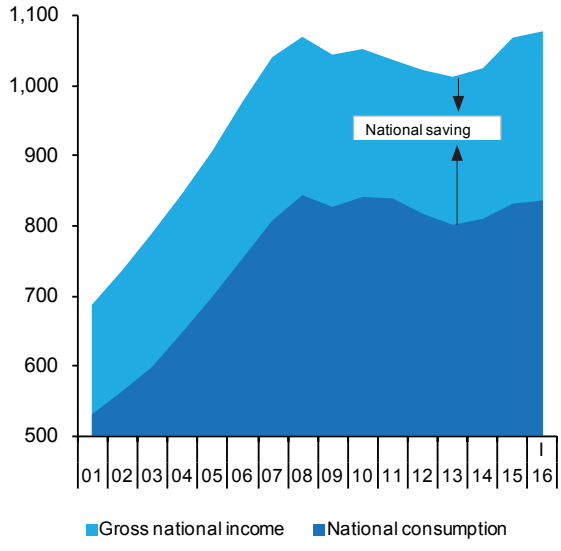


Chart 4.2.- National income, consumption and saving rate
Annual percentage change and percentage of GDP, 4-quarter moving averages

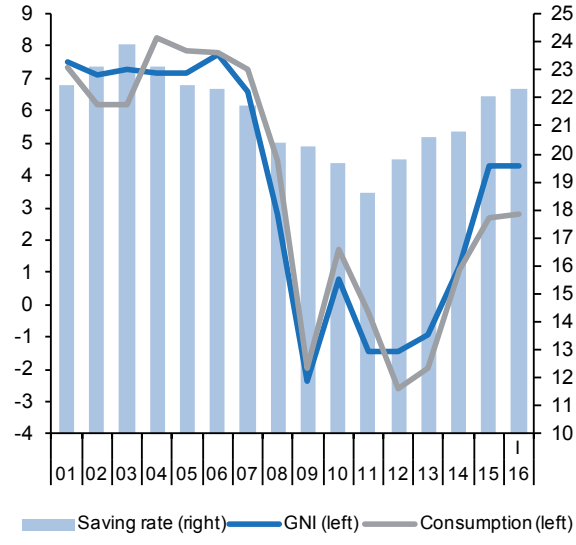


Chart 4.3.- Components of National income
Annual percentage change

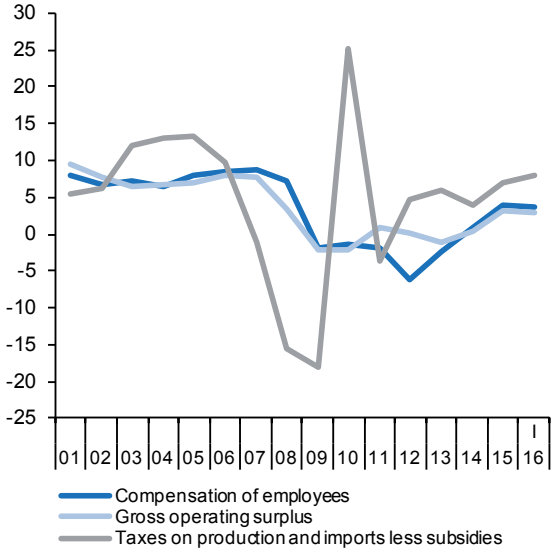


Chart 4.4.- Functional distribution of income
Percentage of GDP, 4-quarter moving averages

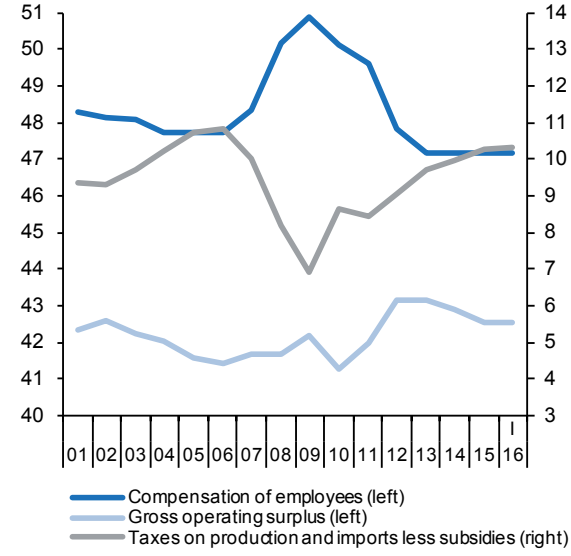


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Table 5

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

Forecasts in blue

		Goods and services				Income	Current transfers	Current account	Capital transfers	Net lending/ borrowing with rest of the world	Saving-Investment-Deficit		
		Total	Goods	Tourist services	Non-tourist services						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 Billions, 4-quarter cumulated transactions													
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		26.4	-25.3	31.4	20.3	5.3	-11.1	20.5	8.1	28.6	258.3	237.8	20.5
2017		20.9	-32.8	34.0	19.8	10.8	-11.3	20.4	8.3	28.7	274.4	254.0	20.4
2014	II	26.7	-20.7	28.7	18.8	-5.9	-13.0	7.8	7.5	15.3	209.3	201.5	7.8
	III	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
	II	27.5	-21.2	28.6	20.2	-1.6	-11.3	14.7	5.8	20.5	227.9	213.2	14.7
	III	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	I	25.8	-21.2	28.5	18.5	-0.3	-10.6	14.9	7.8	22.8	242.8	227.9	14.9
Percentage of GDP, 4-quarter cumulated transactions													
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		2.4	-2.3	2.8	1.8	0.5	-1.0	1.8	0.7	2.6	23.1	21.2	1.8
2017		1.8	-2.8	2.9	1.7	0.9	-1.0	1.8	0.7	2.5	23.7	21.9	1.8
2014	II	2.6	-2.0	2.8	1.8	-0.6	-1.3	0.8	0.7	1.5	20.3	19.5	0.8
	III	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	I	2.6	-2.0	2.7	1.9	-0.3	-1.1	1.2	0.5	1.7	21.1	19.9	1.2
	II	2.6	-2.0	2.7	1.9	-0.1	-1.1	1.4	0.5	1.9	21.5	20.1	1.4
	III	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	-1.9	2.6	1.7	0.0	-1.0	1.4	0.7	2.1	22.3	20.9	1.4

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

Chart 5.1.- Balance of goods and services
Percentage of GDP, 4-quarter moving averages

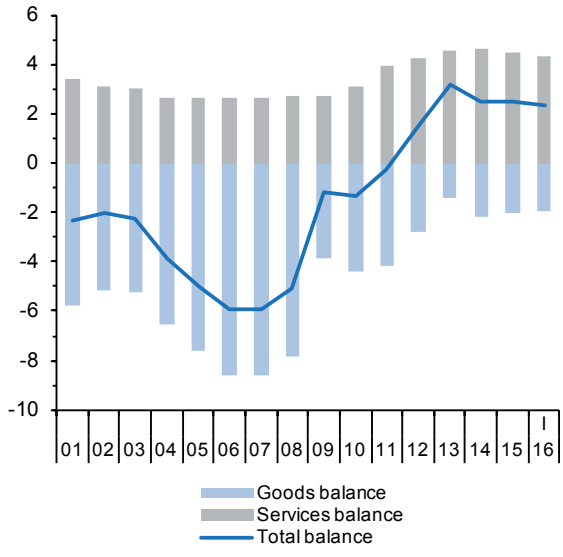


Chart 5.2.- Services balance
Percentage of GDP, 4-quarter moving averages

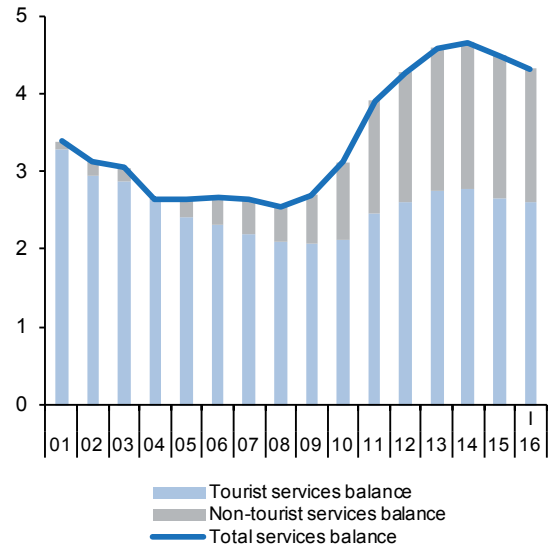


Chart 5.3.- Net lending or borrowing
Percentage of GDP, 4-quarter moving averages

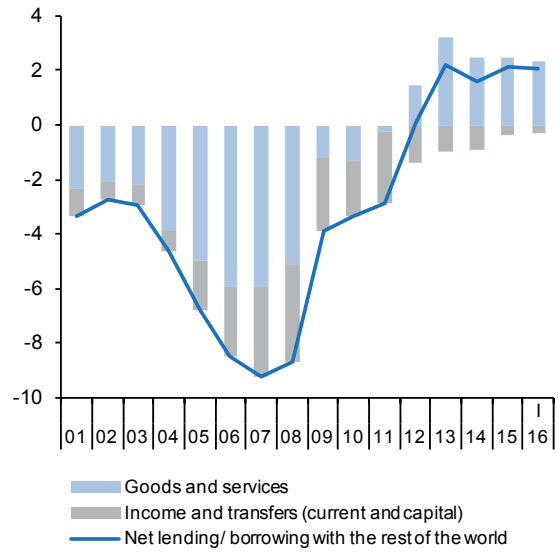


Chart 5.4.- Saving, investment and current account balance
Percentage of GDP, 4-quarter moving averages

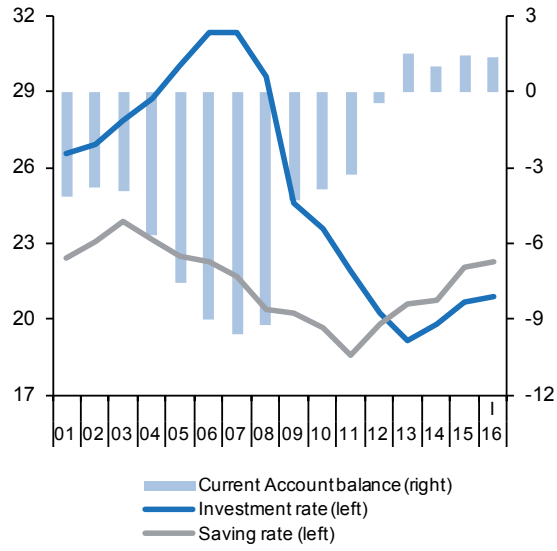


Table 6

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

Forecasts in blue

		Gross disposable income (GDI)						Final consumption expenditure	Gross saving (a)	Saving rate (gross saving as a percentage of GDI)	Net capital transfers	Gross capital formation	Net lending (+) or borrowing (-)	Net lending or borrowing as a percentage of GDP
		Total	Compensation of employees (received)	Mixed income and net property income	Social benefits and other current transfers (received)	Social contributions and other current transfers (paid)	Personal income taxes							
		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-quarter cumulated operations														
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		712.3	529.6	228.4	243.7	203.4	86.0	642.1	68.6	9.6	1.2	30.5	39.3	3.5
2017		736.3	545.6	238.7	249.9	209.0	88.9	664.8	69.9	9.5	1.1	32.7	38.3	3.3
2014	II	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
	III	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
	III	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	I	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
Annual percentage changes, 4-quarter cumulated operations										**Difference from one year ago**	**Annual percentage changes, 4-quarter cumulated operations**			**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		3.5	3.4	4.8	0.9	1.8	3.1	3.2	6.5	0.3	-11.0	4.9	--	0.1
2017		3.4	3.0	4.5	2.5	2.8	3.4	3.5	1.9	-0.1	-8.0	7.1	--	-0.2
2014	II	-0.6	-0.2	0.1	-2.2	-1.6	1.4	0.0	-5.4	-0.5	-17.5	-16.9	--	0.1
	III	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
	II	2.3	2.7	3.3	-1.4	0.5	0.8	1.8	7.3	0.4	-7.0	0.2	--	0.3
	III	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.

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

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

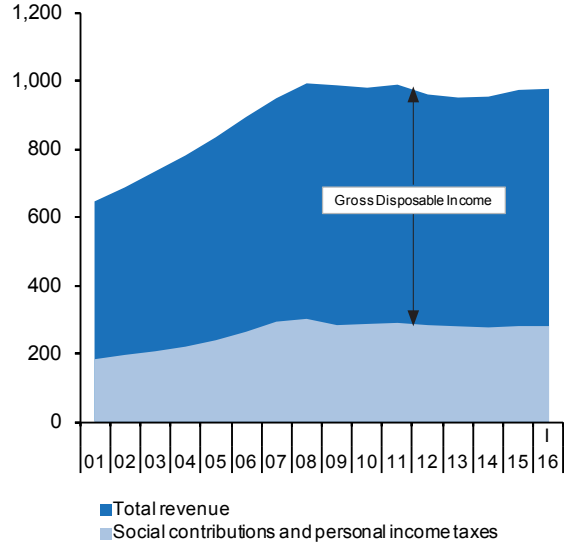
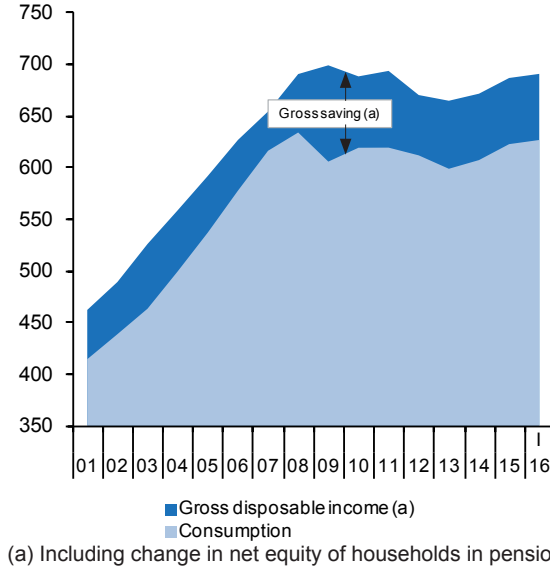


Chart 6.2.- Households: Gross saving
EUR Billions, 4-quarter cummulated



(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

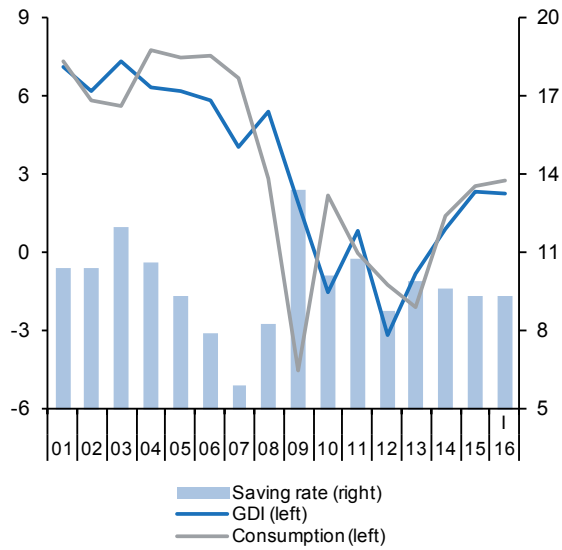
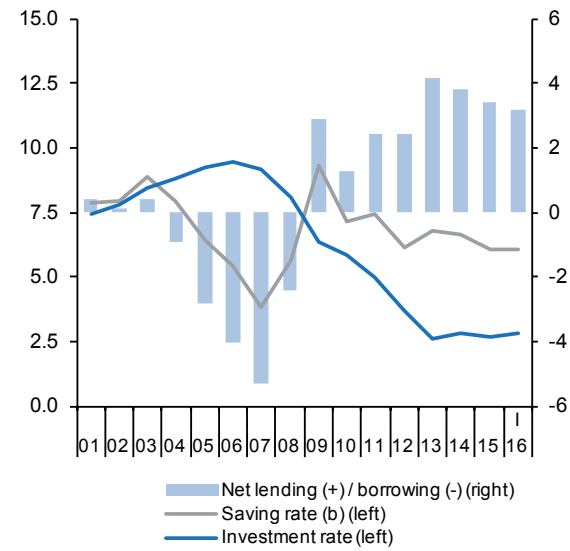


Chart 6.4.- Households: Saving, investment and deficit
Percentage of GDP, 4-quarter moving averages



(b) Including net capital transfers.

Table 7

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

Forecasts in blue

		Gross value added	Compensation of employees and net taxes on production (paid)	Gross operating surplus	Net property income	Net current transfers	Income taxes	Gross saving	Net capital transfers	Gross capital formation	Net lending (+) or borrowing (-)	Net lending or borrowing as a percentage of GDP	Profit share (percentage)	Investment rate (percentage)
		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
EUR Billions, 4-quarter cumulated operations														
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		594.7	341.9	252.8	-32.7	-5.3	21.1	193.7	7.0	176.6	24.1	2.2	42.5	29.7
2017		614.0	353.8	260.1	-27.7	-5.6	22.0	204.8	7.0	189.6	22.2	1.9	42.4	30.9
2014	II	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
	III	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	I	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
	II	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
	III	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	I	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
Annual percentage changes, 4-quarter cumulated operations												**Difference from one 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		3.3	4.0	2.3	-17.4	3.5	-0.2	6.9	0.0	8.7	--	-0.2	-0.4	1.5
2017		3.2	3.5	2.9	-15.1	4.0	4.1	5.8	0.0	7.4	--	-0.2	-0.1	1.2
2014	II	-0.6	-1.0	-0.2	-7.7	-16.2	-1.2	3.3	-26.1	1.8	--	0.1	0.2	0.6
	III	-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
	II	2.7	3.4	1.8	-8.0	-22.6	-1.8	6.2	-1.6	11.8	--	-0.7	-0.4	2.3
	III	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	I	4.3	4.6	4.0	-13.3	-24.2	15.2	8.5	75.5	7.0	--	0.5	-0.1	0.7

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

Chart 7.1.- Non-financial corporations: Gross operating surplus
EUR Billions, 4-quarter cummulated

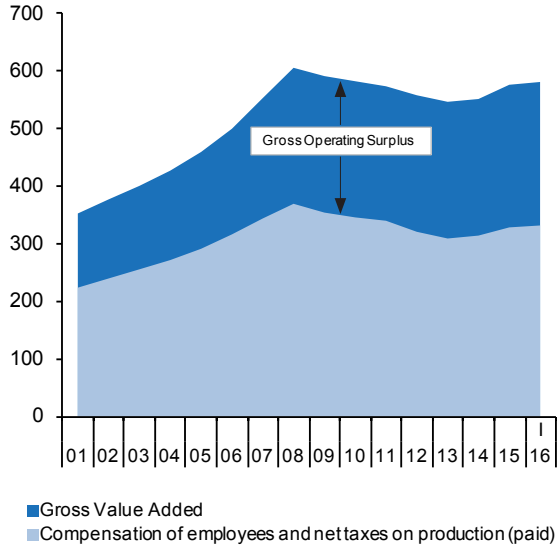


Chart 7.2.- Non-financial corporations: GVA, GOS and saving
Annual percentage change, 4-quarter moving averages

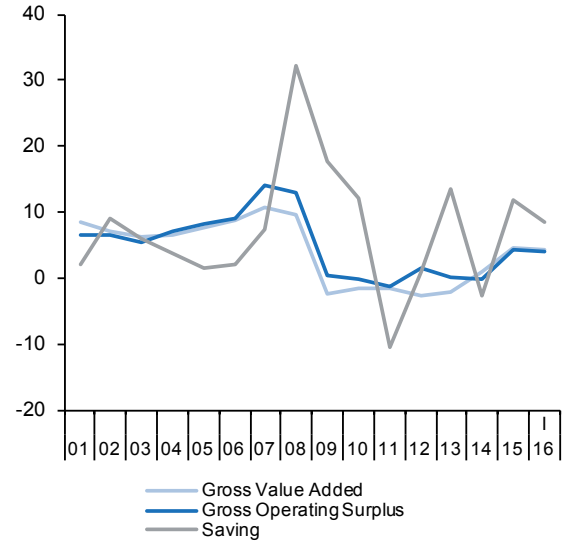
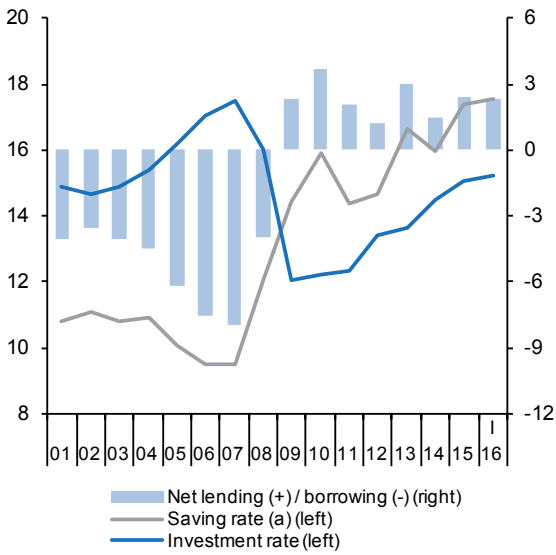


Chart 7.3.- Non-financial corporations: Saving, investment and deficit
Percentage of GDP, 4-quarter moving averages



(a) Including net capital transfers.

Chart 7.4.- Non-financial corporations: Profit share and investment rate
Percentage of non-financial corporations GVA, 4-quarter moving averages

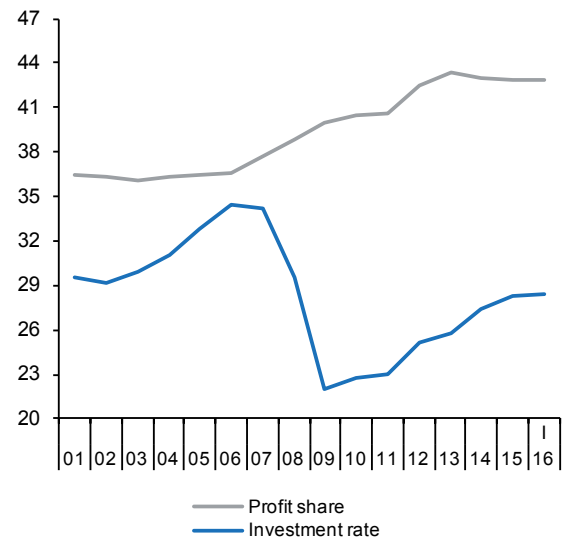


Table 8

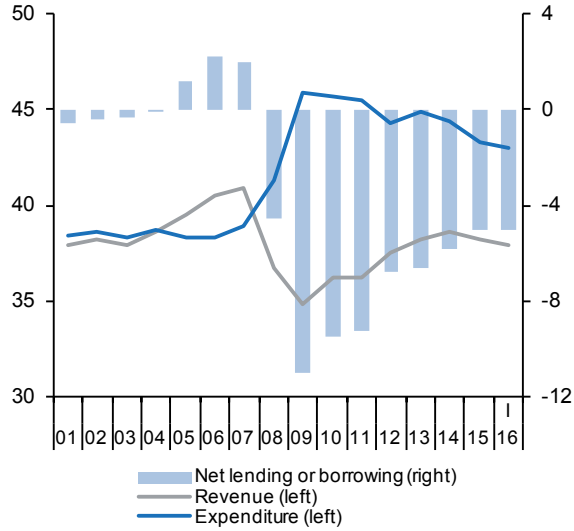
National accounts: Public revenue, expenditure and deficit (ESA 2010, Base 2010)

Forecasts in blue

	Gross value added	Taxes on production and imports receivable	Taxes on income and weath receivable	Social contributions receivable	Compensation of employees	Interests and other capital incomes payable (net)	Social benefits payable	Subsidies and net current transfers payable	Gross disposable income	Final consumption expenditure	Gross saving	Net capital expenditure	Net lending(+)/ net borrowing(-)	Net lending(+)/ net borrowing (-) excluding financial entities bail-out
	1	2	3	4	5	6	7	8	9=1+2+3+4-5-6-7-8	10	11=9-10	12	13=11-12	14
EUR Billions, 4-quarter cumulated operations														
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	150.8	131.4	112.7	135.1	121.8	21.7	171.8	21.9	192.7	212.9	-20.2	22.4	-42.6	-42.7
2017	154.0	137.6	117.0	139.1	124.5	18.5	175.9	22.2	206.5	217.6	-11.1	23.1	-34.2	-34.2
2014 II	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
III	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
II	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
III	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 I	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
Percentage of GDP, 4-quarter cumulated operations														
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	13.5	11.7	10.1	12.1	10.9	1.9	15.3	2.0	17.2	19.0	-1.8	2.0	-3.8	-3.8
2017	13.3	11.9	10.1	12.0	10.8	1.6	15.2	1.9	17.8	18.8	-1.0	2.0	-3.0	-3.0
2014 II	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
III	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 I	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
II	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
III	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 I	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

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

Chart 8.1.- Public sector: Revenue, expenditure and deficit (a)
Percentage of GDP, 4-quarter moving averages



(a) Excluding financial entities bail-out expenditures.

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

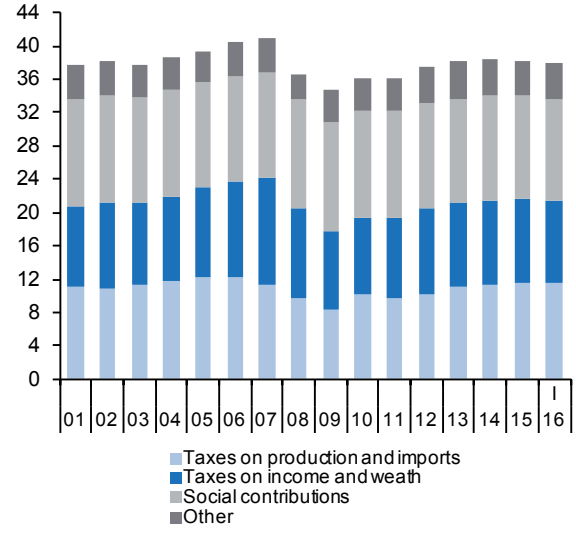


Chart 8.3.- Public sector: Main expenditures
Percentage of GDP, 4-quarter moving averages

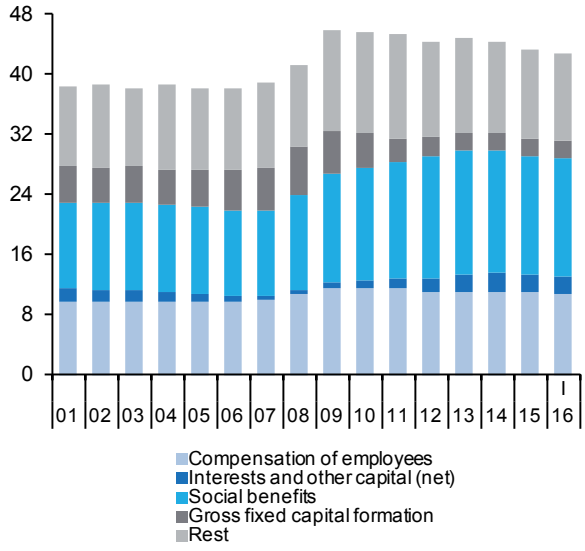
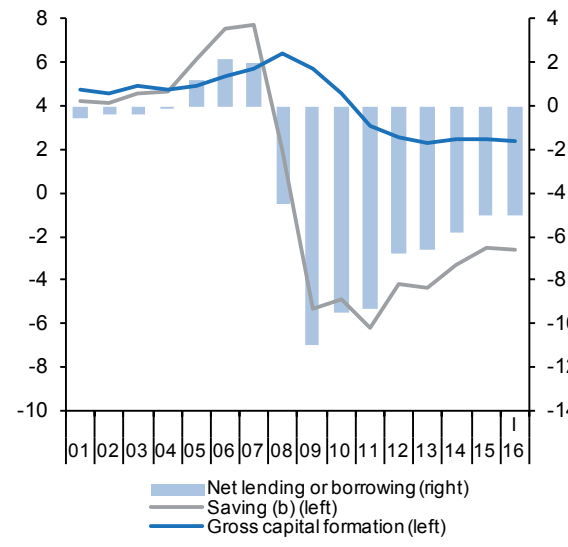


Chart 8.4.- Public sector: Saving, investment and deficit (a)
Percentage of GDP, 4-quarter moving averages



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

Table 9

Public 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 Billions, 4-quarter cumulated operations					**EUR 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		-21.3	-9.0	3.4	-15.8	-42.7	--	--	--	--	1,113.8
2017		-16.1	-6.9	2.9	-14.1	-34.2	--	--	--	--	1,152.0
2014	II	-39.0	-18.3	5.4	-13.8	-65.6	885.1	228.2	42.0	17.2	1,012.5
	III	-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
	II	-32.8	-16.5	6.8	-13.7	-56.1	922.7	249.9	37.7	17.2	1,057.2
	III	-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 GDP, 4-quarter cumulated operations					**Percentage of GDP**				
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
	III	-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	I	-3.7	-1.6	0.6	-1.1	-5.9	87.0	22.9	3.6	1.6	100.2
	II	-3.1	-1.6	0.6	-1.3	-5.3	87.1	23.6	3.6	1.6	99.8
	III	-2.8	-1.7	0.5	-1.3	-5.2	87.7	23.6	3.4	1.6	99.7
	IV	-2.7	-1.6	0.5	-1.2	-5.0	87.0	24.2	3.2	1.6	99.2
2016	I	-2.7	-1.6	0.5	-1.2	-5.0	88.3	24.3	3.2	1.6	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

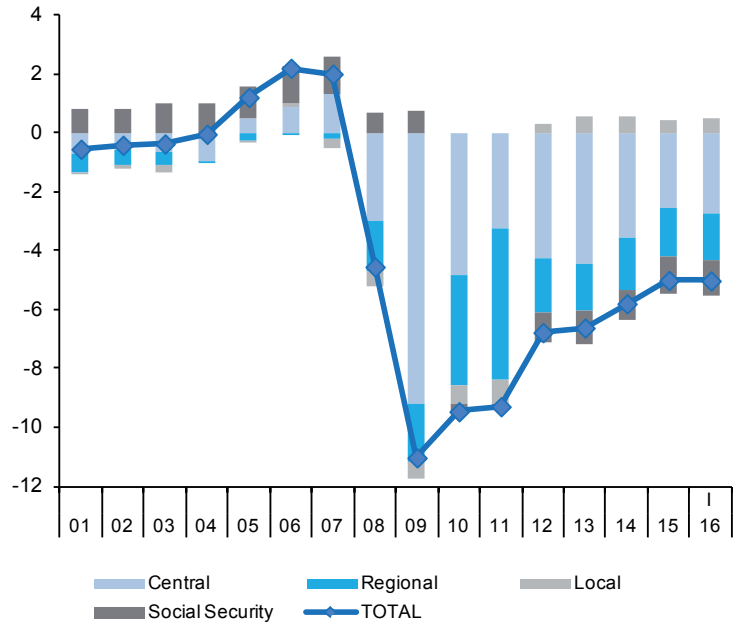


Chart 9.2.- Government debt
Percent of GDP

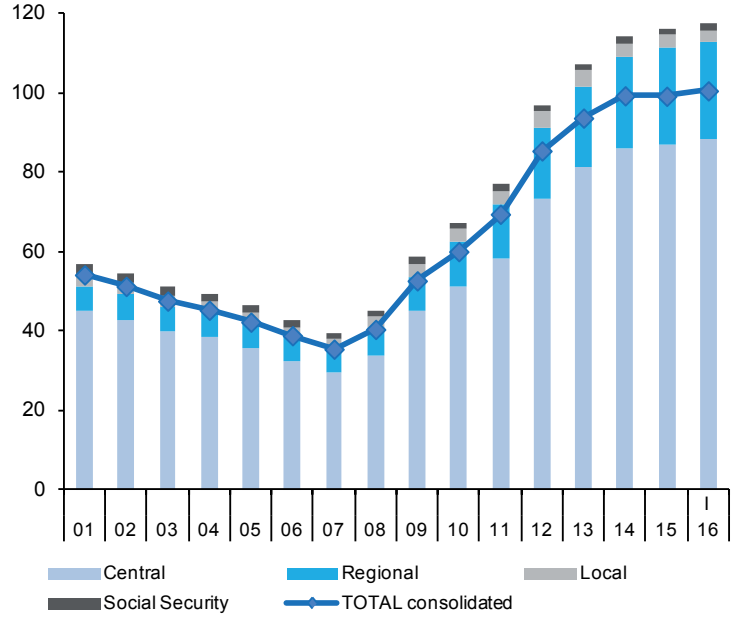


Table 10

General activity and industrial sector indicators (a)

	General activity indicators				Industrial sector indicators					
	Economic Sentiment Index	Composite PMI index	Social Security affiliates (f)	Electricity consumption (temperature adjusted)	Industrial production index	Social Security affiliates in industry	Manufacturing PMI index	Industrial confidence index	Turnover index deflated	Industrial orders
	Index	**Index**	**Thousands**	**1000 GWH (smoothed)**	**2010=100**	**Thousands**	**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	249.8	91.6	2,023	53.2	-7.1	95.1	-16.3
2015	108.8	56.7	16,642	253.7	94.7	2,067	53.6	-0.3	96.5	-5.4
2016 (b)	106.7	55.1	16,969	127.7	96.6	2,103	53.4	-2.4	95.3	-5.3
2014 III	103.2	56.0	16,160	62.6	91.6	2,026	53.1	-6.2	95.4	-14.9
IV	103.9	54.6	16,285	62.7	91.8	2,032	53.7	-4.6	95.3	-12.9
2015 I	107.3	56.6	16,433	62.9	93.2	2,045	54.4	-2.5	95.7	-9.4
II	109.3	57.7	16,610	63.2	94.7	2,062	54.9	-0.4	96.4	-5.3
III	109.1	57.2	16,698	63.5	95.2	2,074	52.9	0.4	96.6	-4.0
IV	109.6	55.4	16,817	63.5	95.7	2,088	52.5	0.0	96.7	-4.7
2016 I	107.3	55.0	16,944	63.4	95.8	2,103	54.3	-1.2	96.7	-5.0
II (b)	106.1	55.3	17,083	63.3	96.2	2,118	52.5	-2.7	96.7	-4.3
2016 Apr	106.1	55.2	17,030	21.1	96.4	2,113	53.5	-2.2	96.7	-4.6
May	105.7	54.8	17,078	21.1	95.9	2,118	51.8	-2.7	--	-4.3
Jun	106.5	55.7	17,143	21.1	--	2,123	52.2	-3.1	--	-3.9
					Percentage changes (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	--	--	1.2	--
2012	--	--	-3.7	-2.2	-6.6	-5.3	--	--	-4.1	--
2013	--	--	-2.9	-2.1	-1.6	-4.4	--	--	-3.3	--
2014	--	--	1.6	-0.2	1.3	0.1	--	--	1.4	--
2015	--	--	3.3	1.6	3.4	2.2	--	--	1.5	--
2016 (d)	--	--	2.9	0.0	2.3	2.8	--	--	0.7	--
2014 III	--	--	2.9	-0.4	-0.9	1.4	--	--	-0.1	--
IV	--	--	3.3	0.6	1.0	1.3	--	--	-0.4	--
2015 I	--	--	3.6	1.7	6.1	2.5	--	--	1.8	--
II	--	--	3.5	2.0	6.4	3.3	--	--	2.6	--
III	--	--	3.0	1.5	2.2	2.4	--	--	1.1	--
IV	--	--	2.9	-0.1	2.1	2.6	--	--	0.4	--
2016 I	--	--	3.0	-0.6	0.4	3.0	--	--	-0.1	--
II (e)	--	--	3.2	-0.5	1.7	2.7	--	--	-0.1	--
2016 Apr	--	--	0.3	0.1	-0.1	0.2	--	--	-0.1	--
May	--	--	0.3	-1.5	-0.5	0.2	--	--	--	--
Jun	--	--	0.4	-0.1	--	0.2	--	--	--	--

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

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

Chart 10.1.- General activity indicators (I)
Annualized percent change from previous period

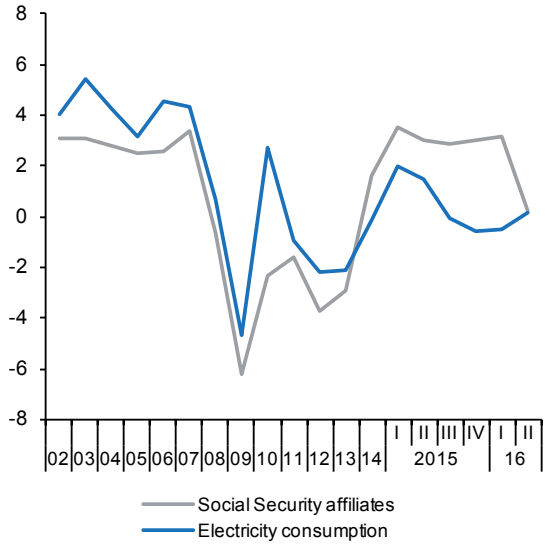


Chart 10.2.- General activity indicators (II)
Index

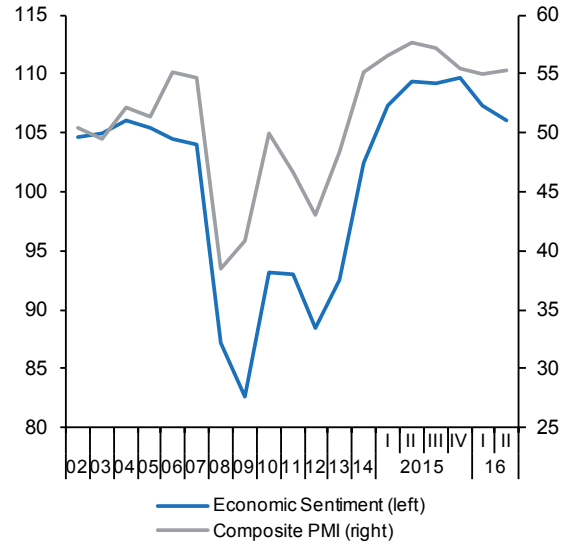


Chart 10.3.- Industrial sector indicators (I)
Annualized percent change from previous period

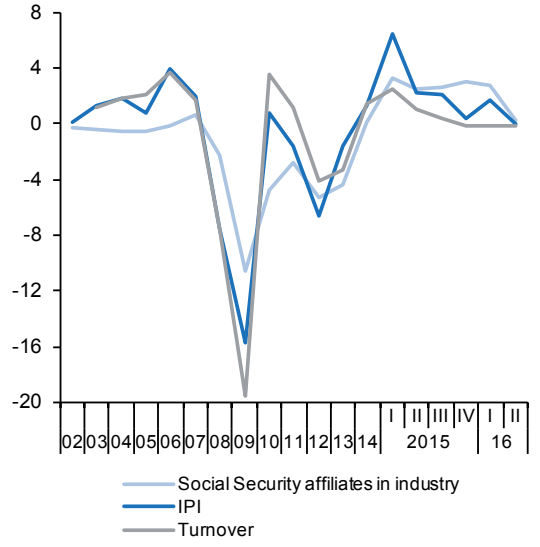


Chart 10.4.- Industrial sector indicators (II)
Index

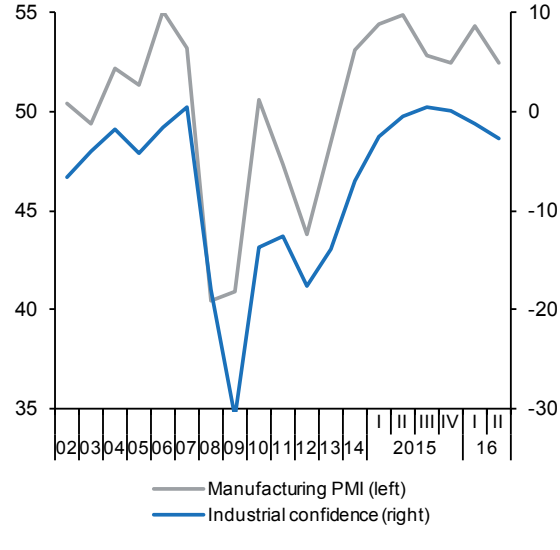


Table 11

Construction and services sector indicators (a)

	Construction indicators						Service sector indicators					
	Social Security affiliates in construction	Consumption of cement	Industrial production index construction materials	Construction confidence index	Official tenders (f)	Housing permits (f)	Social Security affiliates in services (g)	Turnover index (nominal)	Services PMI index	Hotel overnight stays	Passenger air transport	Services confidence index
	Thousands	**Million Tons**	**2010=100 (smoothed)**	**Balance of responses**	**EUR Billions (smoothed)**	**Million m²**	**Thousands**	**2010=100 (smoothed)**	**Index**	**Million (smoothed)**	**Million (smoothed)**	**Balance of responses**
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	11.5	66.9	-25.3	9.4	9.9	12,432	97.8	57.3	308.2	206.6	19.4
2016 (b)	1,040	10.7	66.7	-36.1	3.7	13.0	12,695	95.2	55.1	256.4	181.3	18.2
2014 III	983	2.8	61.2	-35.0	3.2	1.9	12,042	93.7	56.7	73.9	48.8	8.8
IV	994	2.8	61.8	-22.6	3.0	1.5	12,145	94.7	54.3	74.6	49.3	14.0
2015 I	1,015	2.8	63.9	-23.3	2.8	2.1	12,279	95.9	56.7	75.3	49.9	17.5
II	1,028	2.9	66.2	-27.7	2.5	2.5	12,399	97.2	58.3	76.2	50.8	20.1
III	1,029	2.8	68.0	-28.5	2.2	2.5	12,475	98.3	58.1	77.5	52.0	19.7
IV	1,035	2.9	68.9	-21.7	2.0	2.7	12,569	99.1	55.9	79.4	53.5	20.2
2016 I	1,041	2.8	68.9	-31.7	2.1	3.4	12,678	99.8	54.6	81.5	55.2	18.8
II (b)	1,049	2.7	68.7	-40.4	1.5	1.0	12,794	100.3	55.5	83.3	56.2	17.5
2016 Apr	1,047	0.9	68.7	-37.6	0.7	1.0	12,748	100.3	55.1	27.7	18.7	16.5
May	1,048	0.9	--	-39.9	0.8	--	12,793	--	55.4	27.9	--	19.1
Jun	1,053	--	--	-43.7	--	--	12,840	--	56.0	--	--	17.0
					Percentage changes (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	5.9	7.7	--	-28.2	42.6	3.6	4.8	--	4.4	6.0	--
2016 (d)	2.3	-2.7	6.1	--	-23.9	46.0	3.2	3.7	--	9.5	12.1	--
2014 III	3.5	19.0	-8.2	--	30.6	21.2	3.2	3.8	--	2.6	5.2	--
IV	4.9	-1.0	3.9	--	2.1	-8.0	3.4	4.4	--	3.6	4.2	--
2015 I	8.6	4.9	14.3	--	-16.6	23.6	4.5	5.2	--	3.9	5.2	--
II	5.1	13.7	15.3	--	-25.7	37.3	4.0	5.4	--	5.0	7.4	--
III	0.2	-15.3	11.4	--	-33.2	31.9	2.5	4.5	--	7.3	9.7	--
IV	2.6	24.7	5.5	--	-32.8	85.9	3.0	3.5	--	9.9	12.1	--
2016 I	2.4	-15.2	0.0	--	-24.1	60.2	3.5	3.0	--	11.1	12.6	--
II (e)	3.1	-17.4	-1.6	--	-12.6	13.7	3.7	2.0	--	9.2	7.8	--
2016 Apr	0.4	-1.1	-0.2	--	-15.4	-25.2	0.3	0.3	--	0.9	0.9	--
May	0.1	-3.5	--	--	-9.8	--	0.4	--	--	0.9	--	--
Jun	0.5	--	--	--	--	--	0.4	--	--	--	--	--

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

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

Chart 11.1.- Construction indicators (I)
Annualized percentage changes from previous period and index

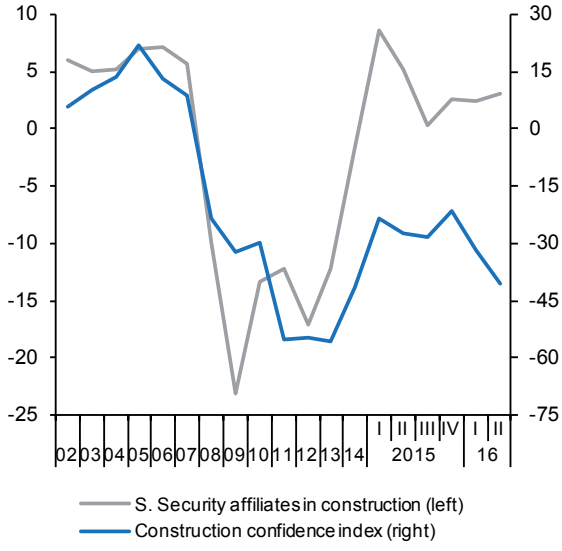


Chart 11.2.- Construction indicators (II)
Annualized percentage changes from previous period

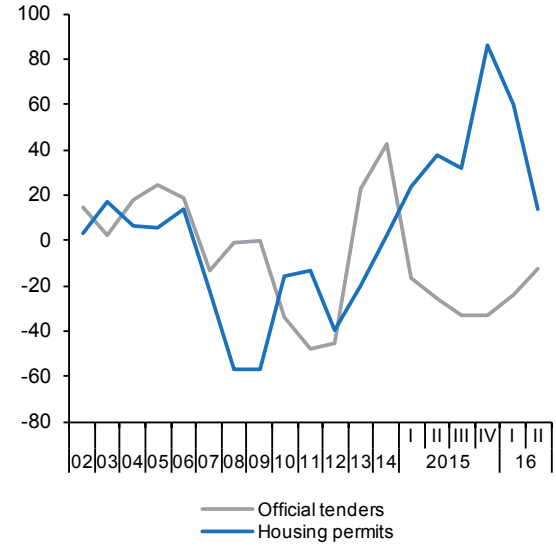


Chart 11.3.- Services indicators (I)
Percentage changes from previous period

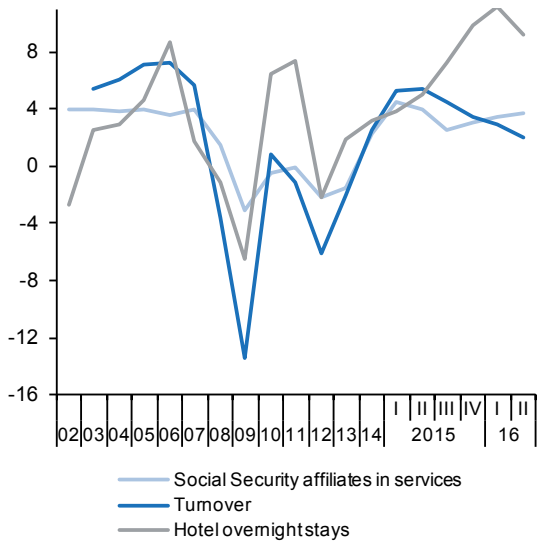


Chart 11.4.- Services indicators (II)
Index

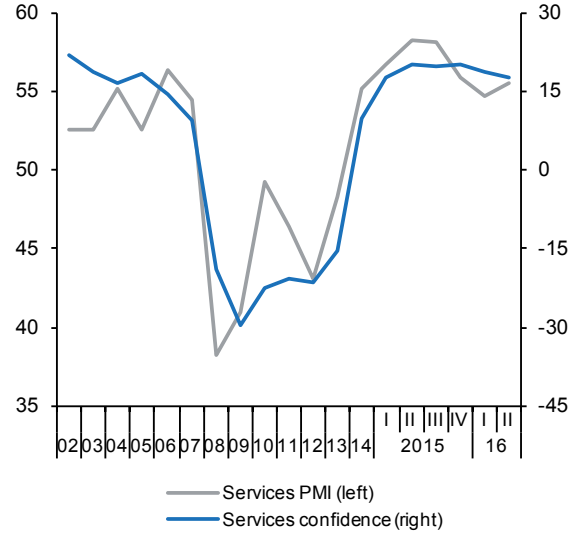


Table 12

Consumption and investment indicators (a)

	Consumption indicators					Investment in equipment indicators		
	Retail sales deflated	Car registrations	Consumer confidence index	Hotel overnight stays by residents in Spain	Industrial orders for consumer goods	Cargo vehicles registrations	Industrial orders for investment goods	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)	86.9	532.5	-2.9	93.4	-1.9	76.8	-0.2	92.2
2014 III	85.1	227.9	-7.9	26.2	-7.1	35.0	-16.7	82.9
IV	85.9	241.5	-9.6	26.6	-10.2	37.8	-11.3	85.7
2015 I	86.7	255.2	-0.6	27.0	-4.9	41.3	-9.1	90.0
II	87.5	265.9	1.6	27.3	-5.3	44.2	5.7	93.1
III	88.4	276.4	-1.3	27.5	-3.2	45.9	-0.7	94.2
IV	89.2	287.6	1.6	27.8	1.0	46.4	4.9	94.1
2016 I	89.9	298.4	-2.5	28.2	0.7	46.0	-2.3	94.9
II (b)	90.4	205.3	-3.2	19.0	-4.5	30.5	1.9	95.8
2016 Apr	90.3	102.0	-4.3	9.5	-1.7	15.3	3.7	95.8
May	90.5	103.3	-3.0	9.5	-4.6	15.2	7.1	--
Jun	--	--	-2.4	--	-7.1	--	-5.1	--
Percentage 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)	3.7	15.0	--	5.7	--	5.8	--	4.3
2014 III	3.1	21.8	--	6.4	--	23.6	--	7.6
IV	3.7	26.1	--	6.4	--	36.1	--	14.0
2015 I	3.8	24.6	--	5.6	--	42.0	--	21.7
II	3.8	18.0	--	4.9	--	31.0	--	14.5
III	4.1	16.6	--	3.4	--	16.2	--	4.8
IV	3.8	17.3	--	3.8	--	4.3	--	-0.4
2016 I	3.1	15.9	--	5.6	--	-3.0	--	3.3
II (e)	2.2	13.4	--	4.5	--	-2.4	--	3.9
2016 Apr	0.2	1.3	--	0.4	--	-0.2	--	0.5
May	0.2	1.3	--	0.4	--	-0.2	--	--
Jun	--	--	--	--	--	--	--	--

(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 12.1.- Consumption indicators
Percent change from previous period and balance of responses

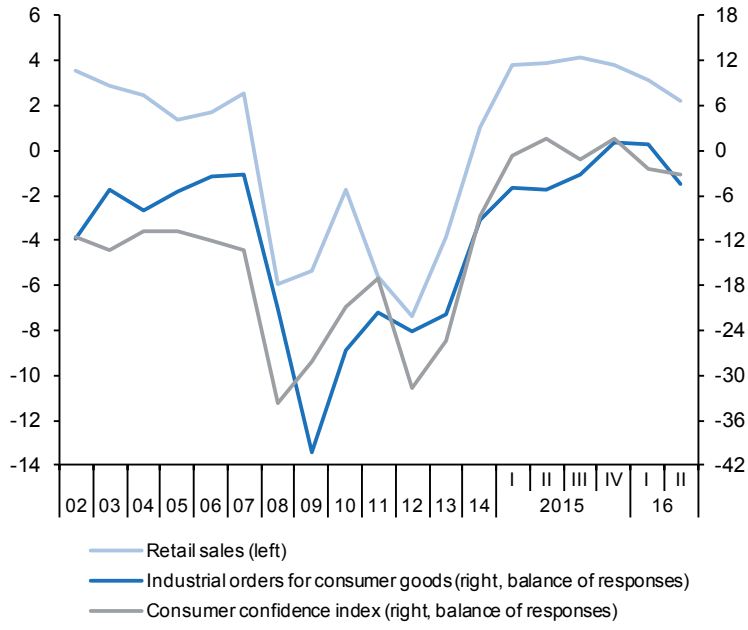


Chart 12.2.- Investment indicators
Percent change from previous period and balance of responses

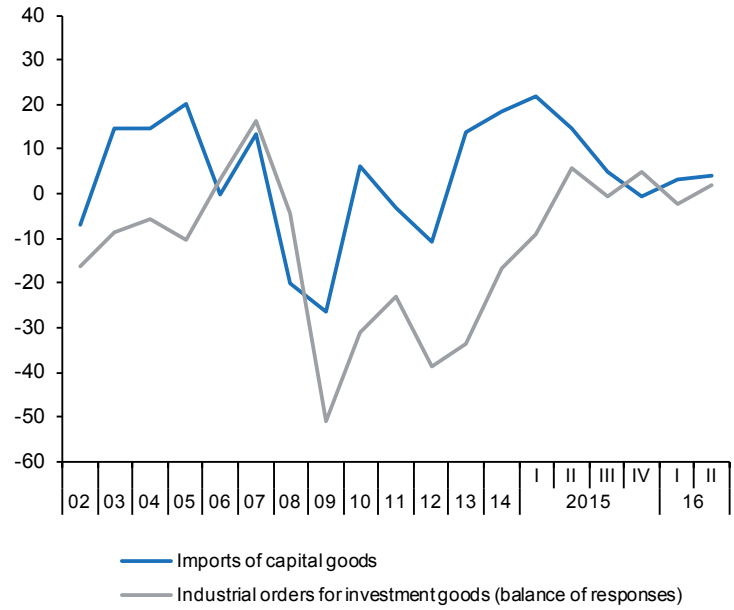


Table 13a

Labour market (I)

Forecasts in blue

		Population aged 16-64	Labour force		Employment		Unemployment		Participation rate 16-64 (a)	Employment rate 16-64 (b)	Unemployment rate (c)			
											Total	Aged 16-24	Spanish	Foreign
			Original	Seasonally adjusted	Original	Seasonally adjusted	Original	Seasonally adjusted	Seasonally adjusted					
		1	2=4+6	3=5+7	4	5	6	7	8	9	10=7/3	11	12	13
		Million							**Percentage**					
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	--	4.5	--	75.5	60.5	19.8	--	--	--
2017		30.0	22.8	--	18.7	--	4.1	--	75.6	61.8	18.1	--	--	--
2014	II	30.3	23.0	22.9	17.4	17.3	5.6	5.6	75.2	56.8	24.5	52.7	23.1	34.4
	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	17.7	5.4	5.3	75.4	57.3	23.1	50.2	21.9	32.0
	II	30.2	23.0	23.0	17.9	17.8	5.1	5.1	75.6	58.7	22.4	48.9	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	46.2	19.9	28.4
2016	I	30.1	22.8	22.9	18.0	18.2	4.8	4.6	75.5	59.4	20.3	45.3	19.2	28.1
		Percentage 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	-0.2	--	2.7	--	-10.4	--	0.1	1.8	-2.3	--	--	--
2017		-0.3	-0.2	--	1.9	--	-8.6	--	0.1	1.3	-1.7	--	--	--
2014	II	-1.0	-1.0	0.3	1.1	4.4	-7.0	-11.3	0.1	1.3	-1.6	-2.7	-1.4	-1.6
	III	-0.8	-1.0	-0.4	1.6	1.8	-8.7	-6.9	-0.2	1.3	-1.9	-1.7	-1.6	-3.7
	IV	-0.6	-0.2	1.5	2.5	3.6	-8.1	-5.0	0.3	1.7	-2.0	-3.1	-1.8	-3.2
2015	I	-0.4	0.1	-0.9	3.0	2.3	-8.2	-10.7	0.3	1.8	-2.2	-4.2	-1.9	-4.1
	II	-0.5	0.2	0.4	3.0	4.0	-8.4	-11.1	0.4	1.9	-2.1	-3.8	-1.9	-3.2
	III	-0.5	-0.1	-1.4	3.1	2.6	-10.6	-14.3	0.2	2.1	-2.5	-5.8	-2.2	-3.9
	IV	-0.5	-0.7	-0.6	3.0	3.1	-12.4	-13.2	-0.2	1.9	-2.8	-5.5	-2.5	-4.8
2016	I	-0.5	-0.3	0.5	3.3	3.5	-12.0	-10.5	0.1	2.1	-2.8	-4.9	-2.6	-3.9

(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

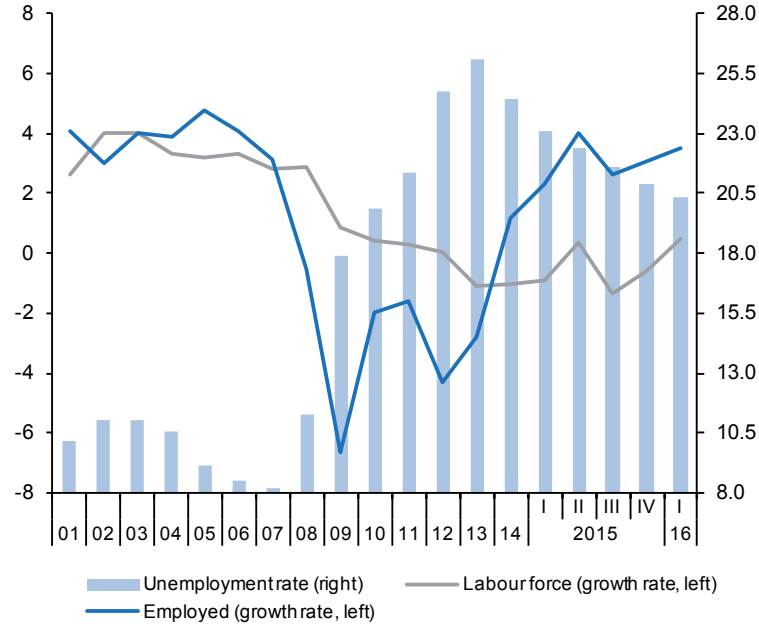


Chart 13a.2.- Unemployment rates, SA
Percentage

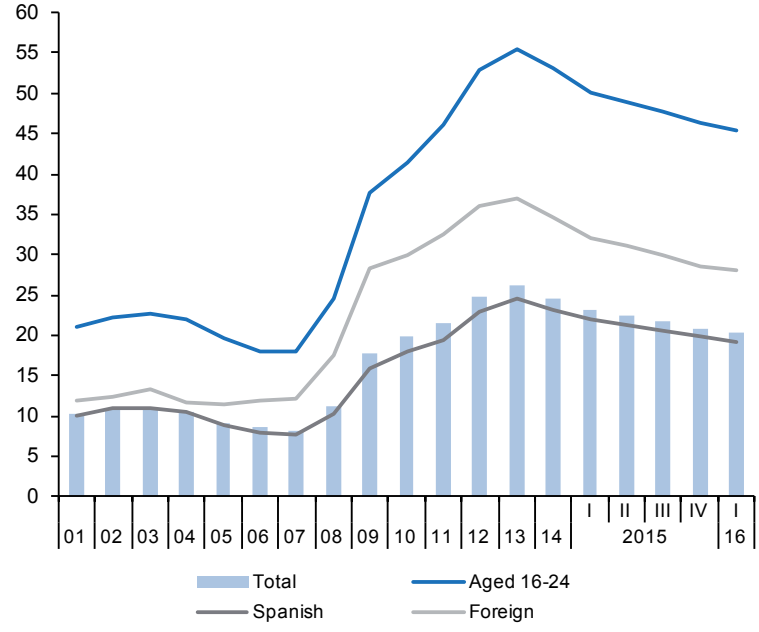


Table 13b

Labour market (II)

	Employed by sector				Employed by professional situation					Employed by duration of the working-day		
					Employees				Self- employed			
						By type of contract						
	Agriculture	Industry	Construction	Services	Total	Temporary	Indefinite	Temporary employment rate (a)		Full-time	Part-time	Part-time employment 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)	0.78	2.48	1.03	13.74	14.94	3.74	11.19	25.0	3.09	15.20	2.83	15.7
2014 II	0.74	2.36	0.98	13.28	14.32	3.43	10.89	24.0	3.04	14.51	2.84	16.4
III	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
II	0.74	2.51	1.09	13.53	14.76	3.70	11.06	25.1	3.10	15.05	2.82	15.8
III	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
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)	8.4	1.7	-2.7	3.8	3.8	10.1	1.8	1.4	1.1	4.0	-0.2	-0.6
2014 II	-1.8	-0.1	-5.3	2.0	1.7	6.5	0.3	1.1	-1.7	0.8	2.6	0.2
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
II	0.1	6.4	11.6	1.9	3.1	8.0	1.6	1.1	2.3	3.7	-0.9	-0.6
III	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

(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

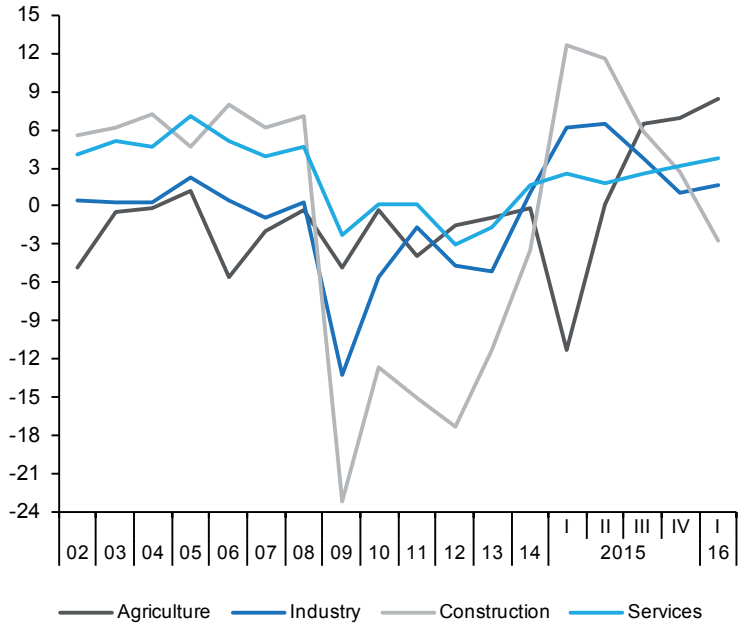


Chart 13b.2.- Employment by type of contract
Annual percentage changes and percentage over total employees

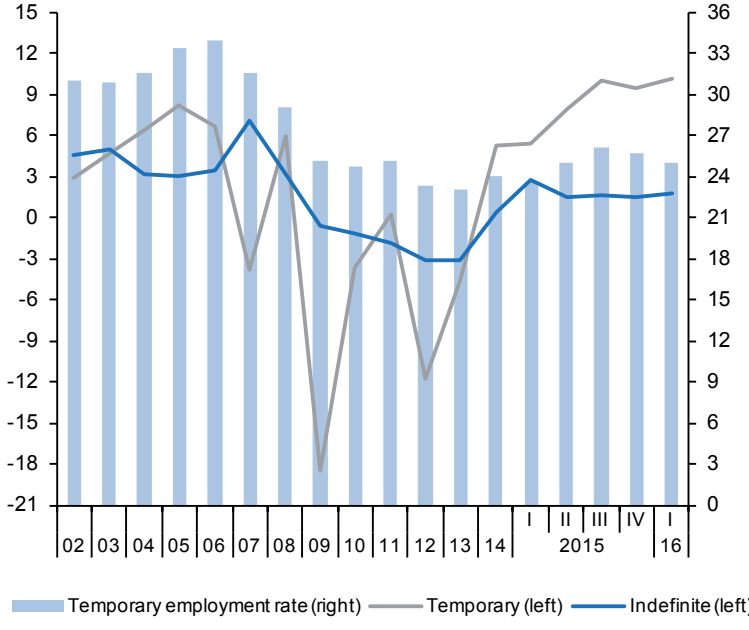


Table 14

Index of Consumer Prices

Forecasts in blue

		Total	Total excluding food and energy	Excluding unprocessed food and energy				Unprocessed food	Energy	Food
				Total	Non-energy industrial goods	Services	Processed food			
% of total in 2016		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	103.6	104.5	101.8	104.7	108.8	109.1	89.3	108.9
2017		104.2	104.4	105.4	102.3	105.7	110.6	111.7	92.6	110.9
Annual percentage changes										
2011		3.2	1.3	1.7	0.6	1.8	3.8	1.8	15.7	3.2
2012		2.4	1.3	1.6	0.8	1.5	3.1	2.3	8.9	2.8
2013		1.4	1.1	1.4	0.6	1.4	3.1	3.6	0.0	3.2
2014		-0.2	0.0	0.0	-0.4	0.1	0.4	-1.2	-0.8	-0.1
2015		-0.5	0.5	0.6	0.3	0.7	0.9	1.8	-9.0	1.2
2016		-0.3	0.7	0.8	0.5	0.9	1.1	2.5	-9.1	1.5
2017		1.3	0.7	0.9	0.5	0.9	1.6	2.4	3.6	1.9
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	-0.9	0.6	0.7	0.5	0.7	1.1	2.1	-12.6	1.4
	Jul	-0.6	0.7	0.7	0.6	0.7	1.1	3.5	-11.1	1.8
	Aug	0.0	0.7	0.8	0.6	0.8	1.0	2.6	-6.7	1.5
	Sep	0.3	0.7	0.8	0.6	0.8	1.0	2.8	-3.8	1.5
	Oct	0.4	0.7	0.7	0.5	0.9	0.9	1.5	-2.7	1.1
	Nov	0.4	0.7	0.7	0.4	0.8	0.9	2.3	-3.3	1.3
	Dec	0.7	0.7	0.7	0.4	0.8	1.0	3.1	-1.1	1.6
2017	Jan	1.5	0.7	0.8	0.5	0.8	1.2	2.4	5.8	1.6
	Feb	1.8	0.7	0.8	0.5	0.8	1.4	2.9	9.0	1.9
	Mar	1.6	0.6	0.7	0.5	0.6	1.5	3.0	7.1	1.9
	Apr	1.8	0.9	1.0	0.5	1.1	1.6	2.8	7.1	1.9
	May	1.4	0.7	0.9	0.5	0.9	1.6	2.3	4.8	1.8
	Jun	1.1	0.7	0.9	0.5	0.8	1.6	2.2	2.4	1.8
	Jul	1.0	0.7	0.9	0.5	0.9	1.7	2.2	1.4	1.8
	Aug	1.0	0.7	0.9	0.5	0.9	1.7	2.2	1.0	1.9
	Sep	1.0	0.7	0.9	0.5	0.9	1.7	2.2	1.1	1.9
	Oct	1.1	0.8	0.9	0.5	0.9	1.8	2.2	1.3	1.9
	Nov	1.1	0.8	0.9	0.5	0.9	1.8	2.2	1.4	1.9
	Dec	1.1	0.8	0.9	0.5	0.9	1.8	2.2	1.3	1.9

Sources: INE and Funcas (Forecasts).

Chart 14.1.- Inflation rate (I)
Annual percentage changes

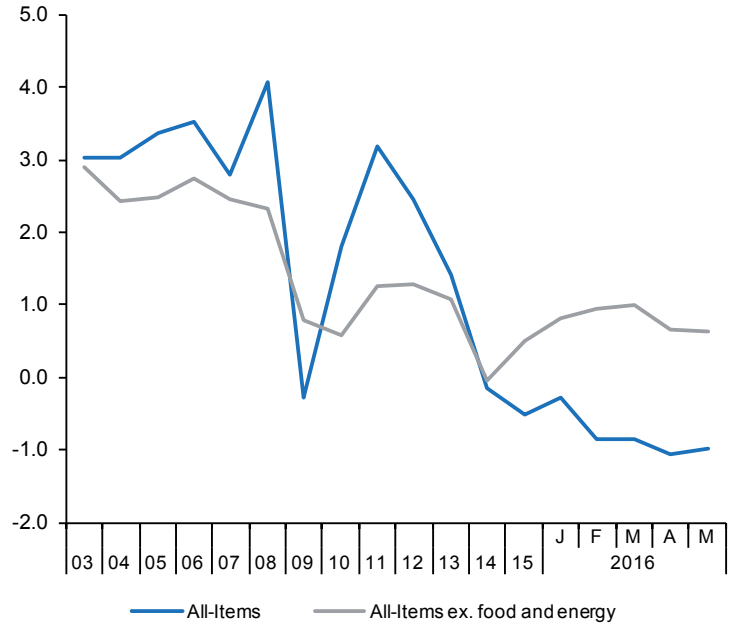


Chart 14.2.- Inflation rate (II)
Annual percentage changes

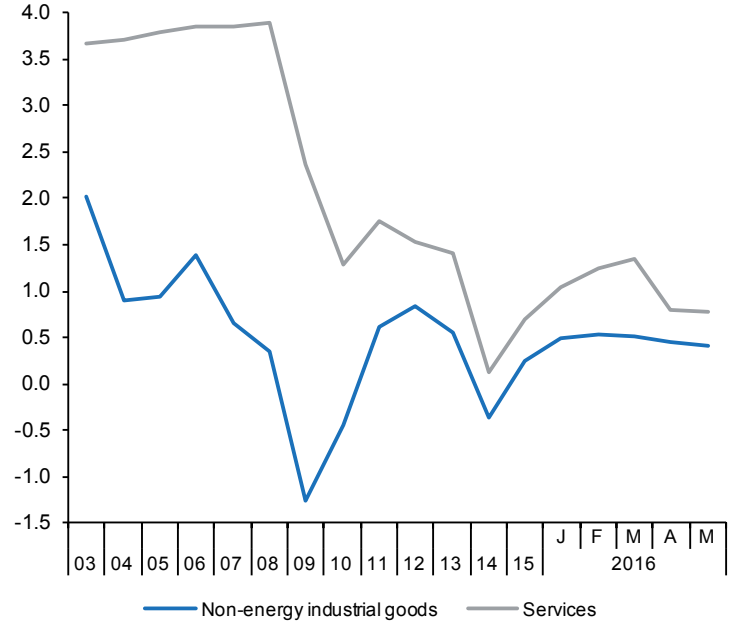


Table 15

Other prices and costs indicators

	GDP deflator (a)	Industrial producer prices		Housing prices		Urban land prices (M. Public Works)	Labour Costs Survey				Wage increases agreed in collective bargaining
		Total	Excluding energy	Housing Price Index (INE)	M^2 average price (M. Public Works)		Total labour costs per worker	Wage costs per worker	Other cost per worker	Total labour costs per hour worked	
	2010=100	2010=100		2007=100			2000=100				
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)	100.5	102.4	105.3	68.7	72.6	56.6	140.3	137.3	149.7	147.5	--
2014 III	100.3	111.2	106.0	64.8	70.8	51.2	138.5	134.8	149.7	160.2	--
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	--
III	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	100.5	102.3	105.2	68.7	72.6	56.6	140.3	137.3	149.7	147.5	--
II	--	102.6	105.4	--	--	--	--	--	--	--	--
2016 Apr	--	102.2	105.3	--	--	--	--	--	--	--	--
May	--	103.0	105.5	--	--	--	--	--	--	--	--
Jun	--	--	--	--	--	--	--	--	--	--	--
Annual percent changes											
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	0.9	-1.1	0.9	1.5
2011	0.0	6.9	4.2	-7.4	-5.6	-6.7	1.2	1.0	1.6	2.2	2.0
2012	0.0	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	4.3	0.6	1.1	-0.7	0.6	0.8
2016 (c)	-0.2	-5.3	-0.8	6.3	2.4	3.2	-0.2	0.1	-0.9	0.3	1.1
2014 III	-0.2	-0.9	-0.4	0.3	-2.6	-3.3	-0.4	0.3	-1.5	-0.1	0.6
IV	-0.3	-2.1	-0.1	1.8	-0.3	5.2	-0.5	-1.0	-1.5	-0.2	0.5
2015 I	0.5	-1.9	0.2	1.5	-0.1	5.9	0.5	1.9	-1.9	0.8	0.7
II	0.5	-1.2	0.7	4.0	1.2	4.7	0.4	0.8	-0.2	0.5	0.7
III	0.7	-2.4	0.5	4.5	1.4	9.7	0.3	0.1	-0.5	-0.1	0.8
IV	0.7	-2.8	-0.1	4.2	1.8	-2.4	1.2	0.7	-0.3	1.4	0.8
2016 I	-0.2	-5.0	-0.7	6.3	2.4	3.2	-0.2	0.1	-0.9	0.3	1.1
II	--	-6.0	-1.1	--	--	--	--	--	--	--	1.1
2016 Apr	--	-5.9	-1.0	--	--	--	--	--	--	--	1.1
May	--	-5.5	-1.0	--	--	--	--	--	--	--	1.1
Jun	--	--	--	--	--	--	--	--	--	--	--

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

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

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

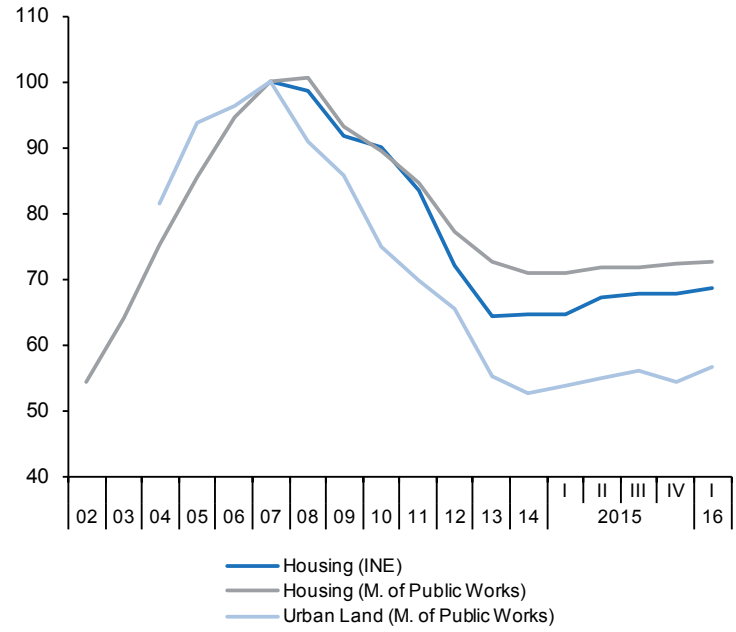


Chart 15.2.- Wage costs
Annual percent change

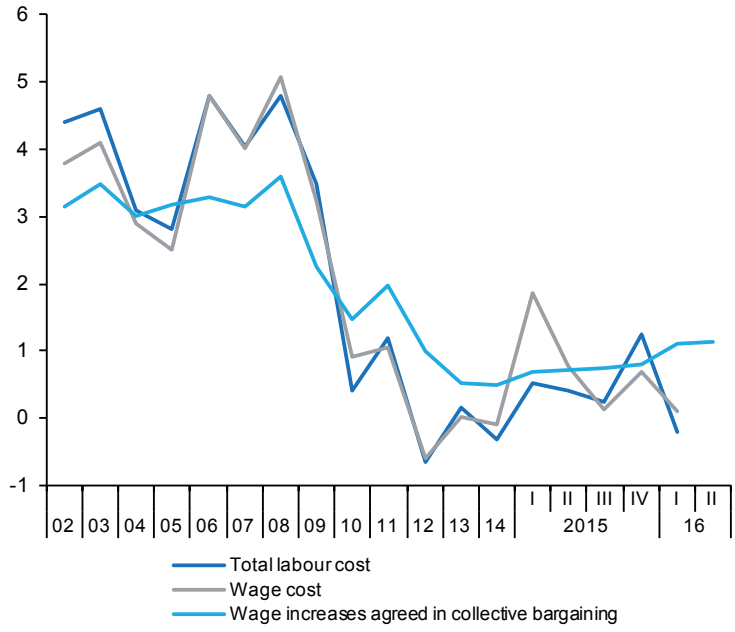


Table 16

External trade (a)

	Exports of goods			Imports of goods			Exports to EU countries (monthly average)	Exports to non-EU countries (monthly average)	Total Balance of goods (monthly average)	Balance of goods excluding energy (monthly average)	Balance of goods with EU countries (monthly average)
	Nominal	Prices	Real	Nominal	Prices	Real					
	2005=100			2005=100			EUR Billions				
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)	161.8	107.6	150.4	115.0	99.5	115.6	14.0	6.8	-1.4	0.2	1.2
2014 II	154.8	109.0	142.3	113.2	107.1	105.7	12.5	7.5	-2.0	1.3	0.9
III	158.8	109.4	145.2	116.1	108.1	107.3	12.9	7.2	-2.1	1.2	1.1
IV	158.8	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	115.2	104.6	110.2	13.3	7.1	-2.0	0.4	0.7
II	162.8	110.6	147.2	119.7	105.4	113.5	13.7	7.6	-2.3	0.2	0.7
III	163.9	109.4	149.8	120.1	104.4	115.1	13.2	7.2	-2.2	0.1	0.7
IV	165.0	109.9	150.2	118.1	103.9	113.7	13.8	7.5	-1.7	0.3	0.7
2016 I	160.3	107.7	148.8	114.9	99.4	115.5	13.8	6.6	-1.7	-0.1	1.1
2016 Feb	156.6	107.8	145.3	113.2	101.3	111.7	13.7	6.7	-1.8	-0.3	0.7
Mar	162.9	107.5	151.5	116.3	96.9	120.1	15.1	7.4	-1.6	0.0	1.2
Apr	166.4	107.2	155.2	115.5	99.7	115.8	14.7	7.5	-1.0	0.7	1.3
	Percentage changes (c)								Percentage of 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	6.4	0.5	-2.2	0.3	0.8
2016 (d)	1.8	-2.0	3.8	-0.8	-5.2	4.6	5.4	-2.5	--	--	--
2014 II	7.7	-1.0	10.1	2.3	4.3	-2.2	0.1	39.6	-2.4	1.5	1.0
III	10.8	1.3	8.5	10.5	3.8	6.6	12.6	-18.4	-2.4	1.3	1.3
IV	0.0	1.4	-1.8	-6.7	-1.0	-5.5	-5.3	29.8	-1.9	1.4	0.9
2015 I	-1.8	0.9	-2.4	3.9	-11.6	17.5	17.0	-26.9	-2.3	0.4	0.8
II	12.3	2.1	10.1	16.3	3.1	12.5	15.5	36.6	-2.5	0.2	0.7
III	2.9	-4.4	7.3	1.6	-3.9	5.8	-15.7	-20.6	-2.4	0.1	0.7
IV	2.6	1.8	1.1	-6.7	-1.9	-4.8	21.8	16.6	-1.8	0.3	0.7
2016 I	-10.9	-7.7	-3.7	-10.4	-16.1	6.5	-1.6	-40.2	-1.8	-0.1	1.2
2016 Feb	-5.9	0.0	-2.9	-1.7	1.1	-2.8	8.3	19.1	--	--	--
Mar	4.0	-0.3	4.3	2.7	-4.3	7.5	10.5	9.2	--	--	--
Apr	2.1	-0.3	2.4	-0.7	2.9	-3.6	-2.3	2.1	--	--	--

(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)
Percent change from previous period

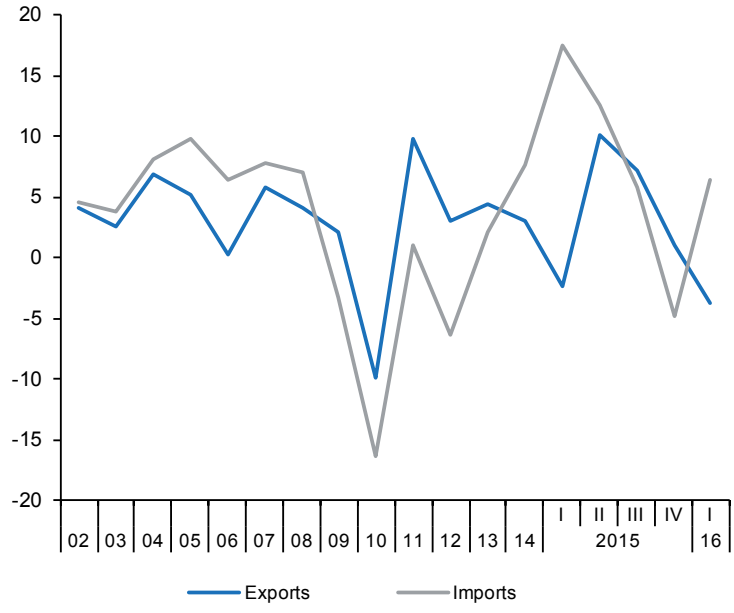


Chart 16.2.- Trade balance
EUR Billions, moving sum of 12 months

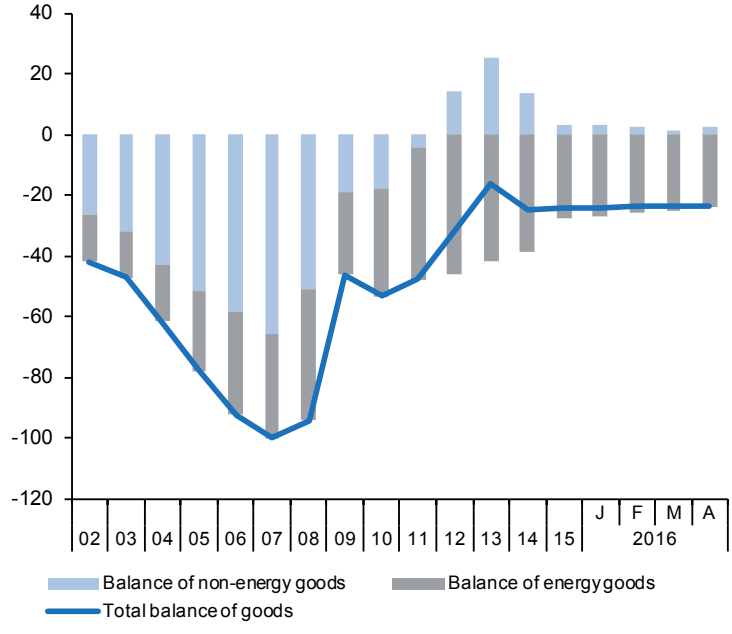


Table 17

Balance of Payments (according to IMF manual)

(Net transactions)

		Current account					Capital account	Current and capital accounts	Financial account						Errors and omissions
									Financial account, excluding Bank of Spain					Bank of Spain	
		Total	Goods	Services	Primary Income	Secondary Income			Total	Direct investment	Porfolio investment	Other invest-ment	Financial derivatives		
		1 = 2 + 3 + 4 + 5	2	3	4	5	6	7=1+6	8 = 9 + 10 + 11 + 12	9	10	11	12	13	14
EUR billions															
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	I	-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
			Goods and Services		Income and Transfers										
2016	Feb	-1.41	1.04		-2.45		0.81	-0.60	10.02	2.94	22.81	-15.01	-0.73	-13.00	-2.38
	Mar	0.94	1.94		-0.99		0.37	1.31	8.46	0.23	2.22	5.94	0.07	-1.03	6.11
	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
Percentage 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
	III	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

Source: Bank of Spain.

Chart 17.1.- Balance of payments: Current and capital accounts
EUR Billions, 12-month cumulated

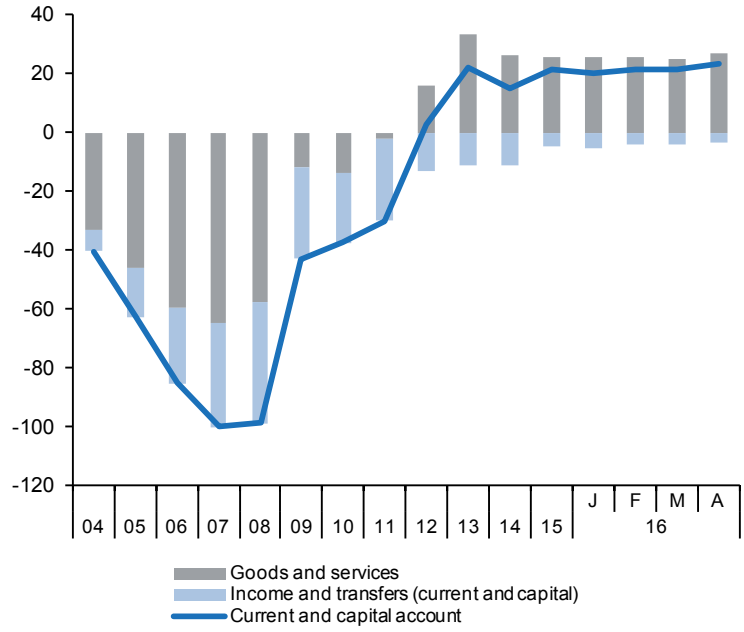


Chart 17.2.- Balance of payments: Financial account
EUR Billions, 12-month cumulated

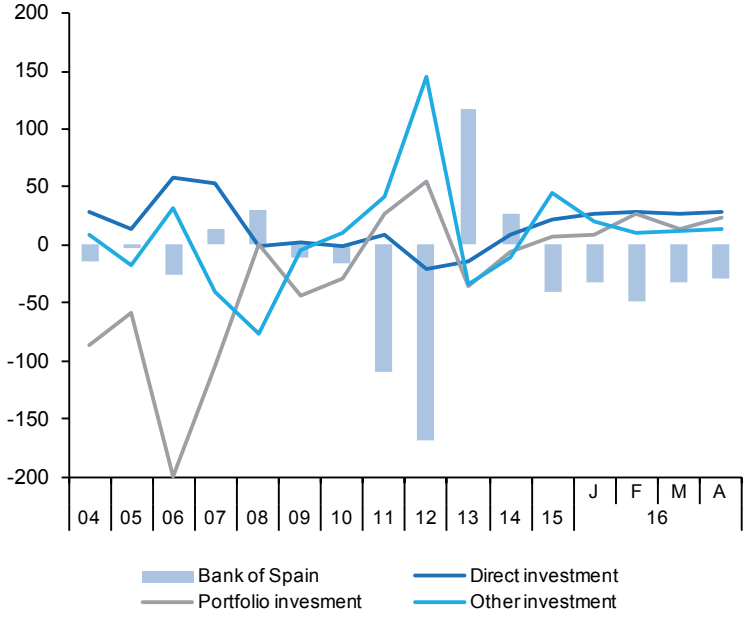


Table 18

State and Social Security System budget

	State							Social Security System (b)				
	National accounts basis			Revenue, cash basis (a)					Accrued income		Expenditure	
	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
EUR billions, 12-month cumulated												
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)	-23.3	58.9	82.2	47.3	16.0	20.3	11.0	2.9	52.4	42.8	49.6	43.3
2016 Mar	-29.4	179.5	208.9	210.7	97.0	83.7	30.0	-16.6	124.6	101.0	141.2	118.5
Apr	-32.0	177.4	209.4	207.1	94.2	83.8	29.1	-17.5	124.1	101.2	141.7	118.8
May	-31.2	177.4	208.6	208.2	94.5	84.1	29.7	-17.4	124.6	101.5	142.0	119.0
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)	--	-5.8	-2.9	-18.0	-18.7	3.0	-40.0	--	1.7	2.4	3.2	3.0
2016 Mar	--	3.1	-3.0	-1.4	1.4	5.8	-22.9	--	4.3	1.6	5.6	2.9
Apr	--	1.6	-1.4	-6.5	-4.7	1.8	-27.8	--	3.7	1.7	5.6	2.9
May	--	1.2	-1.4	-3.6	-1.9	4.7	-24.6	--	5.3	2.0	5.7	2.9
Percentage of GDP, 12-month cumulated												
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 Mar	-2.2	5.4	7.6	4.4	1.5	1.9	1.0	0.3	4.8	4.0	4.6	4.0
Apr	-2.7	16.6	19.3	19.5	9.0	7.7	2.8	-1.5	11.5	9.3	13.1	11.0
May	-3.0	16.4	19.4	19.2	8.7	7.7	2.7	-1.6	11.5	9.4	13.1	11.0

(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.

Chart 18.1.- State: Revenue, expenditure and deficit (cash basis)
EUR Billions, 12-month cumulated

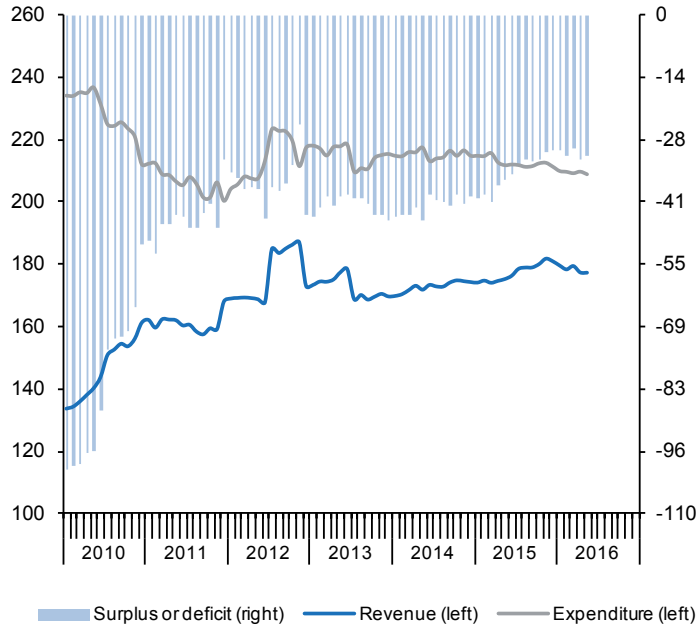


Chart 18.2.- Social Security System: Revenue, expenditure and deficit
EUR Billions, 12-month cumulated

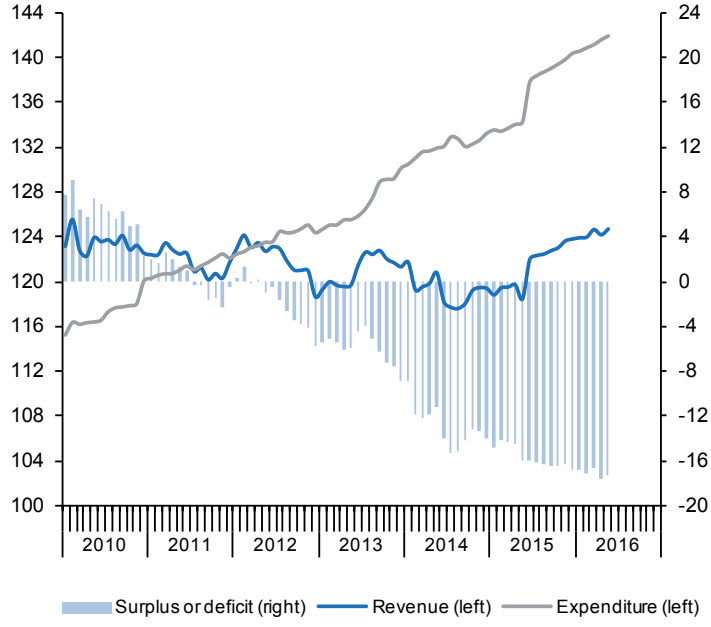


Table 19

Monetary and financial indicators

	Interest rates (percentage rates)					Credit stock (EUR billion)					
	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)
	Average of period data					**End of period data**					
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)	1.59	137.7	2.3	7.8	3.3	2,704.9	1,095.1	908.2	721.6	--	8,163.3
2014 III	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
II	1.77	126.0	2.5	7.9	3.7	2,733.6	1,057.2	934.6	741.8	--	10,769.5
III	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
II (a)	1.52	139.9	2.3	7.5	3.2	2,704.9	1,078.8	908.2	717.9	--	8,163.3
2016 Apr	1.51	133.9	2.3	7.4	3.2	2,704.9	1,078.8	908.2	717.9	--	9,025.7
May	1.57	139.8	2.3	7.7	3.2	--	--	--	--	--	9,034.0
Jun	1.48	145.9	--	--	--	--	--	--	--	--	8,163.3
						Percentage change from same period previous year					**(b)**
2009	--	--	--	--	--	4.1	29.3	-1.2	-0.9	-0.8	29.8
2010	--	--	--	--	--	2.7	14.2	-0.2	-0.6	-2.2	-17.4
2011	--	--	--	--	--	0.6	14.5	-4.0	-3.1	-1.6	-13.1
2012	--	--	--	--	--	0.6	19.8	-7.9	-4.3	0.1	-4.6
2013	--	--	--	--	--	-2.2	8.5	-8.1	-5.8	-4.4	21.4
2014	--	--	--	--	--	-1.3	7.0	-6.8	-4.4	3.4	3.7
2015	--	--	--	--	--	-0.4	3.7	-2.6	-3.3	5.2	-20.7
2016 (a)	--	--	--	--	--	-0.3	0.6	-1.1	-0.8	6.1	-14.5
2014 III	--	--	--	--	--	-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
II	--	--	--	--	--	0.0	4.4	-2.5	-2.6	3.6	-6.5
III	--	--	--	--	--	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	--	--	--	--	--	0.4	4.1	-1.8	-2.1	5.5	-8.6
II (a)	--	--	--	--	--	-0.3	0.6	-1.1	-0.8	6.1	-6.4
2016 Apr	--	--	--	--	--	0.2	3.9	-1.8	-2.4	6.0	3.5
May	--	--	--	--	--	--	--	--	--	6.1	0.1
Jun	--	--	--	--	--	--	--	--	--	--	-9.6

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

Source: Bank of Spain.

Chart 19.1.- 10 year bond yield
Percentage rates and basis points

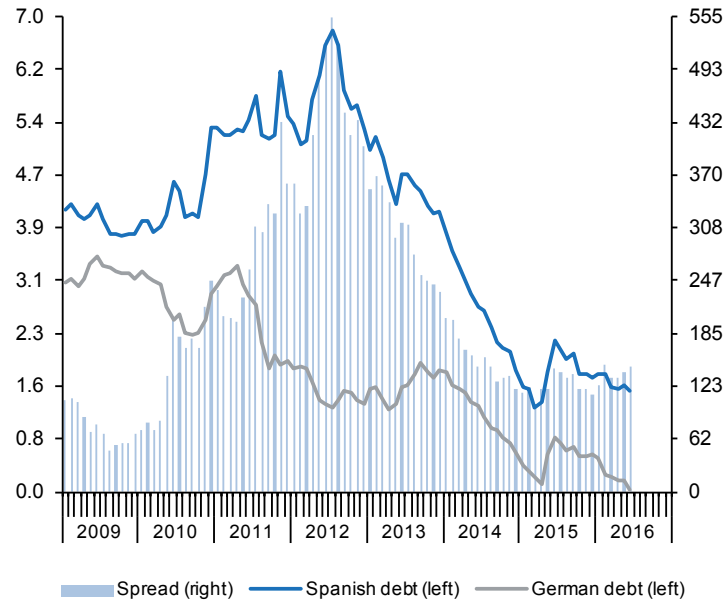


Chart 19.2.- Credit stock growth
Annual percentage change

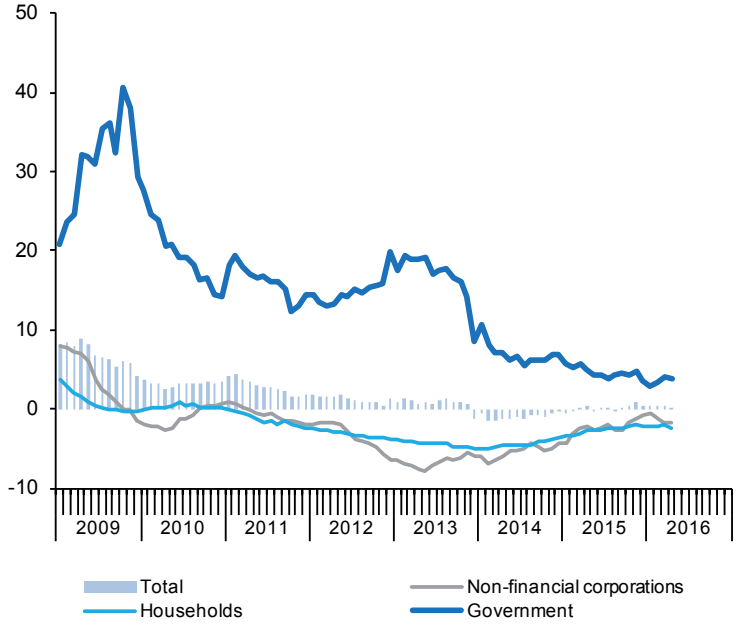


Table 20

Competitiveness indicators in relation to EMU

		Relative Unit Labour Costs in industry (Spain/EMU)			Harmonized Consumer Prices			Producer prices			Real Effective Exchange Rate in relation to developed countries
		Relative productivity	Relative wages	Relative ULC	Spain	EMU	Spain/EMU	Spain	EMU	Spain/EMU	
		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)		--	--	--	98.8	99.7	99.1	102.0	100.9	101.2	108.2
2014	II	--	--	--	101.5	100.3	101.2	108.6	106.1	102.4	113.4
	III	--	--	--	100.3	100.0	100.4	109.3	106.1	103.0	111.7
	IV	--	--	--	100.7	100.1	100.7	107.7	105.3	102.3	111.8
2015	I	--	--	--	98.8	99.2	99.6	106.6	104.2	102.3	108.7
	II	--	--	--	101.2	100.5	100.6	108.0	104.9	102.9	109.6
	III	--	--	--	99.8	100.0	99.7	107.3	104.0	103.2	108.6
	IV	--	--	--	100.3	100.2	100.0	105.2	102.8	102.3	109.0
2016	I	--	--	--	98.0	99.2	98.8	101.9	100.8	101.1	107.7
2016	Mar	--	--	--	99.2	100.1	99.1	101.9	100.8	101.1	108.2
	Apr	--	--	--	99.7	100.2	99.5	101.9	100.7	101.2	109.0
	May	--	--	--	100.2	100.5	99.7	102.6	101.2	101.4	109.0
		Annual percentage changes					**Differential**	**Annual percentage changes**		**Differential**	**Annual 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)		--	--	--	-0.9	0.0	-0.9	-4.7	-3.5	-1.2	-0.7
2014	II	--	--	--	0.2	0.6	-0.4	-0.6	-1.1	0.5	-0.3
	III	--	--	--	-0.4	0.4	-0.7	-0.9	-1.2	0.3	-1.4
	IV	--	--	--	-0.6	0.2	-0.8	-1.7	-1.5	-0.2	-1.9
2015	I	--	--	--	-1.1	-0.3	-0.8	-1.3	-2.1	0.9	-3.4
	II	--	--	--	-0.3	0.2	-0.5	-0.6	-1.1	0.5	-3.3
	III	--	--	--	-0.6	0.1	-0.7	-1.8	-1.9	0.2	-2.8
	IV	--	--	--	-0.5	0.2	-0.6	-2.3	-2.4	0.1	-2.6
2016	I	--	--	--	-0.8	0.0	-0.8	-4.4	-3.2	-1.1	-1.0
2016	Mar	--	--	--	-1.0	0.0	-0.9	-4.8	-3.7	-1.1	-0.5
	Apr	--	--	--	-1.2	-0.2	-0.9	-5.3	-4.1	-1.2	-0.1
	May	--	--	--	-1.1	-0.1	-1.0	-4.9	-3.6	-1.3	-0.6

(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

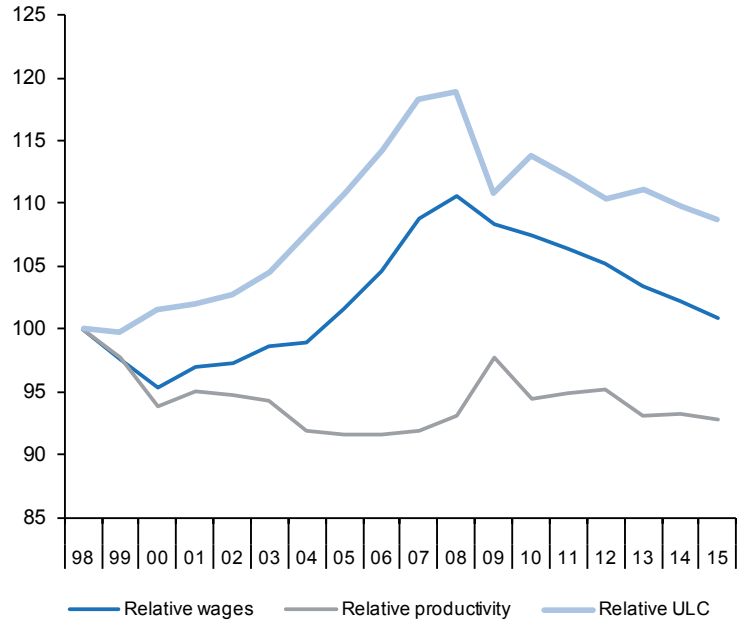


Chart 20.2.- Harmonized Consumer Prices
Annual growth in % and percentage points

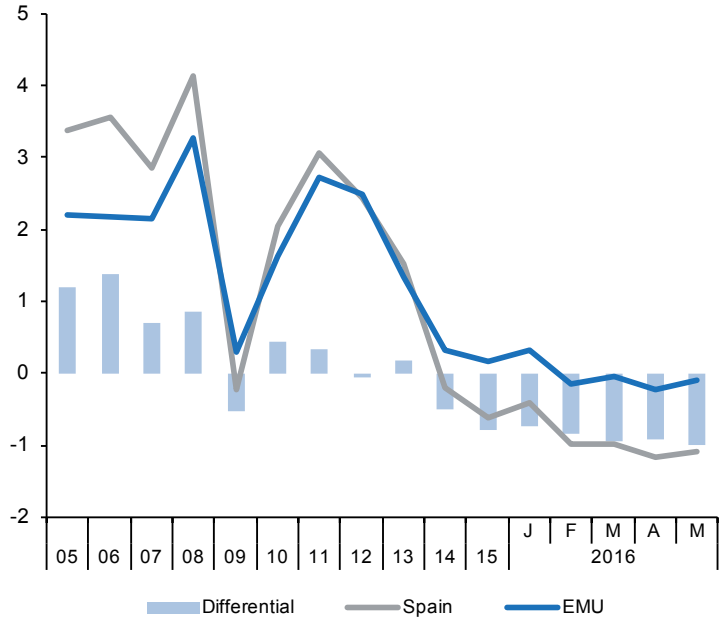


Table 21a

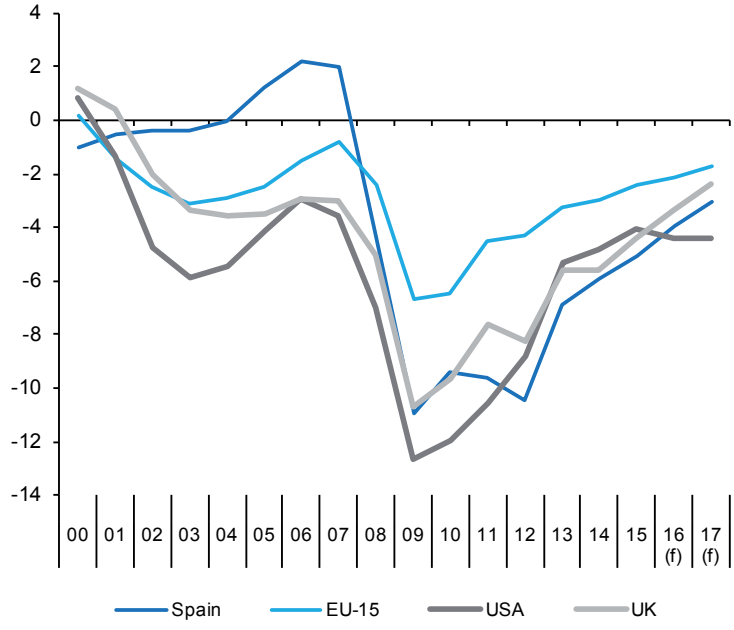
Imbalances: International comparison (I)

In blue: European Commission Forecasts

	Government net lending (+) or borrowing (-)				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	-1,030.1	-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	-1,824.2	-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	-1,793.9	-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	-1,644.6	-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	-1,424.2	-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
Percentage 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

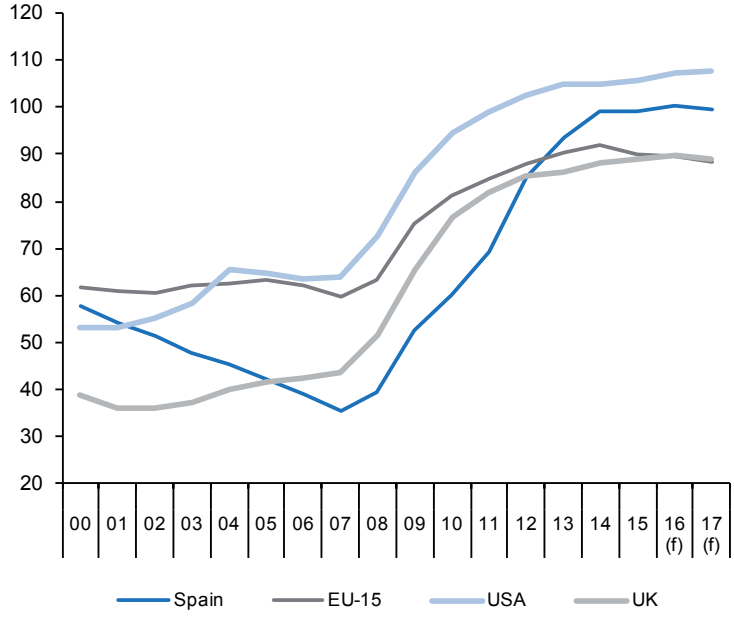
Source: European Commission.

Chart 21a.1.- Government deficit
Percentage of GDP



(f) European Commission forecast.

Chart 21a.2.- Government gross debt
Percentage of GDP



(f) European Commission forecast.

Table 21b

Imbalances: International comparison (II)

	Household 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 national currency												
2005	653.5	4,753.2	11,953.5	1,189.8	925.0	6,892.4	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	7,528.0	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	8,323.9	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	8,929.7	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	8,990.1	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	9,114.8	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	9,437.0	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	9,568.6	10,786.2	1,481.4	1,182.1	14,045.2	14,705.3	3,776.6
2013	790.8	6,034.4	13,501.9	1,525.5	1,235.3	9,593.9	11,281.1	1,454.1	992.9	13,036.9	14,895.6	3,679.2
2014	754.0	6,040.1	13,880.4	1,565.8	1,175.2	9,718.2	11,969.2	1,414.1	922.0	13,573.3	15,201.7	3,605.5
2015	729.6	--	14,230.1	1,625.3	1,131.3	--	12,778.3	1,388.6	836.4	--	15,247.0	3,329.0
Percentage of GDP												
2005	70.2	56.2	91.3	89.4	99.4	81.5	62.3	82.9	58.2	99.9	104.7	179.0
2006	77.5	58.1	95.5	93.2	115.0	84.5	64.7	85.4	76.5	106.9	108.9	186.2
2007	81.1	58.9	97.7	96.1	124.4	88.5	69.7	86.3	92.5	114.6	119.3	210.8
2008	81.9	59.7	95.2	97.2	127.5	92.7	72.6	97.2	95.7	123.6	122.3	238.1
2009	84.0	63.1	95.5	99.2	130.3	96.8	70.4	95.2	106.3	133.1	114.8	242.3
2010	83.5	62.9	90.3	94.9	132.2	95.5	66.8	88.7	105.6	132.1	102.5	240.2
2011	81.8	62.1	85.7	91.8	132.3	96.3	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	96.6	67.7	83.8	96.3	131.3	89.4	212.1
2014	72.4	59.8	80.0	86.2	112.9	96.2	69.0	77.8	88.6	134.3	87.6	198.4
2015	67.5	--	79.3	87.2	104.6	--	71.2	74.5	77.4	--	85.0	178.5

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

Sources: Eurostat, European Central Bank and Federal Reserve.

Chart 21b.1.- Household debt
Percentage of GDP

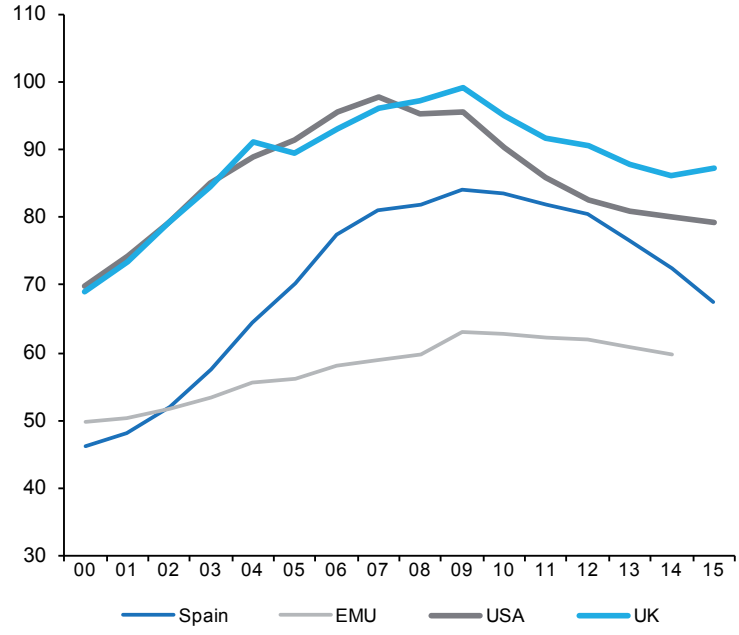
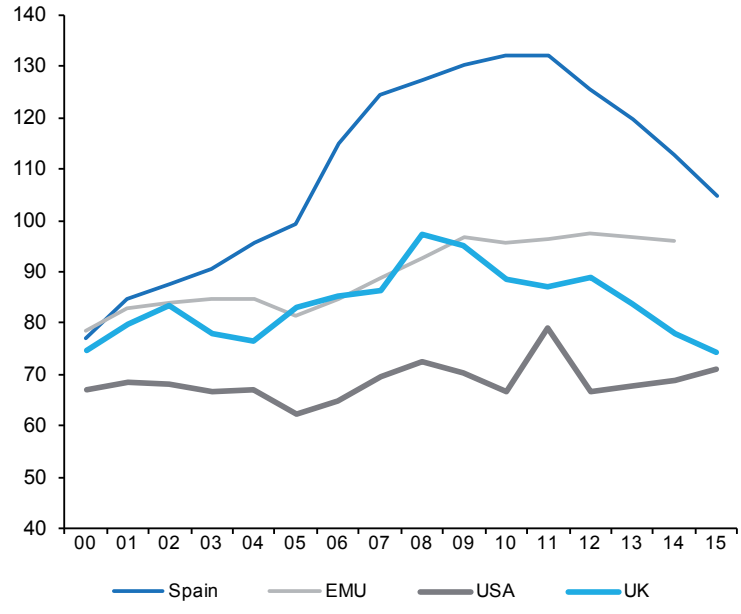


Chart 21b.2.- Non-financial corporations debt
Percentage of GDP



KEY FACTS: 50 FINANCIAL SYSTEM INDICATORS – FUNCAS

Updated: June 30th, 2016

Highlights

Indicator	Last value available	Corresponding to:
Bank lending to other resident sectors (monthly average % var.)	-0.4	April 16
Other resident sectors' deposits in credit institutions (monthly average % var.)	0.2	April 16
Doubtful loans (monthly % var.)	-1.1	April 16
Recourse to the Eurosystem (Eurozone financial institutions, million euros)	205,465	May 16
Recourse to the Eurosystem (Spanish financial institutions, million euros)	126,986	May 16
Recourse to the Eurosystem (Spanish financial institutions million euros)- Main L/T refinancing operations	4,514	May 16
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 May	2016 June	Definition and calculation
1. Monetary Supply (% chg.)	ECB	5.6	3.8	4.7	0.4	-	M3 aggregate change (non-stationary)
2. Three-month interbank interest rate	Bank of Spain	2.49	0.21	-0.02	-0.27	-0.28	Daily data average
3. One-year Euribor interest rate (from 1994)	Bank of Spain	2.76	0.48	0.17	-0.015	-0.051	End-of-month data
4. Ten-year Treasury bonds interest rate (from 1998)	Bank of Spain	4.6	2.7	1.7	1.5	1.2	Market interest rate (not exclusively between account holders)
5. Corporate bonds average interest rate	Bank of Spain	4.5	2.3	2.2	1.5	-	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 -0.28% and the 1-year Euribor to -0.051% in June. The ECB has announced new expansionary monetary policy measures, amid the persistence of negative inflation rates and with the irruption of Brexit. As for the Spanish 10-year bond yield, it has fallen to 1.2%.

B. Financial markets

Indicator	Source:	Average 2000-2013	2014	2015	2016 April	2016 May	Definition and calculation
6. Outright spot treasury bills transactions trade ratio	Bank of Spain	34.6	75.6	75.5	110.90	125.34	(Traded amount/ outstanding balance) x100 in the market (not exclusively between account holders)
7. Outright spot government bonds transactions trade ratio	Bank of Spain	77.7	73.2	65.3	56.31	61.65	(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	0.19	0.19	(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	1.73	1.30	(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	0.1	0.1	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	1,086.4	1,096.6	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	3.5	0.3	Change in the total number of resident companies
13. Stock market trading volume. Stock trading volume (monthly average % var.)	Bank of Spain and Madrid Stock Exchange	3.7	7.0	-0.2	23.2	-37.4	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	911.1	820.8[a]	Base 1985=100
15. Ibex-35 (Dec1989=3000)	Bank of Spain and Madrid Stock Exchange	9,767.1	10,528.8	10,647.2	9,025.7	8,163.3[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	19.6	20.3	Madrid Stock Exchange Ratio “share value/ capital profitability”

B. Financial markets (continued)

Indicator	Source:	Average 2000-2013	2014	2015	2016 April	2016 May	Definition and calculation
17. Long-term bonds. Stock trading volume (% chg.)	Bank of Spain and Madrid Stock Exchange	4.2	7.4	21.3	-63.9	-48.6	Variation for all stocks
18. Commercial paper. Trading balance (% chg.)	Bank of Spain and AIAF	2.0	-1.3	-0.2	-0.3	-2.8	AIAF fixed-income market
19. Commercial paper. Three-month interest rate	Bank of Spain and AIAF	2.7	0.6	0.1	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	0.2	-10.1	IBEX-35 shares concluded transactions
21. IBEX-35 financial options concluded transactions (% chg.)	Bank of Spain	8.6	6.4	17.7	-45.5	0.0	IBEX-35 shares concluded transactions

(a) Last data published: June 30th, 2016.

Comment on "Financial Markets:" During May, there was an increase in transactions with outright spot T-bills and of spot government bonds transactions, which stood at 125.3% and 61.7%, respectively. The stock market has lost some momentum, in particular after Brexit, with the IBEX-35 down to 8,163 points, and the General Index of the Madrid Stock Exchange to 821. Additionally, there was a decrease of 10.1% in financial IBEX-35 futures transactions and no change in transactions with IBEX-35 financial options.

C. Financial Savings and Debt

Indicator	Source:	Average 2007-2012	2013	2014	2015 Q 3	2015 Q 4	Definition and calculation
22. Net Financial Savings/GDP (National Economy)	Bank of Spain	-5.3	2.1	1.0	2.1	2.2	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	3.3	3.6	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	306.4	302.3	Public debt, non-financial companies debt and households and non-profit institutions debt over GDP

C. Financial Savings and Debt (continued)

Indicator	Source:	Average 2007-2012	2013	2014	2015 Q 3	2015 Q 4	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	68.6	67.5	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	-1.8	2.3	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	-1.6	-0.6	Total liabilities percentage change (financial balance)

Comment on "Financial Savings and Debt:" During 2015Q4, there was an increase in financial savings to GDP in the overall economy that reached 2.2% of GDP. There was also an increase in the financial savings rate of households from 3.3% in 2015Q3 to 3.6% in 2015Q4. The debt to GDP ratio fell from 68.6% to 67.5% in the same period. Finally, the stock of financial assets on households' balance sheets registered a growth of 2.3%, and there was a 0.6% decrease in the stock of financial liabilities.

D. Credit institutions. Business Development

Indicator	Source:	Average 2000-2013	2014	2015	2016 March	2016 April	Definition and calculation
28. Bank lending to other resident sectors (monthly average % var.)	Bank of Spain	9.1	-4.6	-4.0	-1.3	-0.4	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	-1.2	0.2	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	0.1	-0.3	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	0.3	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	-5.4	-5.2	Difference between the asset-side and liability-side "Credit System" item as a proxy of the net position in the interbank market (month-end)

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D. Credit institutions. Business Development (continued)

Indicator	Source:	Average 2000-2013	2014	2015	2016 March	2016 April	Definition and calculation
33. Doubtful loans (monthly average % var.)	Bank of Spain	40.5	-12.7	-22.4	-2.5	-1.1	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	16.8	-16.3	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	0.3	0.3	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 April 2016 show a decrease in bank credit to the private sector of 0.4%. Data also show an increase in financial institutions' deposit-taking from the previous month of 0.2%. Holdings of debt securities fell by 0.3%, while shares and equity grew 0.5%. Also, doubtful loans decreased 1.1% 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 foreign credit institutions operating in Spain	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	205,465[(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	126,986[(a)]	Open market operations and ECB standing facilities. Spain total

E. Credit institutions. Market Structure and Eurosystem Refinancing (continued)

Indicator	Source:	Average 2000-2012	2013	2014	2015 December	2016 March	Definition and calculation
42. Recourse to the Eurosystem (total Spanish financial institutions): main long term refinancing operations (Euro millions)	Bank of Spain	22,425	19,833	21,115	10,515	4,514[(a)]	Open market operations: main long term refinancing operations. Spain total

(a) Last data published: May 2016.

Comment on "Credit institutions. Market Structure and Eurosystem Refinancing:" In May 2016, recourse to Eurosystem funding by Spanish credit institutions reached 126.99 billion euro. There has been a 2.8 billion euro decrease in the recourse to the Eurosystem by Spanish banks from April.

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.

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