Spanish Economic and Financial Outlook

Spain´s financial sector post-restructuring: Credit recovers amidst outstanding challenges

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FEATURES

to securing an adequate provision of public services.

Letter from the Editors

Deleveraging has been one of the most frequently used terms in reports on Spain in recent years. It is generally understood to be a rebalancing that demands short-term sacrifices but supports long-term growth and remains a necessary condition for the consolidation of the Spanish recovery. In this context, the November issue of *Spanish Economic and Financial Outlook* (SEFO) starts off by taking stock of progress on the deleveraging efforts of Spanish households and firms over recent years.

Spain is among the countries having made most progress on deleveraging since 2010, and efforts appear to be compatible with an increase in new lending flows and a gradual recovery of financial savings. Between 2010 and June 2015, Spanish households and firms reduced their debt by 450 billion euros, or 37.5% of GDP. At the same time, while the rate of change of the stock of credit to the private sector remains negative, it has dropped from -5.3% in 2012 to -2.7% in August 2015. Credit to SMEs stood at 146.6 billion euros in 2014, and is estimated at 159.8 billion euros by year-end 2015. Moreover, financial savings has gone from negative values in almost all sectors before the crisis to an increase of up to 2% for the country as a whole in June 2015.

In this issue of SEFO, we also explore recent progress and outstanding challenges for the Spanish financial sector post-restructuring. The adjustment (restructuring, write-offs, public aid) undergone by the Spanish banking sector in response to the crisis has allowed Spanish banks to become well positioned on the ranking of EU banking sectors in terms of profitability and efficiency. Spanish banks´ solvency levels have also improved and capital ratios are above Basel III minimum requirements, although below the EU average. At the same time, today´s low interest rate environment, together with increased capital requirements, continue to place downward pressures on banks´ profitability. To overcome these and other outstanding challenges, banks must further boost efficiency and adopt new business strategies reliant on increasing scale, international diversification, and on-line and mobile banking service provision.

The November SEFO then shifts its focus to the challenges of the Spanish corporate sector, such as the need for increased reliance on non-traditional funding sources, competitiveness challenges in the manufacturing sector, and finally, the internationalisation process of Spanish firms. We start by looking at the rise of non-bank financing alternatives for Spanish SMEs, pointing out important developments at the EU level to increase firms´ reliance on capital markets funding, such as the European Commission´s Action Plan on Building a Capital Markets Union (CMU).

In Spain, alternative financing channels have deepened and now include equity financing options, such as crowdfunding or venture capital for smaller firms, as well as alternative exchanges and private

equity for larger-scale entities. On the debt side, non-bank financing alternatives include debt crowdfunding platforms for smaller firms, together with fixed-income exchanges, such as MARF for medium-sized companies. These alternatives are a necessary step forward and have encountered strong institutional support. However, many obstacles remain, such as changing the mentality of SMEs towards alternative financing and the size constraints of European and Spanish SMEs.

We then study the process of internal devaluation across Spanish manufacturing firms, which reveals broad differences in competiveness of exporting firms relative to domestic-oriented players. As a result of rising unit labour costs during the economic expansion, Spanish manufacturing firms catering to the domestic market lost cost-competitiveness as they increased prices in order to protect profit margins. By contrast, the competitiveness of export-oriented industries, in terms of costs and products, progressed more favourably. Consequently, Spanish exporters' market share has done well relative to global exports. Falling wages during the crisis years could be driving manufacturing's recent take-off, a necessary preconditions for generating a more sustainable growth model in Spain, although it is still too early for definitive conclusions.

Taking our analysis of Spain´s export industry a bit further, we consider the internationalisation of Spanish firms, focusing on the performance of Spanish exporters relative to other large EU economies, to find that Spanish businesses have internationalised substantially in recent years. However, they are still

a long way from securing net exports comparable to large European exporters, such as Germany, the Netherlands, or even Italy. Moreover, at the micro level, our findings shows exports to be concentrated, where 15% of large, frequent exporters account for 90% of Spain´s exports by volume, alluding to the existence of growth constraints experienced by many smaller export businesses.

Lastly, this SEFO examines issues related to public-sector employment trends and the characteristics of Spain´s labour market. Following a period of growth from 2007-2011, subsequent cuts in public-sector employment, in part driven by the need for fiscal consolidation, brought figures back in line with 2007 levels. The impact of the cuts, however, was mitigated by the general increase in the number of hours in the working week from 35 to 37.5. Staff reductions were mainly achieved through net job losses affecting temporary contracts, posing challenges for the future as regards the cyclical or structural nature of the policies implemented, and the provision of certain public goods and services.

On the topic of labour markets, according to empirical evidence, workers who enter inflexible labour markets, such as those in Spain, during times of economic recession fare worse than those who enter more flexible ones. Moreover, while Spain has recently completed a much-needed labour market reform, not enough has been done to reduce segmentation, so it is likely that these negative effects will still be applicable to the current generation of individuals that graduated during the recent financial crisis.

Credit, deleveraging, and financial savings: Balancing adjustment and recovery in Spain

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

Spain is among the countries having made most progress on deleveraging since 2010. Debt reduction efforts are expected to be compatible with private sector credit growth and positive savings rates in 2016, in line with the trend for the Spanish economy as a whole since 2012.

The process of deleveraging in Spain has been compatible with an increase in new lending flows and a gradual recovery in financial savings. While the rate of change of the stock of credit remains negative, for the private sector as a whole, it has dropped from -5.3% in 2012 to -2.7% in August 2015. This transition was from -6.4% to -2.7% for firms and -3.8% to -2.6% for households. In the case of new lending to firms, credit to SMEs stood at 146.6 billion euros in 2014, and it is estimated at 159.8 billion euros by year-end 2015. These readjustments have been compatible with the reduction of the debt burden, as shown by the evolution of the private sector loans-to-deposits ratio, a proxy for deleveraging, which was 1.14 in 2009, but has dropped in recent years to as low as 0.96. Between 2010 and June 2015, households and firms reduced their debt by 450 billion euros, or 37.5 percentage points of GDP. At the same time, financial savings has gone from negative values in almost all sectors before the crisis to an increase of up to 2% for the country as a whole in June 2015 (3.8% for households and 1.5% for firms).

Introduction: Deleveraging, savings, and long-term growth

There was a considerable build-up of private debt in the years preceding the crisis in Spain. Leveraging continued up until 2010. Since then, households and firms have taken measures to reduce their debt considerably, albeit through different ways and with different intensities, and these efforts will continue for several more years.

However, although necessary, this deleveraging implies an opportunity cost in terms of the financial resources channelled away from consumption or investment. There is also a risk that it may compromise households' financial savings, particularly when taking place at a time of high unemployment, as is the case in Spain.

In any event, as this article aims to show, a reduction in debt levels can be compatible with an increase in new lending flows and a gradual

recovery in financial savings. For example, in Spain, households and firms are reducing high accumulated debt burdens without having to resort to measures, which could lead to reputational damage for the country, such as write-downs. The problems associated with deleveraging are, however, not unique to Spain nor to this crisis.

In Spain, households and firms are reducing high accumulated debt burdens without having to resort to measures, which could lead to reputational damage for the country, such as write-downs.

Like other components of the economy, deleveraging has, at times, behaved cyclically. A recent International Monetary Fund document (Chen *et al.*, 2015), reviews experiences of debt reduction in 36 advanced economies since 1960. It considers the impact of debt, both during the accumulation phase and when it is necessary to reduce it. The results suggest that a gradual deleveraging of the private sector after recessions is positively and significantly related to substantial medium and long-term GDP growth gains. Also, all the policies geared towards facilitating this effort tend to have a positive effect.

In countries such as the United States, at the peak of the crisis, some studies (Glick and Lansing, 2009) suggested that to reach a "reasonable" level of private debt, a ten-year adjustment would be necessary in which the savings rate would need to increase from 4% in 2009 to 10% in 2018. This savings would imply a reduction of 0.75% in the annual rate of consumption growth, which would hold back economic recovery, but would ensure more sustainable growth over the long-term.

However, when the United States began to emerge from the crisis, studies (Bauer and Nash, 2012) pointed out that although in theory, deleveraging

could have negative effects on consumption, U.S. households held back from increasing consumption significantly when they began to have more disposable income. This suggests that factors other than deleveraging, linked to expectations or the quality of employment, may also be important for the recovery.

Similar results have been observed in some European economies particularly affected by property crises and problems associated with debt levels. This is the case in Ireland, where McCarthy and McQuinn (2014) use mortgage data to show that households have difficulties meeting their payments in the wake of the crisis, which entails a significant reduction in consumption, although they also suggest positive effects over the long-term.

Financing conditions and credit

The ability to repay debt, save, or extend new credit largely depends on the macroeconomic situation and financial conditions (primarily the level of uncertainty and interest rates).

The recent press release from the Governing Council of the European Central Bank on October 22nd, 2015[3] stated that "while euro area domestic demand remains resilient, concerns over growth prospects in emerging markets and possible repercussions for the economy from developments in financial and commodity markets continue to signal downside risks to the outlook for growth and inflation." The ECB went on to say that, although monetary policy was already quite loose, it would probably be necessary to re-examine this "degree of accommodation" at the monetary policy meeting in December. Furthermore, according to the ECB, it "is willing and able to act by using all the instruments available within its mandate if warranted in order to maintain an appropriate degree of monetary accommodation." The ECB estimates that inflation in the euro area will rise in 2016, but will remain short of the medium-term target of 2%.

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[3] https://www.ecb.europa.eu/press/pressconf/2015/html/is151022.en.html

This monetary context, however, implies relatively favourable lending conditions. Indeed, the ECB has observed that the year-on-year rate of change in lending to non-financial corporations (adjusted for sales and securitisations) in the euro area rose to 0.4% in August, following the figure of 0.3% in July. However, the ECB acknowledges that "despite these improvements, developments in loans to enterprises continue to reflect the lagged relationship with the business cycle, credit risk, credit supply factors, and the ongoing adjustment of financial and non-financial sector balance sheets."

On the objective of completing the financial adjustments in the euro area (including deleveraging), the ECB was keen to point out that the monetary policy target is to maintain price stability, but that "in order to reap the full benefits from our monetary policy measures, other policy areas must contribute decisively [...] In particular, actions to improve the business environment."

The improvement in costs and conditions of access to finance is also perceptible in Spain, as may be deduced from the latest "*Encuesta de préstamos bancarios*" [Bank loan survey] published by the Bank of Spain in its October Economic Bulletin.[4] This survey suggests that lending criteria were relaxed slightly in the case of lending to households to buy residential property in Spain for the first time since 2006, while they became slightly stricter in the euro area. On the demand side, both national and euro area institutions reported an increase in the number of loan applications from households for home

Spanish banks stated that they used liquidity from the ECB programme mainly to extend credit, and to a lesser extent to substitute for other funding sources.

purchases, consumption and other purposes in the third quarter. Interestingly, Spanish financial

institutions stated that they perceived an improvement in conditions of access to both retail finance and wholesale markets. This was also perceptible in the euro area average. They also indicated that the ECB's expanded asset purchase programme improved their financial situation over the last six months, with this effect being stronger in the case of Spanish institutions. By contrast, the impact on approval criteria in Spain was negligible. In any event, Spanish banks stated that they used the liquidity from the programme mainly to extend credit, and to a lesser extent to substitute for other funding sources.

Another significant factor in relation to financial conditions is the perception of the country's solvency and stability, as expressed by the rating agencies. In October, Standard & Poor's raised Spain's rating a notch from 'BBB' to 'BBB+' with a stable outlook, and highlighted the "positive impact of the reforms on the economy." On October 21st, Fitch published its "Fundamental Index" for Spain, which is a report on the state of credit and financial conditions. Fitch stressed the improvement in the supply and demand for credit, and above all, highlighted the flow of lending to SMEs (as will be discussed below). On October 23rd, Fitch affirmed Spain's rating as "BBB+," also with a stable outlook, pointing to an improvement in the country's financing costs and, in general, a reduction in systemic risks.

As regards recent trends in credit in Spain, Exhibit 1 shows the year-on-year change in credit to the private sector from 2012 to August 2015. The rates remain negative, although for the sector as a whole the rate had dropped from 5.3% in 2012 to 2.7% in August 2015, 6.4% to 2.7% for firms and 3.8% to 2.6% for households. In any event, few analysts expect a return to positive figures before 2016.

Debt repayments still appear to be a bigger factor in the change in credit than new lending flows. Even so, there has been a gradual recovery in new credit, as can be seen from Exhibit 2, which shows the progress since 2010 and an estimate

4 http://www.bde.es/bde/es/secciones/informes/boletines/Boletin_economic/

Santiago Carbó Valverde and Francisco Rodríguez Fernández

Exhibit 1

Year-on-year change in lending to the private sector (2012-2015)
(Percentage)
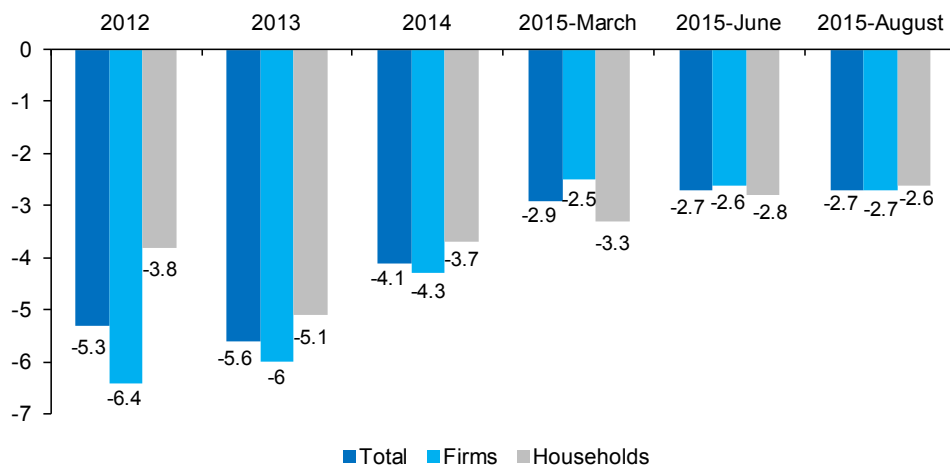
Source: Bank of Spain and the authors' calculations.

for year-end 2015 (based on the flows observed up until September). In the case of domestic economies (left pane of the Exhibit), home loans rose from 26.8 billion euros in 2014 to 30.1 billion euros in 2015, while consumer credit rose from 16.4 billion euros to 18.8 billion euros over the same period. These figures suggest gradual progress, but are still a long way short of the 69.5 and 23.1 billion euros of credit for housing and consumption, respectively, in 2010.

In the case of new lending to firms (right pane of Exhibit 2), credit to SMEs (using transactions valued less than one million euros as a proxy) came

Exhibit 2

Flow of new credit
(Billion euros)
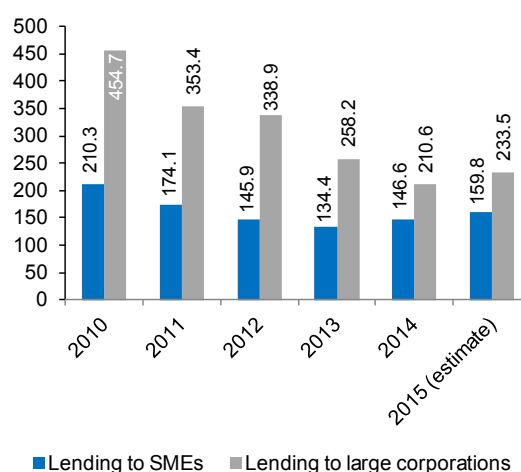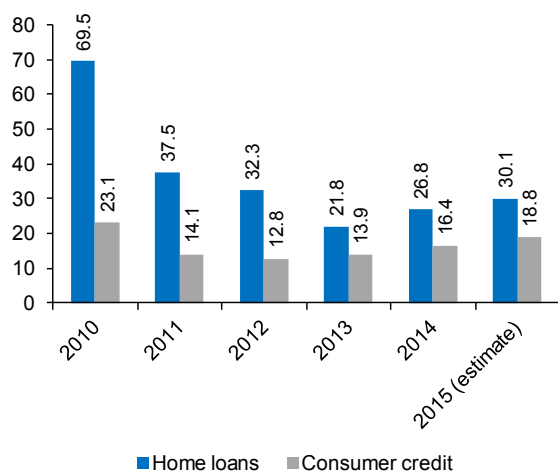
Source: Bank of Spain, the authors, and authors' estimates for 2015.

to 146.6 billion euros in 2014, and it is estimated that it will end 2015 at 159.8 billion euros. This figure still contrasts with the figure of 210.3 billion in 2010. In the case of large enterprises, new credit in 2014 came to 210.6 billion euros in 2014 and is expected to rise to 233.5 billion euros in 2015. However, large enterprises seem to be making a bigger effort to pay down debt, as the volume of transactions in 2010 was 454.7 billion euros.

Both the flows and the cost of this private sector financing have improved. Thus, the Bank of Spain's October *Economic Bulletin* reported that "interest rates on new credit to non-financial corporations fell in August compared to the previous month by 31 basis points (bp) in the case of transactions for a value of over a million euros (to 1.8%) and just 1 bp for smaller transactions (to 3.7%)."

Deleveraging effort

"Deleveraging" has been one of the most frequently used terms in reports on Spain in recent years. It is generally understood to be a necessary rebalancing

that demands short-term sacrifices but supports long-term growth. In a recent speech,[5] the governor of the Bank of Spain said that "debt-to-GDP ratios of both non-financial corporations and households continued to moderate and are well below the peaks reached in 2010 during the previous cycle, thus narrowing the gap between Spain and the average debt-to-GDP ratios in the Economic and Monetary Union countries. For the euro area as a whole, the gradual improvement in aggregate credit has continued, with an increase, albeit moderate, in loans extended both to financial corporations and households. The ongoing relaxing of loan approval criteria is also perceptible across the euro area as a whole, except in the case of stricter criteria for home loans, due to the regulatory changes approved in a number of countries."

An initial perspective is given by the household sector liquidity reference, for which bank deposits are a proxy. Deposits have behaved erratically since 2009, although since 2013 they have stabilised at around 750 billion euros, as against 704.1 billion euros in 2009 (Exhibit 3). What is most striking,

Exhibit 3

Bank deposits: Trends by types (2009-2015)
(Billion euros)
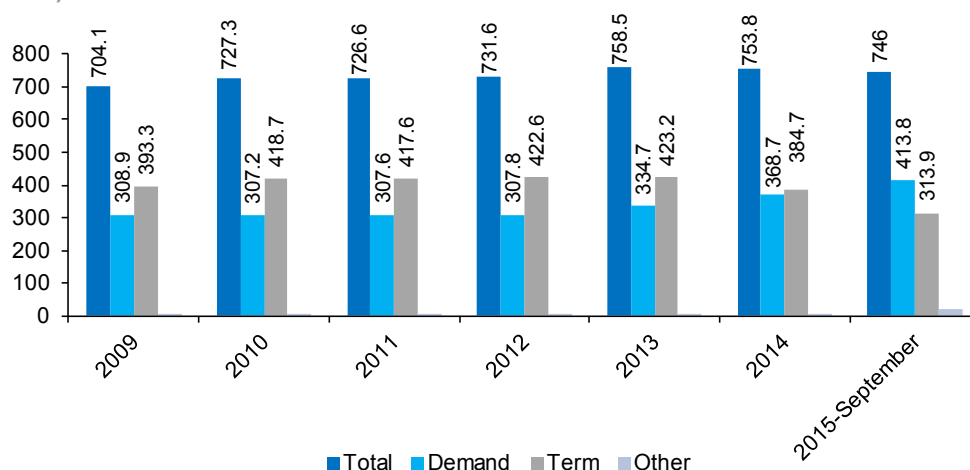
Source: Bank of Spain and the authors' calculations.

[5] VI Encuentro Financiero: "De la reestructuración a la transformación" [From restructuring to transformation] *Expansión/ KPMG*. October 20th, 2015, http://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/IntervencionesPublicas/Gobernador/Arc/ Fic/linde201015.pdf

Exhibit 4

Loans-to-deposits ratio (2009-2015)
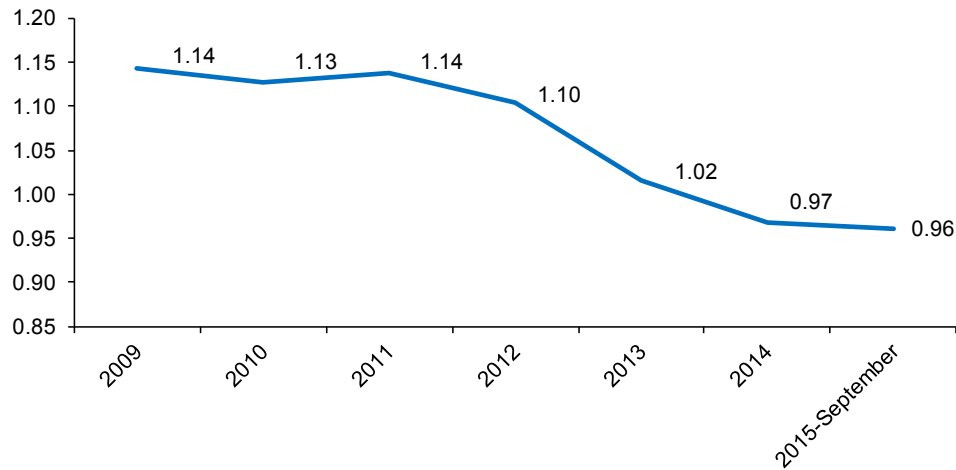
Source: Bank of Spain and the authors' calculations.

however, is the change in composition, as demand deposits have increased, while term deposits have declined. This is partly due to the competition between deposit-taking institutions, offering attractive demand deposit rates to capture liquidity.

Even though it is an imperfect indicator, one of the most commonly used measures to approximate

the private sector's leverage is the loans-to-deposits ratio. Exhibit 4 shows how this ratio was above unity in 2009 (1.14) but dropped to 0.96 in subsequent years, mainly as a result of debt reduction efforts.

Just how much have households and firms reduced debt? Exhibit 5 shows the progress

Exhibit 5

Debt in the form of debt securities and loans (2007-2015)
(Percentage)
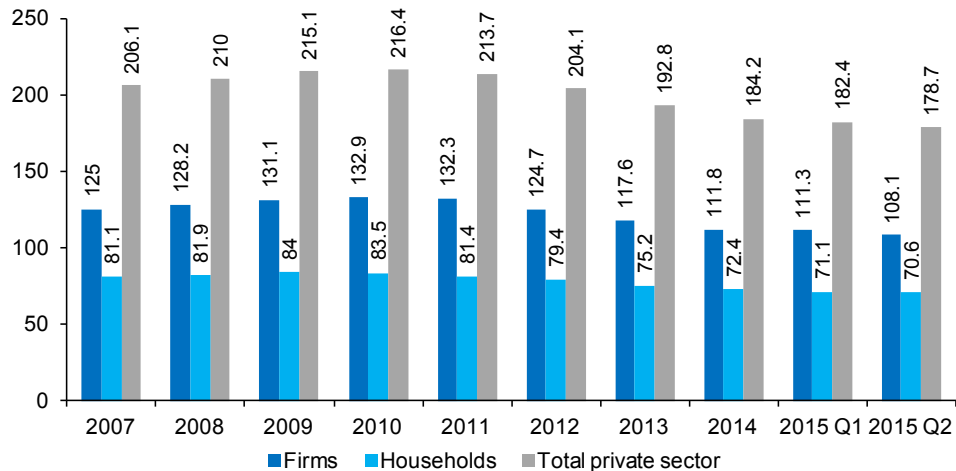
Source: Bank of Spain and the authors' calculations.

Exhibit 6

Private sector deleveraging effort (2010-2015)

■ %GDP

■ Billion euros
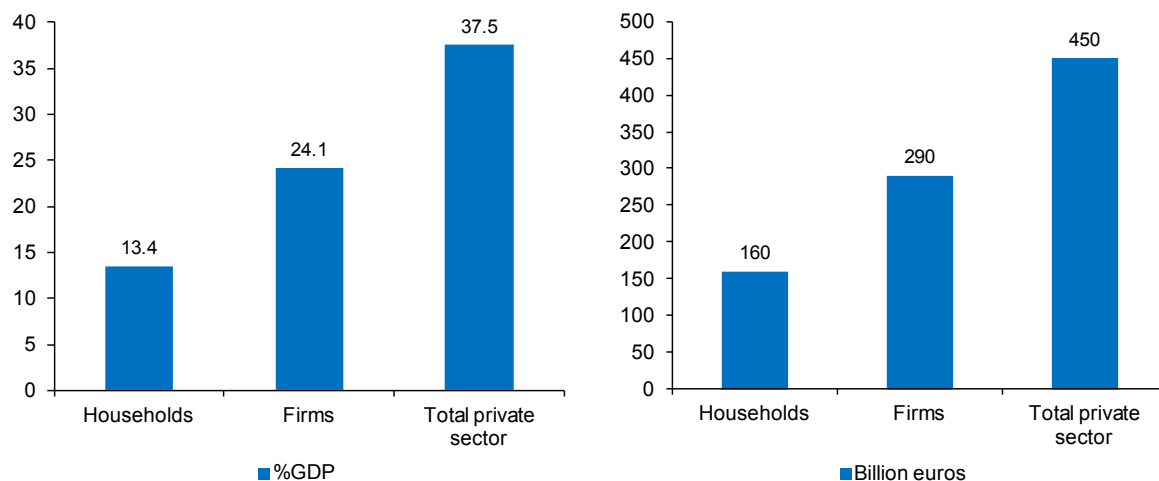
Source: Bank of Spain and the authors' calculations.

of debt in the form of debt securities and loans between 2007 and 2015. According to data from the Bank of Spain's Financial Accounts of the Spanish Economy, this ratio represented 206.1% of GDP for the private sector as a whole in 2007, rising to 216.4% in 2010, before dropping back to 178.7% in the second quarter of 2015. Households' debt-to-GDP ratio reached 83.5% in 2010, but had dropped to 70.6% in the second quarter of 2015. Firms' leverage dropped from 132.9% to 108.1% of GDP over this same period.

At the current rate of deleveraging, the government estimates that the ratio of household debt to GDP will be in line with that in Germany and France in 2018, and that the outstanding mortgage lending balance will be half of current levels between 2020 and 2023.

Exhibit 6 summarises progress on deleveraging. Between 2010 and June 2015, households and firms had reduced their debt by 450 billion euros,

or 37.5 percentage points of GDP (households by 160 billion euros and firms by 290 billion euros). With this rate of deleveraging, in its monthly report for investors,[6] the government estimates that the ratio of household debt to GDP will be in line with that in Germany and France in 2018, and that the outstanding mortgage lending balance will be half of current levels between 2020 and 2023.

Savings and financial wealth (2007-2015)

Under the financing and debt conditions described, how have the private sector's financial saving progressed? The first part of the answer may be found in Exhibit 7, which shows the net financial transactions to GDP ratio, or net financial savings. This rate has gone from negative values in almost all sectors before the crisis to an increase of up to 2% for the country as a whole in June 2015 (3.8% for households and 1.5% for firms).

This trend is a result of several factors, such as improved market conditions (it is worth recalling that assets are valued at market prices in the

[6] http://www.thespanisheconomy.com/stfls/tse/ficheros/2014/151005_Kingdom_of_Spain.pdf

Exhibit 7
Net financial saving/GDP (2007-2015)
(Percentage)
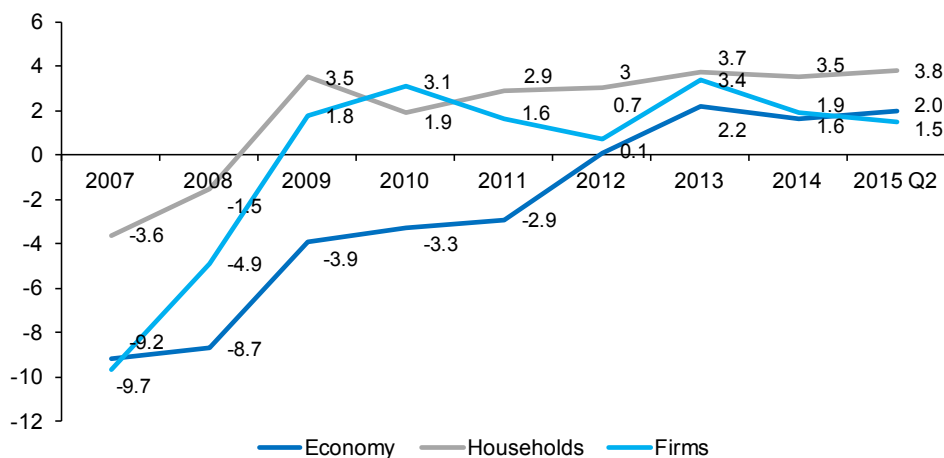
Source: Bank of Spain and the authors' calculations.

financial accounts) and increased disposable income since 2013. Exhibit 8 can be used to examine what recent factors are encouraging improvements in net financial saving, among both households and firms. The exhibit shows the balance at the start and end of the second quarter of 2015. Despite an unfavourable quarter for the market, with firms' assets depreciating by 31,216 million euros and households' assets losing 22,605 million euros, volume transactions grew by around 50 billion euros across the private sector as a whole, allowing households' and firms' financial balance sheets to remain over 2.06 trillion and 2.11 trillion euros in June 2015, respectively.

Exhibit 8
Link between the financial balance sheet at the start and end of 2015 Q2
(Million euros)
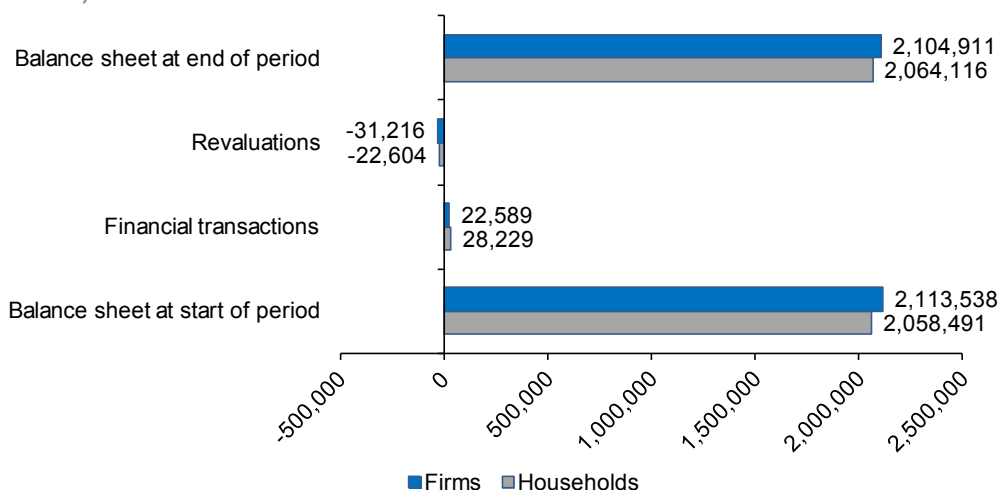
Source: Bank of Spain and the authors' calculations.

Exhibit 9
Net financial wealth of households and firms (2007-2015)
(Million euros)
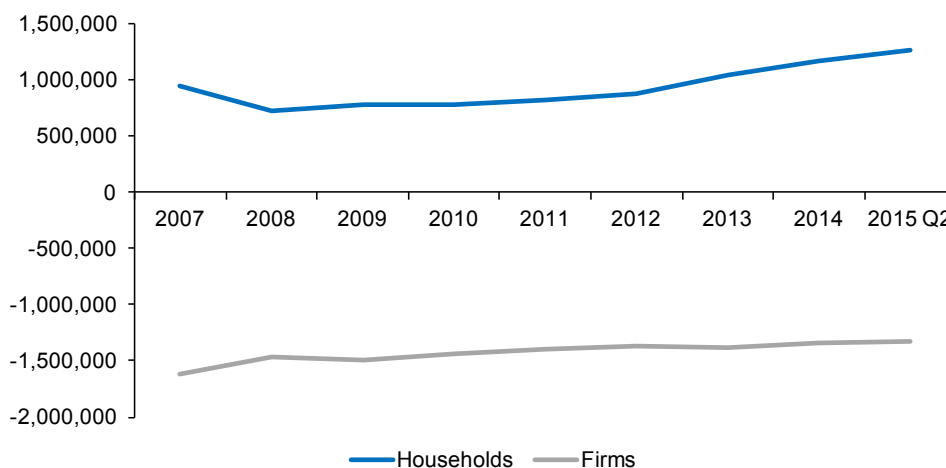
Source: Bank of Spain and the authors' calculations.

In any event, more than the recovery in assets, what has improved the situation of the private sector has been firms' debt reduction, as discussed above. In particular, in June 2015 households had

> *More than the recovery in assets, what has improved the net financial wealth of the private sector has been firms' debt reduction.*

achieved net financial wealth (financial assets less liabilities on their balance sheet) of 1.26 trillion euros, compared with 0.72 trillion in 2008. In the case of firms, their net financial balance is negative given their higher debt level, but it has gone from -1.49 trillion in 2010 to -1.33 trillion in June 2015.

In short, the data presented here show that Spain's deleveraging effort has been significant, and is compatible with a gradual recovery in new lending flows and financial saving. These are rebalancing mechanisms in which debt repayment still outweighs new lending, but all the

signs suggest that 2016 may be the year in which the tide turns and the opposite starts to be true.

References

BAUER, R. A., and B. J. NASH (2012), "Where Are Households in the Deleveraging Cycle?," *Economy in Brief*, Nº 12-01, Federal Reserve Bank of Richmond.

CHEN, S.; MINSUK, K.; OTTE, M.; WISEMAN, K., and A. ZDZIENICKA (2015), *Private Sector Deleveraging and Growth Following Busts*, WP/15/35, International Monetary Fund.

GLICK, R., and K. J. LANSING (2009), *U.S. Household Deleveraging and Future Consumption Growth*, FRBSF Economic Letter.

MCCARTHY, Y., and K. MCQUINN (2014), *Deleveraging in a highly indebted property market: Who does it and are there implications for household consumption?,* Research Technical Paper 05/RT/14, Central Bank of Ireland.

Post-restructuring challenges for the Spanish banking sector

Joaquín Maudos[1]

In the wake of the crisis, Spanish banks have become more solvent and returned to profitability. However, unique macroeconomic conditions, especially the current low interest rate environment, together with increased capital requirements, will require further efforts to boost efficiency and reinvent business strategies to secure positive profits going forward.

The crisis had a severe negative impact on the Spanish banking sector. However, profitability has returned in 2013 and has since remained in positive territory, albeit constrained below pre-crisis levels in the context of the current low interest rate environment. As regards non-performing loans (NPLs), they have declined overall since their peak. Still, the concentration of bad loans related to construction and development, as well as the overall NPL rate in this sector, remains high. Finally, in line with more stringent new capital requirements, Spanish banks have improved their solvency indicators, with capital ratios for deposit-taking institutions that are above Basel III minimum requirements. On the downside, even though there have been significant reductions in employees and number of branches, Spanish banks have not been able to sufficiently increase efficiency indicators. Thus, despite notable progress post-crisis, today´s difficult climate requires further efficiency gains, together with the adoption of new business strategies reliant on increasing scale, internationalisation, and further expansion of on-line services in order to adapt to profitability challenges.

Introduction

The imbalances accumulated in the Spanish banking sector in the pre-crisis expansionary period ultimately forced a profound restructuring and reorganization of the sector. Imbalances were so severe in parts of the banking sector that the Spanish government had to request financial assistance from the European Union. The conditions established in the Memorandum of Understanding (MoU) accompanying the assistance programme have helped bolster the sector's viability. The restructuring and the end of the recession have been the cornerstones of the sector's return to profitability and its ability to extend credit. Moreover, having provisioned resources equivalent to 27% of GDP to

writing-off asset impairment losses since the start of the crisis, profitability of Spanish banks is now on the rise, along with the growth rate of new lending. At the same time, banks have made a significant effort to bring capitalisation levels in line with even the most demanding solvency requirements, as evidenced by the their successful performance on the ECB and EBA's 2014 stress tests.

Nonetheless, in the wake of the financial crisis, the Spanish banking system still faces significant challenges for a number of reasons: i) the process of private sector deleveraging, although intense, is still incomplete, and is holding back the potential recovery in banking activity; ii) the current low interest rate environment is having a negative impact on net interest margins, limiting profitability; iii) the potential to offset the drop in interest income with earnings from financial transactions has lost momentum (low interest rates are making it difficult to obtain capital gains – *i.e.*, lower interest rates on public debt have made the carry trade less attractive); iv) new capital requirements call for more and better quality capital, and capital is difficult to attract as the current yield offered to investors is low; and finally, v) the large volume of non-performing assets still held on banks´ balance sheets is slowing the recovery in profits and the reactivation of credit.

In this context, it is difficult to raise profitability above the cost of capital, making efficiency gains and cost rationalisation more necessary than ever. This is a challenging goal bearing in mind that, although the network of branches has been cut by 31% and jobs by 25%, it is proving difficult to reduce costs per unit of assets – they have even increased in 2014 and 2015. For this reason, efficiency gains have been hard to achieve and efficiency today is below pre-crisis levels.

On top of these difficulties, increased competition poses a no less important challenge. Competition is set to increase on two fronts: domestically, manifesting itself through a narrowing of the interest margin banks are charging on their loans as they try to win business; and, internationally,

deriving from progress on the banking union. Implementing the two pillars of this union (the Single Supervisory Mechanism and the Resolution Mechanism), together with harmonisation of standards in the singe rule book, will bring about a more competitive marketplace.

Against this background, this article aims to analyse recent developments in the Spanish banking sector, over a period that captures both the impact of the crisis and the recovery, using the most recent data available, which refer to June 2015. Given the information available from the Bank of Spain, the analysis based on income statements (margins, profitability, efficiency, income structure, etc.) refers to deposit-taking institutions (business in Spain), while the rest of the analysis (activity, specialisation, capacity indicators, etc.) refers to credit institutions.

This article is subdivided into two sections: one analysing recent developments in the Spanish banking sector in terms of activity, specialisation, margins, profitability, liquidity, asset quality, solvency and efficiency; and another discussing the challenges facing the sector and the vulnerabilities it needs to overcome.

Recent developments in the Spanish banking sector

Activity and specialisation

Following the rapid growth during pre-crisis expansion, the crisis made a clear impact on the size of the Spanish banking sector's balance sheet. After growing at an average annual rate of 14.6% between 2000 and 2007, the rate turned negative during the crisis (Table 1). Nevertheless, assets continued to grow until 2012, subsequently dropping by 17% to June 2015. Given the weight of residential private sector lending in the balance sheet, both its intense growth in the expansionary phase (growing by a factor of 3.3 between 2000 and 2008) and the subsequent plunge (a

Table 1

Spanish banking system balance sheet (credit institutions)
(Billion euros)

a) Assets

	Total assets	Interbank lending	Credit to public sector	Credit to domestic resident sector	Credit to non-residents	Fixed income	Equity	Others assets
2000	1,133	145	31	559	96	139	75	87
2007	2,946	246	43	1,760	254	268	184	191
2008	3,224	263	53	1,870	253	326	172	287
2009	3,238	247	65	1,837	237	415	184	254
2010	3,252	234	79	1,844	230	384	180	301
2011	3,400	251	90	1,783	234	406	251	387
2012	3,423	279	114	1,605	232	509	258	426
2013	3,026	211	87	1,448	180	493	280	326
2014	2,913	155	101	1,380	169	492	262	353
2015 June	2,832	160	98	1,358	174	459	245	339
Annual growth rate 2000-07	14.6%	7.8%	4.5%	17.8%	14.9%	9.9%	13.6%	11.9%
Annual growth rate 2007-15	-0.53%	-5.6%	11.6%	-3.4%	-4.9%	7.4%	3.9%	7.9%

b) Liabilities

	Total liabilities and shareholder's equity	Interbank deposits	Public sector deposits	Domestic resident sector deposits	Deposits from non-residents	Debt issued	Shareholder's equity	Others
2000	1,133	162	21	491	237	55	77	90
2007	2,946	269	75	1,323	442	426	175	237
2008	3,224	315	76	1,433	505	395	181	320
2009	3,238	305	82	1,427	507	434	190	294
2010	3,252	270	79	1,440	511	433	178	340
2011	3,400	373	70	1,373	492	435	220	439
2012	3,423	573	69	1,317	339	394	195	535
2013	3,026	381	63	1,314	306	297	233	430
2014	2,913	312	76	1,289	320	249	230	436
2015 June	2,832	317	76	1,276	314	227	225	396
Annual growth rate 2000-07	14.6%	7.5%	20.1%	15.2%	9.3%	34.2%	12.4%	14.8%
Annual growth rate 2007-June15	-0.53%	2.2%	0.1%	-0.5%	-4.5%	-8.1%	3.4%	7.1%

Note: Average values for December of each year and the preceding year.
Source: Bank of Spain.

contraction of 27% between 2008 and June 2015) explains how assets have evolved. Over time, the rate of decline has slowed, dropping to around 4% in mid-2015. The crisis barely affected growth in fixed-income investments, such that they account for a much larger share of the balance sheet today (16%) than they did in 2007 (9%). This increase is

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The crisis barely affected growth in fixed-income investments, such that they account for a much larger share of the balance sheet today (16%) than they did in 2007 (9%). This increase is explained by investment in public debt, as it has more than tripled as a share of assets: from 2.9% in 2007 to 9.1% in 2015.

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explained by investment in public debt, as it has more than tripled as a share of assets: from 2.9% in 2007 to 9.1% in 2015. Nevertheless, the current level is only slightly higher than that at the start

of the 2000s. In the case of equities, their share of total assets is currently higher (8.7%) than it was before the crisis in 2007 (6.2%).

On the liabilities side, other resident sector (ORS) deposits have suffered the impact of the crisis. After growing at a rate of 15.2% up until 2007, since the crisis, their average growth rate has been -0.5%. This evolution is similar to that of the balance sheet as a whole, such that their share of assets remains 45%. As a consequence of banks taking full advantage of ECB financing, interbank financing peaked at 17% of assets in 2012, although it had slipped back to 11.2% in June 2015. Market issuance of debt grew strongly between 2000 and 2007, given the shortage of deposits to finance such rapid credit growth, such that it went from representing 4.8% of assets in 2000 to 15% in 2007. The difficulties accessing wholesale markets during the crisis had reduced this share to 8% in June 2015. Finally, the crisis caused own funds to shrink in relative terms to a minimum of 5.4% in 2010. However, the new regulatory requirements had obliged institutions to bring them up to 8% in the summer of 2015.

Exhibit 1

Percentage distribution of credit to ORS (credit institutions)
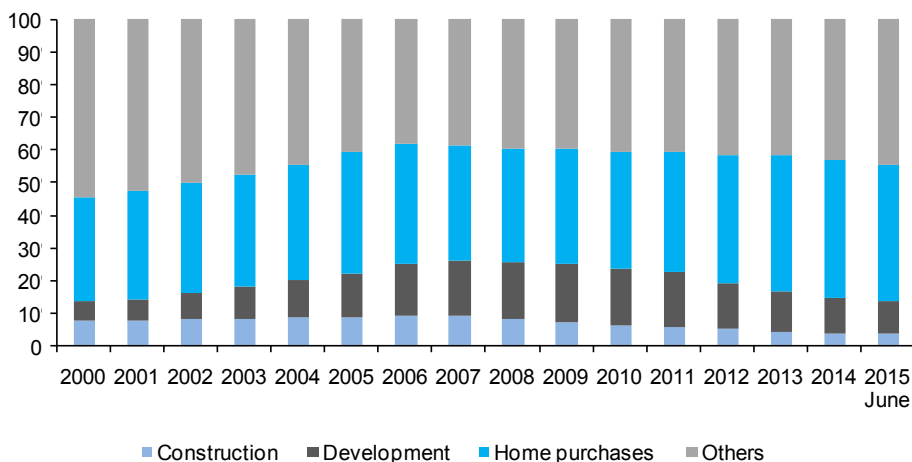
Source: Bank of Spain.

The composition of credit, the most significant variable concerning banks' assets, changed substantially throughout the crisis relative to the years of expansion. As Exhibit 1 shows, lending to

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Given that defaults have risen exponentially in the construction and property development sector, the biggest decline in credit has been in these two sectors, their total share of credit having halved.

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construction and property development activities peaked at 27% in 2007. Considering lending for housing purchases as well, the construction and

property sector as a whole came to account for 61% of lending. This lending has subsequently declined, dropping to 13.6% and 55%, respectively, in June 2015. Given that, as we shall see, defaults have risen exponentially in the construction and property development sector, the biggest decline in credit has been in these two sectors, their total share of credit having halved.

Margins and profitability

The crisis has adversely affected the quality and value of banks' assets, necessitating massive write-offs. Between 2008 and June 2015, the Spanish banking system devoted 282 billion euros of net margin to provisions, to cover both financial (206 billion) and non-financial assets (76 billion).

Table 2

Spanish banking system income statement (deposit-taking institutions)
(Percentage of Average Total Assets)

	2000	2007	2008	2009	2010	2011	2012	2013	2014	2015 June*
Financial revenues	4.57	4.32	4.78	3.32	2.47	2.64	2.47	2.12	1.94	1.79
Financial costs	2.77	3.10	3.59	1.93	1.37	1.71	1.47	1.25	0.98	0.80
NET INTEREST INCOME	1.80	1.22	1.19	1.38	1.10	0.93	1.01	0.87	0.96	0.99
Non-interest income	1.19	1.25	1.05	0.79	0.93	0.87	0.82	0.94	1.00	0.96
Dividends	0.38	0.43	0.41	0.25	0.39	0.41	0.46	0.29	0.35	0.31
Net commissions	0.71	0.52	0.44	0.39	0.38	0.37	0.35	0.36	0.40	0.41
Trading gains	0.04	0.24	0.16	0.11	0.14	0.10	0.10	0.32	0.31	0.26
Other net income	0.06	0.07	0.04	0.04	0.03	-0.01	-0.08	-0.03	-0.05	-0.01
TOTAL OPERATING INCOME	2.99	2.48	2.24	2.17	2.03	1.79	1.83	1.81	1.96	1.95
Operating expenses	1.88	1.07	0.99	0.95	0.94	0.89	0.83	0.87	0.92	0.94
NET INCOME	1.11	1.41	1.24	1.23	1.09	0.90	1.00	0.94	1.04	1.00
Net provisions	0.30	0.06	0.11	0.04	0.13	0.06	0.20	0.07	0.07	0.07
Loan loss provisions	0.21	0.31	0.51	0.63	0.54	0.71	2.54	0.71	0.51	0.48
OPERATING PROFIT	0.60	1.05	0.61	0.55	0.42	0.13	-1.73	0.16	0.46	0.46
Non-financial assets loss provisions	0.00	0.05	0.03	0.24	0.17	0.68	1.03	0.13	0.05	0.07
Other income	0.37	0.11	0.10	0.15	0.06	0.00	0.08	0.11	0.06	0.07
PROFIT BEFORE TAXES	0.96	1.12	0.69	0.46	0.32	-0.55	-2.68	0.14	0.46	0.45
Net attributable income	0.81	0.96	0.62	0.42	0.31	-0.46	-0.69	-0.15	0.06	0.09

*Note: * Last 12 months.*
Source: Bank of Spain.

Exhibit 2

Profitability of Spanish banking system (deposit-taking institutions)
(Percentages)

*Note: * Last 12 months.*
Source: Bank of Spain.

The Royal Decrees enacted in February and May 2012 required intense restructuring of banks' property exposure, with provisions consequently coming to 356% of net margin that year, resulting in banks´ generating losses, with an ROA of -2.7% and ROE of -42.7%. Banks also recorded losses in 2011, with write-offs equivalent to 155% of net margin.

Between 2008 and June 2015, the Spanish banking system devoted 282 billion euros of net margin to provisions, to cover both financial (206 billion) and non-financial assets (76 billion).

2013 was a turning point for banks' profitability, as the Spanish economy emerged from recession in the second half of the year. After the restructuring of property exposure in 2013, the year ended with pre-tax profit of 4.2 billion euros – a profit of 0.14% in terms of assets, and 2.01% in terms of equity. The recovery in profits continued in 2014, with

ROA of 0.46% and ROE of 6.01%. Up through the first half of 2015 (last 12 months) returns remained at 2014 levels, specifically 0.45% in terms of ROA and 5.86% in terms of ROE. These levels, however, are far from those reached prior the crisis in 2007: ROA of 1.13% and ROE of 20.2%.

The drop in money markets' benchmark interest rates to record lows makes it difficult to make profits, as this squeezes net interest margins. Net interest income (as a percentage of assets) has halved since the early 2000s and is currently down almost 20% on its pre-crisis level in 2007. Nevertheless, the bigger drop in expenses than financial income in 2014 and in the first half of 2015 has allowed margins to recover slightly, and they are currently 0.99%.

Gross profit margins fell by 21% as a percentage of assets after 2007, but have been growing since 2011. Banks reacted to the drop in net interest income by increasing their income from fees and financial transactions. Fees rose between 2014 and 2015 to represent 0.41% of assets, and income from financial transactions tripled its

Exhibit 3

Percentage of operating margin set aside for provisions (deposit-taking institutions)
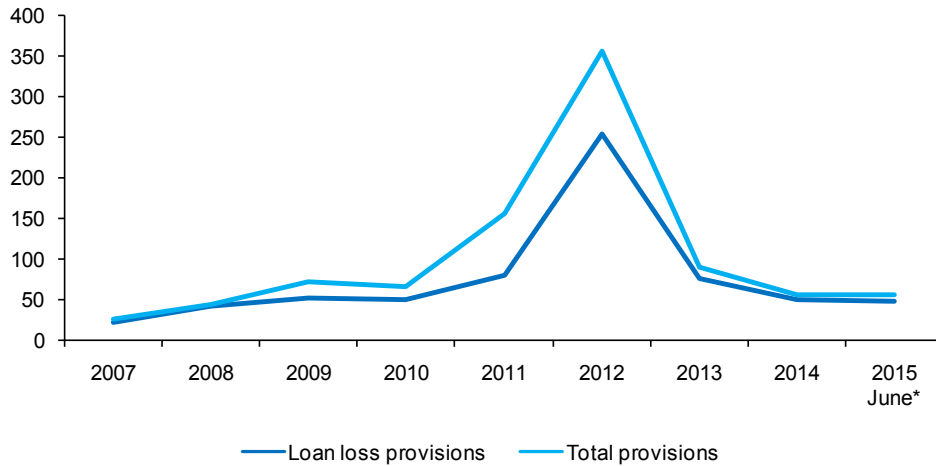
Note: * Last 12 months.
Source: Bank of Spain.

share relative to its value in 2011 and 2012, with a value equivalent to 0.26% of assets in June 2015. Without these non-recurrent revenues, Spanish banks' current profits would be halved.

Banks reacted to the drop in net interest income by increasing their income from fees and financial transactions. Without these non-recurrent revenues, Spanish banks' current profits would be halved.

Liquidity gap

During the credit boom, the Spanish banking system accumulated a widening liquidity gap. However, the subsequent slump in credit has largely corrected it. Thus, the private sector loans-to-deposits ratio increased from 1.4 in 2000 to 1.7 in 2007, with the liquidity gap widening from a value equivalent to 13.8% of assets in 2000 to 25.4% in 2007 (Exhibit 4). In June 2015, it was below its 2000 level at 1.2, equivalent to 7.6% of

assets. The gap, as a percentage of assets, is currently at a record low.

The reversal of the liquidity gap was not a consequence of a recovery in deposits, but rather of a collapse in credit. Thus, whereas between 2007 and June 2015, deposits increased by 13%, credit contracted by 23%. The biggest correction of the gap took place after 2011, and particularly in 2013, as in this year alone it shrank by 38% (165 billion euros).

Spain´s reliance on Eurosystem financing peaked in August 2012, when Spain requested financial assistance from the European Union at the height of tensions, accounting for 34% of ECB gross total lending. Dependence has dropped by a third, but still represents a large share of Eurosystem funding (26%).

The problems accessing wholesale markets when the crisis broke out, further exacerbated

Exhibit 4

Liquidity gap between ORS credit and ORS deposits (credit institutions)

Liquidity gap/Assets — C/D (r.h.s.)
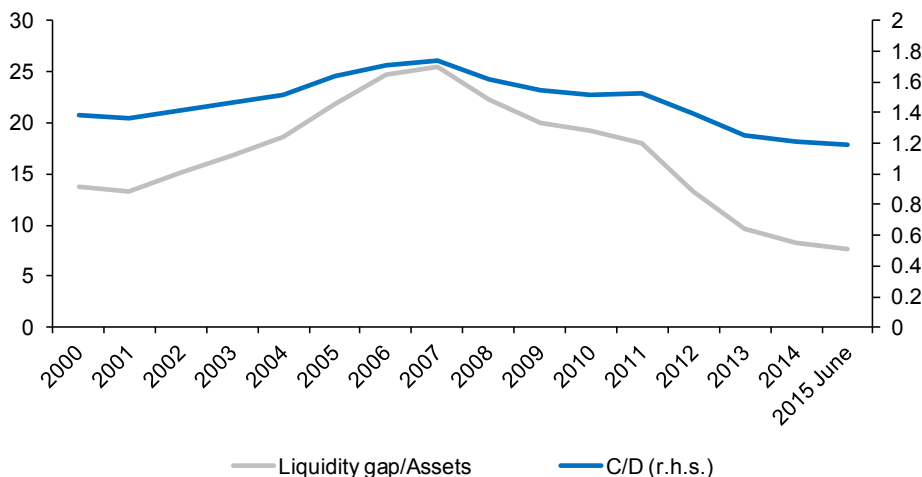
Source: Bank of Spain.

by the sovereign-debt crisis, forced Spanish banks to resort to ECB liquidity on a large scale. The low interest rates charged on this type of funding also made it particularly attractive. As Exhibit 5 shows, Eurosystem financing peaked at 411 billion euros in August 2012, at precisely the moment Spain requested financial assistance from the European Union at the height of tensions. From this high point, when the Spanish banking system accounted for 34% of the ECB's gross total lending, its dependence has dropped by a third, currently at 138 billion euros. This is nevertheless a large share of Eurosystem funding (26%).

Exhibit 5

Spanish banks' financing in the Eurosystem

Millions of euros — % of Eurosystem (r.h.s)
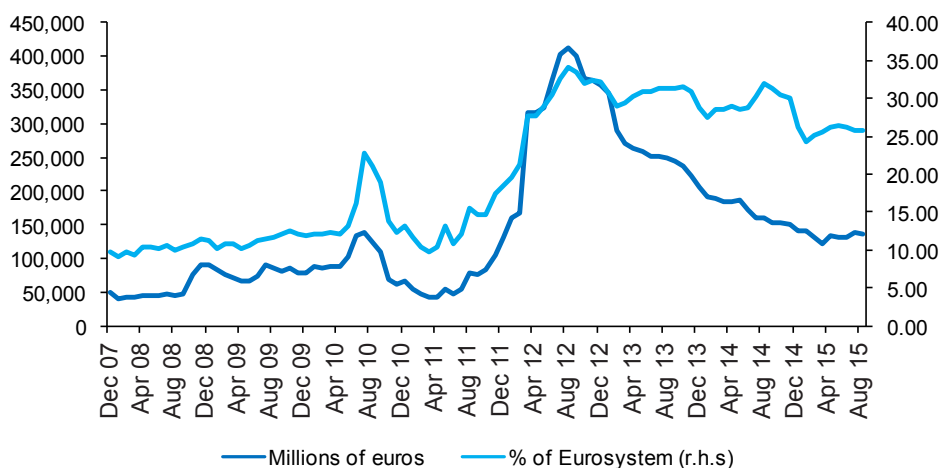
Source: ECB.

Asset quality

The quality of Spanish banks' assets deteriorated progressively as the property-market bubble burst, given the high concentration of risks in property-related activities (construction, property development, and mortgages). As already discussed, lending to this sector peaked at 61.5% of total credit to the resident private sector, and subsequently dropped to around 55% in mid-2015. However, construction and

Exhibit 6

Non-performing loan rate for loans to other resident sectors (credit institutions)
(Percentages)
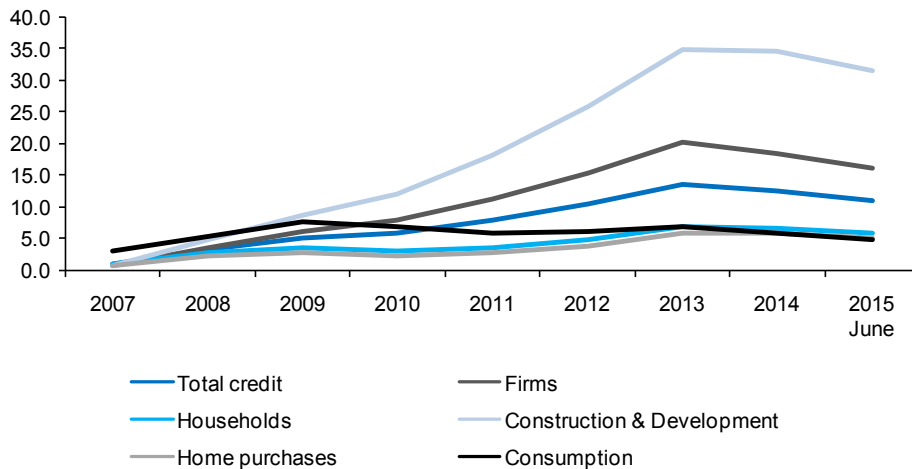
Source: Bank of Spain.

Exhibit 7

ORS non-performing loan rate and provision coverage rate
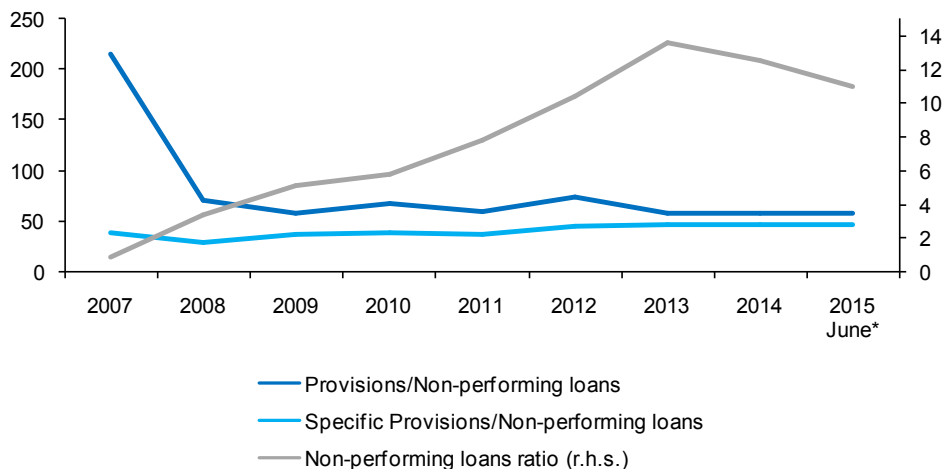
*Note: * Last 12 months for provisions.*
Source: Bank of Spain.

property development, the area of activity hardest hit by the crisis, had dropped from a peak of 27% of lending to around half that (13.6%) by June 2015.

Driven by the economic crisis, the non-performing loan rate rose exponentially between 2007 and 2013 (Exhibit 6). Since its peak at close to 14% it has been falling as the economy has emerged from recession, having dropped to 11% in June 2015. However, this average conceals significant differences across types of credit. In the case of property development and construction, non-performing loans reached a maximum of 35% in 2013, and although they have since fallen, the rate remains high (31.5%). By contrast, non-performing loans for housing purchases currently comprise 5.3% of the total. The non-performing loan rate on all types of loans has been falling continuously since January 2014, with doubtful loans valued at 147 billion euros in July 2015, a drop of 26% (50 billion euros) from the peak. At present, 39% of non-performing loans are in the property development and construction sectors (58 billion euros). This share rose as high as 51% in 2011.

One factor to bear in mind regarding doubtful assets is their provision coverage. After a sharp drop in the coverage ratio in 2008 as a result of the increase in non-performing loans, the ratio is currently 58%. In the case of specific provisions, coverage has been rising since 2011, and in June 2015 it was 47%.

Solvency

In the years of expansion up until 2007, Spanish banks' own funds grew more slowly than assets, with the result that proportionally they fell from

Spanish deposit-taking institutions' solvency ratio at June 2015 was 14.3% and the common equity tier 1 capital ratio (CET1) was 12.4%. Both these values are above the minimum required (8% and 6%, respectively).

6.4% of assets in 2000 to 5.9% in 2007 (Exhibit 8). This drop continued until 2010 (5.7%). Since

Exhibit 8
Own funds/assets ratio. Credit institutions
(%)
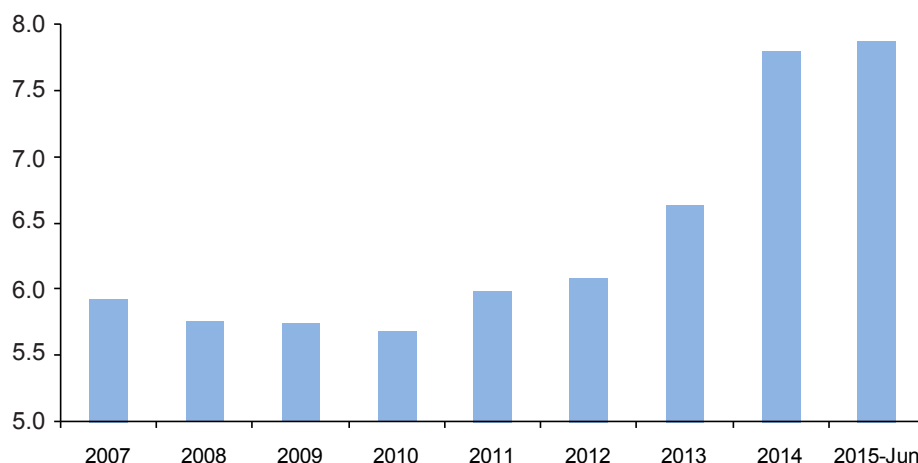
Source: Bank of Spain.

then the ratio has gradually increased, rising to a new high of 7.9% in June 2015. The leverage ratio has fallen since 2010, when it was 17.6, to 12.7 in June 2015. This represents a significant capitalisation effort, and has allowed the Spanish banking system to meet the requirements of the MoU and the new capital requirements under Basel III. In particular, Spanish deposit-taking institutions' solvency ratio at June 2015 was 14.3% and the common equity tier 1 capital ratio (CET1) was 12.4%. Both these values are above the minimum required (8% and 6%, respectively). There has also been an improvement in the quality of capital, as 87% of the total is top quality capital (CET1).

Efficiency and costs

In a context of low interest rates and narrow margins, and with a declining volume of assets due to the deleveraging of the economy, it is essential that banks rationalise their costs in order to improve their efficiency. Although banks gained efficiency during the expansion thanks to a sharp

drop in operating expenses (which fell by 43% as a percentage of assets), current efficiency levels (Exhibit 9) are below pre-crisis levels as a result of gross margins shrinking faster than operating expenses. The current efficiency ratio is therefore 48.5%, 5.2 pp worse than in 2007. Consequently, despite the correction in overcapacity, with the closure of more than 14,000 branches (a cut of 31%) and a cut in employment of 70,000 (25%) since the peak in 2008 (Exhibit 10), the sharp drop in banks' margins has meant this effort has been insufficient to achieve efficiency gains.

In terms of recurrent efficiency (eliminating earnings from financial transactions), the trend was similar up until 2012 but differed in subsequent years due to the increased share of this type of non-recurrent revenues. This efficiency ratio is currently 8.2 pp higher (meaning efficiency is lower) than in 2007. It deteriorated sharply in 2013 (increasing by almost 11 pp) and only managed to improve by 2.8 pp in 2014 and 2015, ending the period at 55.9%, which is close to the 2014 level.

Exhibit 9

Efficiency of Spanish banking system (deposit-taking institutions)
(Percentages)

Cost to income ratio
Cost to income ratio (without trading gains)
Operating costs/Assets (r.h.s.)
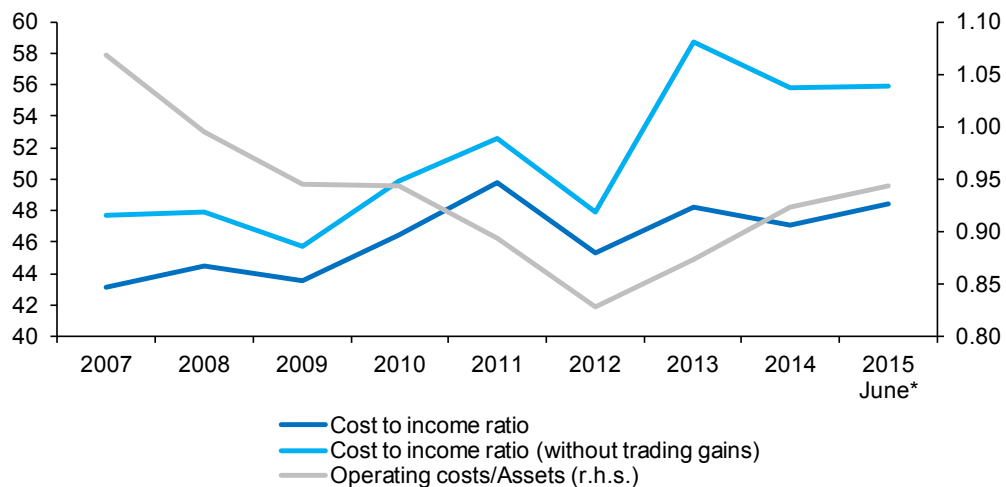
*Note: * Last 12 months.*
Source: Bank of Spain.

Exhibit 10

Number of employees and branches of Spanish credit institutions
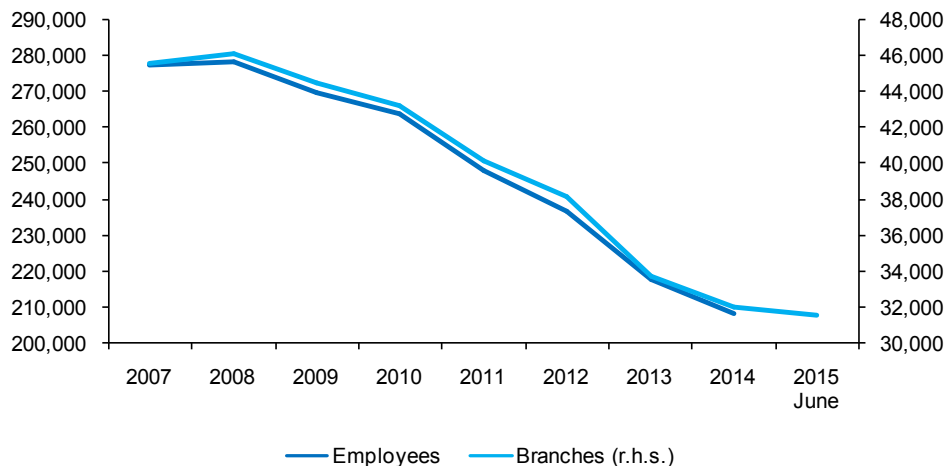
Source: Bank of Spain.

26 Challenges facing the Spanish banking sector

The recent evolution of the Spanish banking sector shows a return to profitability after the enormous impact of the crisis, which required write-offs equivalent to 27% of GDP, and caused the sector to post negative returns in 2011 and 2012. Correcting the imbalances that built up during the expansion has required a profound restructuring that has manifest itself in the shedding of overcapacity and the consolidation of the sector.

Although the restructuring and write-offs have made public aid necessary (largely financed from the European bail-out funds), the level of aid is similar to the European average (between 2008 and 2014 the cumulative aid was equivalent to 5% of Spanish GDP, compared with 4.7% in the eurozone as a whole), although, unfortunately, the impact on the public deficit has been bigger in Spain (4.4% of GDP compared with 1.8% in the eurozone as a whole).

The adjustment has allowed the Spanish banking system to become well positioned on the ranking of EU banking sectors in terms of profitability and efficiency. The latest comparable data from the ECB's statistics refer to June 2014 at the consolidated group level. As Exhibit 11 shows, the Spanish banking system enjoys high net interest and operating margins, its operating expenses per unit of assets are similar to the European average, it tops the ranking among the main EU countries in terms of operating margins, its profitability is above the European average, and it is the most efficient in the group of countries analysed. The Spanish banking sectors´ poorest performance is on the solvency ratio, with a value 2.2 points below the average for the EU's banks. However, this indicator should be interpreted with caution given the differences in the way risk-weighted assets are measured.

Although the banking crisis is now behind us, current profitability levels are low and are a long way short of pre-crisis levels. The sector's average ROE is currently 5.9%, a low and insufficient level relative to the cost of attracting capital (around 8%, according to some recent estimates). This problem is not unique to Spanish banks, as according to the IMF's latest financial stability report, dated October

Exhibit 11

Main indicators for European banking sectors (consolidated groups) June 2014
(Percentage)

Net interest income
(% total assets)

Greece, Spain, Austria, Italy, Belgium, Netherlands, Portugal, EU, Denmark, Ireland, France, UK, Germany, Finland, Luxembourg

0 1 2

Total operating income
(% total assets)

Austria, Greece, Italy, Spain, Portugal, France, Belgium, EU, UK, Ireland, Denmark, Netherlands, Germany, Luxembourg, Finland

-0.5 1.5 3.5

Operating expenses
(% total assets)

Austria, Italy, Greece, Portugal, France, Spain, EU, Belgium, UK, Germany, Netherlands, Ireland, Denmark, Luxembourg, Finland

0 1 2 3

Operating profits
(% total assets)

Spain, Greece, Italy, Denmark, Luxembourg, Belgium, EU, Ireland, Portugal, UK, France, Netherlands, Finland, Austria, Germany

-0.4 0.6 1.6

ROA

Luxembourg, Spain, Denmark, Belgium, Ireland, UK, Finland, Greece, Netherlands, EU, France, Germany, Italy, Austria, Portugal

-2 -1 0 1

ROE

Denmark, Finland, Luxembourg, Belgium, Spain, UK, Netherlands, France, Germany, EU, Ireland, Greece, Italy, Austria, Portugal

-31 -11 9

Cost-to-income ratio
[%]

Austria, Germany, France, Portugal, Netherlands, UK, EU, Belgium, Italy, Ireland, Greece, Denmark, Finland, Luxembourg, Spain

40 60 80

Total capital
(% total assets)

Ireland, Luxembourg, Denmark, Belgium, Germany, Netherlands, UK, Greece, Finland, Austria, EU, Italy, France, Spain, Portugal

8 13 18

Source: ECB.

2015, the ROE of banks in developed countries has fallen from 13.2% over the period 2000-06 to 8.2% in 2014. In 2014, Eurozone banks' ROE was around 2.5%, compared with 9% in North America. Almost 70% of the drop in profitability in developed countries is due to stricter capital requirements. The

eurozone banks' lower profitability is due to their large volume of non-performing assets.

In this context, one of the biggest challenges facing the Spanish banking system is to raise its profitability. This is far from easy in an environment

of low interest rates, which are damping the recovery in margins, and increased regulatory pressure, with stricter capital requirements. Although net interest income rose slightly in 2014 and the first half of 2015 as financial costs fell more than income, if the benchmark rates in the money markets remain at their current levels, they will have a negative impact on margins, as although there may be scope for lower lending rates (which continue to drop as a result of more intense competition), the same is not true for borrowing rates.

The key variable in this scenario becomes efficiency. And improving efficiency will mean cutting costs. However, as we have seen, despite the intense correction to overcapacity, costs per unit of assets have barely dropped, and indeed have increased since 2012. Spanish banks therefore need to continue rationalising costs, which could encourage (as the ECB and Bank of Spain have recently suggested) further mergers as banks aim for economies of scale in order to reduce their costs. In parallel, progress developing on-line and mobile banking is an essential part of cost cutting, although the benefits will not materialise in the short term. In any event, other channels offering an alternative

to traditional branches as a means of accessing banking services should be given more importance. This is particularly relevant in Spain's case, given that it has Europe's densest branch network and smallest average branch size.

One of the lessons of the banking crisis in Spain has been the importance of geographical diversification. Spain's two largest banking groups have weathered the storm best not only thanks to sound management, but also because of the advantages of diversification. The basic principle that "diversification reduces risk" has been reflected faithfully in the bottom line of Spain's two largest banking groups. Therefore, the new banking groups that have emerged in Spain out of the restructuring, and those that may emerge from future mergers, should look to expand internationally, particularly bearing in mind that business in Spain is likely to be sluggish for some time as a result of the deleveraging still underway.

Another vulnerability is the large volume of non-performing assets. This is a problem that has been highlighted by the IMF in its latest report on the European banking sector. Spanish banks have

Exhibit 12

Income structure of Spanish banking system (deposit-taking institutions)
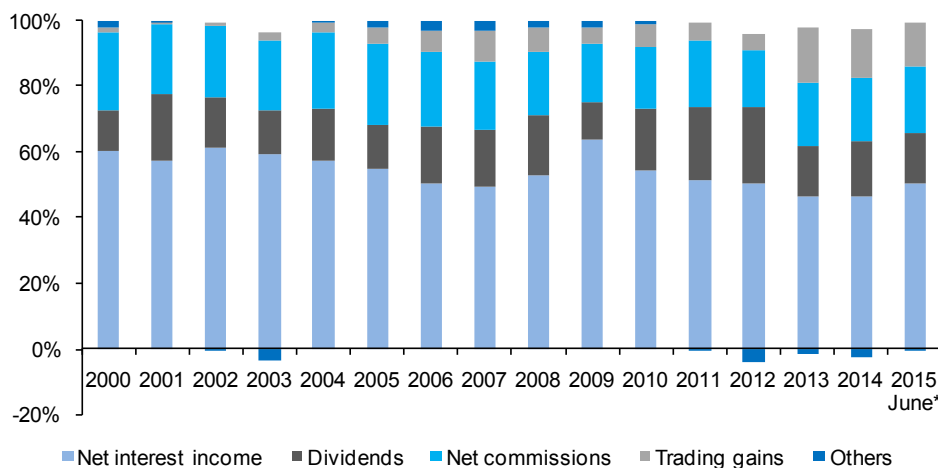
Note: * Last 12 months.
Source: Bank of Spain.

Exhibit 13

Share of public debt income in total financial income and total fixed-income earnings (deposit-taking institutions)
(Percentages)
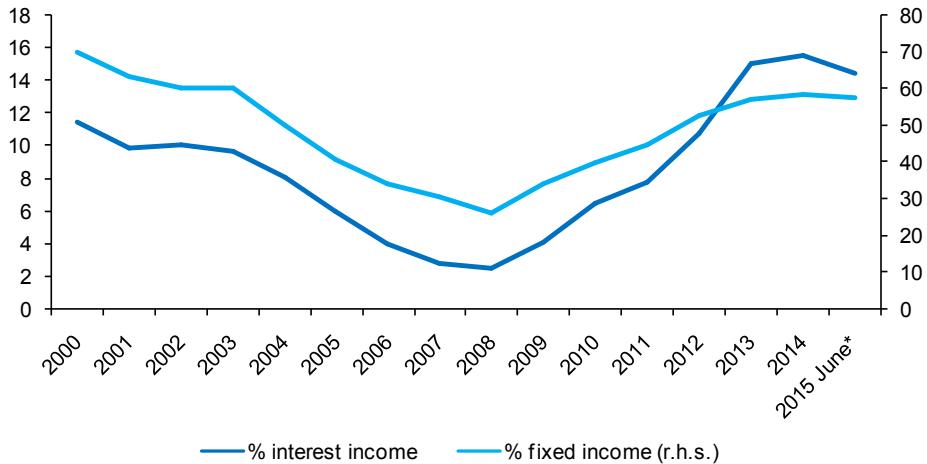
*Note: * Last 12 months.*
Source: Bank of Spain.

bad loans valued at around 14% of GDP on their balance sheets. However, if foreclosed assets are also considered, the figure rises to 22% (230 billion euros). These are assets that generate costs but no income, thus weighing down profitability.

One additional challenge the Spanish banking system faces derives from the change in income structure. During the credit boom, when margins were high, net interest income accounted for as much as 64% of total net income. With the drop in credit and narrowing of margins, banks used earnings on financial transactions as an escape valve, such that they accounted for 18% of net income in 2013 (Exhibit 12). Earnings were also shored up by the capital gains obtained from the carry trade, whereby they used the lower interest rates from the ECB to finance public debt purchases. As this type of income is non-recurrent, banks face the challenge of maintaining their income in an environment in which low interest rates mean they will not be able to repeat these capital gains. In fact, over the twelve months to June 2015, the contribution had dropped to 13%.

The carry trade also boosted Spanish banks' bottom lines with the income obtained from buying public debt, particularly when interest rates on public debt were high. In 2007, the income associated with public debt represented 2.7% of the Spanish banking system's total financial income and 30% of income from fixed-income securities (Exhibit 13). In 2013 and 2014, following the ECB's opening up its liquidity facility, the percentage reached a maximum of 15.5% (58% of fixed income). High levels were maintained over the 12 months to June 2015 (14.4% of total financial income and 58% of fixed-income earnings).

In summary, although the banking crisis is now behind us, as the reactivation of new lending and recovery in profitability show, the sector's challenges and vulnerabilities suggest that, going forward, it will be difficult to boost profitability. This requires institutions to continue raising their efficiency and exploring new business models, while reflecting on the future viability of the current retail banking model based on an extensive network of branches that are too small by European standards.

The new SME finance landscape:
The rise of alternatives to bank lending

Irene Peña[1]

SME access to multiple and stable sources of finance has become essential for fostering growth and investment in Europe after the crisis. To this end, one of the overriding objectives of the European Commission´s recently published Action Plan on Building a Capital Markets Union (CMU)[2] is to boost the benefits for the economy from increased reliance on capital markets and non-financial intermediaries.

Spanish SMEs have faced extreme difficulties in accessing bank finance as a result of the severe credit crunch and large-scale financial sector restructuring and recapitalisation. This has fuelled the – largely spontaneous – development of numerous alternatives to the banking channel, which are already well established in other economies, such as the US, and readily accessible to larger companies. Alternatives include equity financing options, such as crowdfunding or venture capital for smaller firms, as well as alternative exchanges and private-equity for larger-scale entities. On the debt side, non-bank financing alternatives include debt crowdfunding platforms for smaller firms, together with fixed-income exchanges, such as MARF for medium-sized companies. These alternatives have encountered strong institutional support. At the same time, complementary initiatives, related to securitization and the covered bond market, have been undertaken at the EU level to ensure continued liquidity of funding instruments for banks themselves. In parallel, new macroprudential measures have been introduced in order to help create a healthier, less indebted and more stable financial system.

Foreword

Traditionally, European companies have relied on banks for their financing. Alternatives such as capital markets and direct investor financing have been less successful options for facilitating credit flows against the backdrop of an efficient financial system and abundant liquidity. In tandem, average company size, with the European economy dominated by SMEs, has posed an additional barrier in terms of access to financing alternatives.

With the onset of the crisis in Europe, part of this financing paradigm was called into question and alternative financing targeting different company segments began to attract more attention. This article analyses the role of these financing alternatives in the context of the recovery underway in corporate bank lending.

Irene Peña

Exhibit 1

Net lending *vs.* securities issues by non-financial corporates
(€ mn)
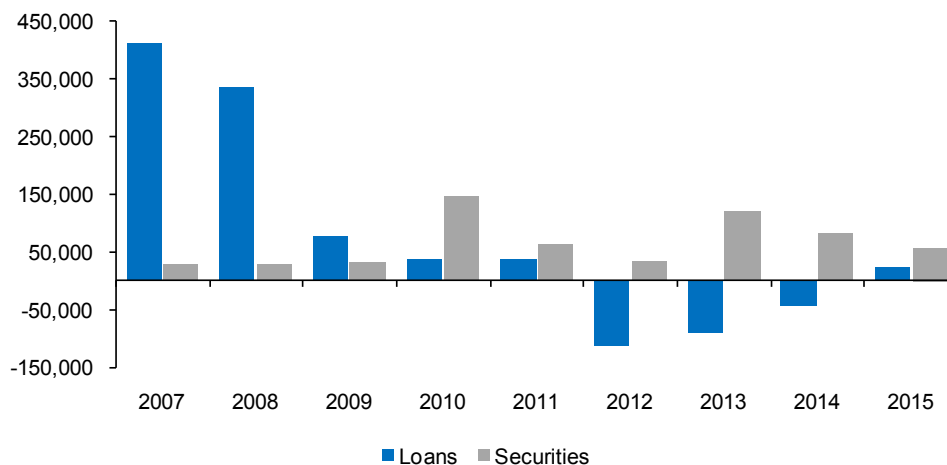
Source: European Central Bank, AFI.

Diversity of non-bank financing sources in Europe

A company's financing cycle usually begins with the equity injected by the business owner him or herself and the financial support provided by relatives and other close contacts. Later, companies tend to resort to bank financing, typically short-term paper, and, later still, long-term loans to finance their investments. When the scale of a company's debt reaches a certain magnitude, other bank instruments, such as syndicated loans, come into play. Lastly, when a company reaches maturity and builds sufficient scale, a new phase of corporate finance begins, marked by the ability to issue shares or bonds in capital markets.

However, new forms of financial intermediation have begun to develop since the recent crisis in Europe, meeting companies' and investors' needs alike. These forms of financial intermediation, which fall under the so-called 'alternative' category insofar as they represent an alternative to traditional bank financing (even though many are ultimately dependent on banks), bring the investor base into

earlier stages of business development, in turn boosting these businesses' growth potential.

Alternative financing leads to risk diversification by diminishing financial system exposure to the real economy and reducing corporate dependence on the banking system.

Alternative financing is not so different from bank financing. Direct investors obtain funds in a similar way to how the banks take in deposits; they assume the borrowers' credit risk; they play with maturity structuring; and they leverage themselves to finance their investments in assets. However, their development leads to risk diversification by diminishing the financial system's exposure to the real economy and, vice versa, reducing corporate dependence on the banking system.

Alternative sources of financing may take the form of debt or equity and cover a range of financing needs for different types of businesses. They

Exhibit 2
Corporate finance timeline
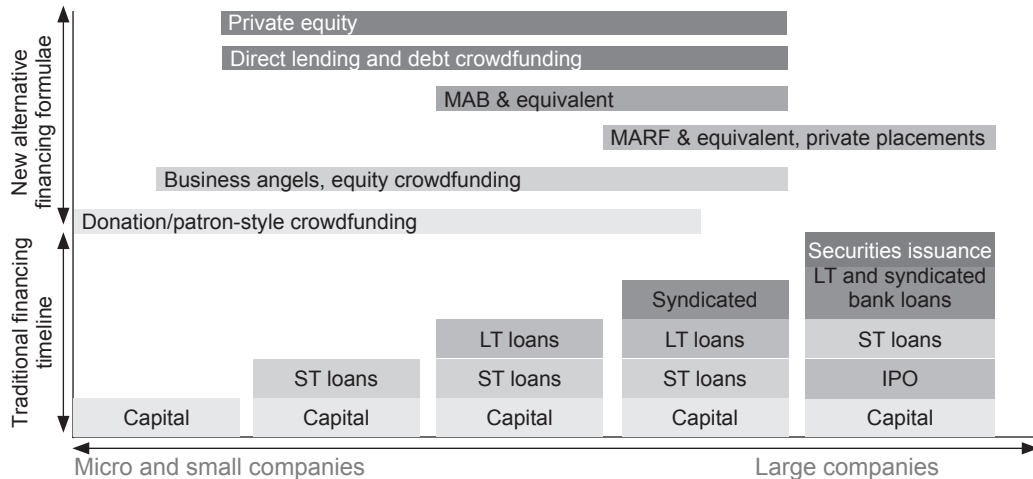

Source: AFI.

bring additional benefits for the company, such as greater visibility, financial and management acumen and enhanced corporate governance and transparency practices.

Equity financing

Options designed to strengthen companies' capital position include, notably, private equity and other early-stage sources of equity (such as business angels and equity crowdfunding), on the one hand, and the issuance of shares on official or alternative stock markets, at the other end of the spectrum.

Private equity is an important source of financing, particularly for smaller-scale companies and riskier or more innovation-based projects without ready access to capital markets or bank financing. In turn, there are several categories of private equity:

■ *Venture capital:* private equity targeted at enterprising, early-stage companies with high growth potential (often related to technological innovation).

■ *Enterprise capital:* private equity targeted at more established and consolidated companies in order to fund international expansion or value creation strategies.

■ *Buyouts:* injection of private equity in order to acquire the targets outright.

Despite growth in recent years, private equity remains less developed in Europe than in the US. According to the European Private Equity and Venture Capital Association (EVCA), private equity investment in European companies rose by 14% in 2014 to 41.5 billion euros, with a total of 5,500 companies receiving equity, roughly 80% of which fall into the SME category. By comparison, private equity in the US amounted to around 150 billion euros.

Meanwhile, the money injected by business angels and via equity crowdfunding surpassed 5.5 billion euros in 2013 (the last year for which data are available). The UK is the leader in this segment, followed by Spain, Russia and France.

Share placements are the other key – and undoubtedly the most important – source of

Irene Peña

Table 1

Business angels in Europe, key facts and figures

	No. of business angels	No. of companies financed	Investment 2013 (€ m)	YoY change	Jobs created	Average financing per company (€)	Average financing per BA (€)
United Kingdom	4,350	535	84.4	24%	2,354	157,754	19,402
Spain	2,520	245	54.6	-8%	1,485	235,102	22,857
Russia	220	165	41.8	-	808	253,030	189,773
France	4,320	376	41.1	0%	1,807	109,176	9,502

Source: EBAN, AFI.

corporate equity financing. Capital market equity raised by non-financial corporates is relatively small. According to European Commission (EC) figures, of Europe's 23 million SMEs, just 11,000 or so are listed on an official stock exchange or a multilateral trading facility (such as Spain's alternative stock market, the MAB).

There are many cultural factors behind European companies' relatively greater aversion to having third parties among their shareholders, particularly on the part of family-run companies, and to

pursuing a stock-market listing, usually associated with stringent reporting and disclosure obligations.

Asymmetric tax treatment favouring debt has and continues to play a significant role in most companies' preference for debt and, in the case of European issuers, bank debt.

Other aspects, such as the costs of issuing shares and preparing the required listing documentation,

Exhibit 3

Breakdown of the liabilities of European non-financial corporates

(%)

- ■ Equity
- ■ Bonds and similar liabilities
- ■ Borrowings from banks and other financial intermediaries
- ■ Non-financial intermediaries
- ■ Other

Source: BACH, AFI.

Exhibit 4

Percentage of debt *vs.* equity across Europe's non-financial corporates

(%)
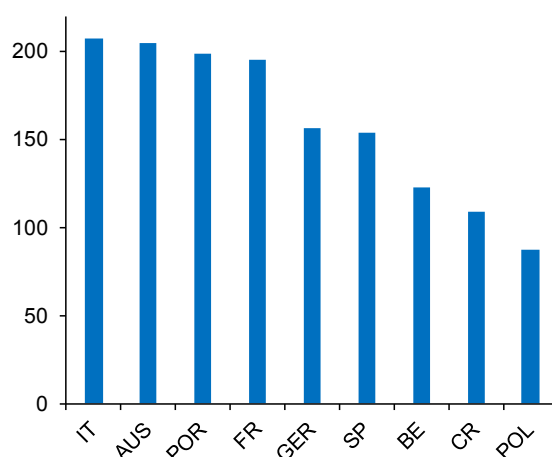
Sources: BACH, AFI.

company size and the creation of dedicated internal relations departments have also impeded greater consolidation of this form of financing in the past. However, the advent of organised trading facilities has proven a game-changer by proving effective at facilitating capital market access for smaller cap companies.

In Spain, we have the example of the MAB, the Spanish acronym for the alternative stock exchange, which was set up by Bolsas y Mercados Españoles (BME) in 2009. Since then, it has enabled growth companies to raise 392 million euros in equity financing. In 2015, this exchange's average trading volume was 48.35 million euros.

Lastly, in terms of the equity *versus* debt dichotomy, the asymmetric tax treatment of this source of financing, favouring debt, has and continues to play a significant role in most companies' preferen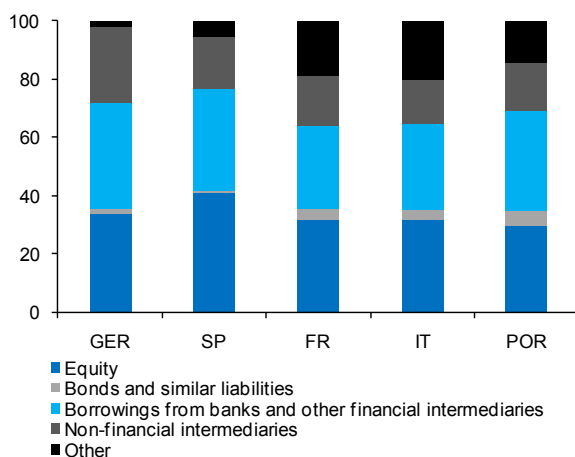ce for debt and, in the case of European issuers, bank debt. However, as evidenced during the recent crisis, higher leverage weakens the corporate landscape and increases exposure to the economic cycle.

Debt financing

As for the debt-based financing alternatives, two major categories are worth highlighting: (i) direct lending and debt crowdfunding for smaller-sized companies; and (ii) access to alternative corporate debt platforms (such as Spain's MARF) and official fixed-income exchanges for medium-sized companies.

Direct lending is usually targeted at companies with insufficient creditworthiness to tap bank financing (*e.g.,* due to high leverage or issues related to the economic cycle), which are therefore willing to offer investors a higher return.

Private placements are one such form of direct lending. Private placements offer an alternative to

public placements and syndicated loans. For these placements, qualified investors are contacted individually or in small groups to determine their investment appetite.

The largest private placement market is that of the US, where the annual issuance size is nearly 40 billion dollars. Europe's private placement markets are far more fragmented. However, there is an industry initiative,[3] which has the EC's backing, as enshrined in its CMU Action Plan, to develop a pan-European private placement market. In total, this market is estimated to provide Europe's companies with around 15 billion euros of financing.

The recent development of alternative corporate debt markets is enabling more medium-sized companies to tap capital markets, as in the case of Spain's alternative fixed-income exchange, MARF.

The key advantages of a private placement include issue size and longer maturities (sometimes in excess of 10 years). Moreover, the fact that the placements are private means there are no disclosure, registration or approval requirements.

Lastly, in terms of the debt markets, as has been the case on the equity side of the equation, capital markets have traditionally been reserved to large-scale companies with sufficient financing needs to cover the markets' benchmark issue size. However, the recent development of alternative corporate debt markets is enabling more medium-sized companies to tap capital markets. This is the case of Spain's MARF, the acronym in Spanish for the alternative fixed-income exchange, created at the end of 2013 in line with the trend in other European markets, such as Nordic ABM in Norway, BondM in Germany, Alternext in France and the Netherlands and Extramot in Italy.

[3] ICMA Pan European Private Placement Working Group.

Exhibit 5

Annual new issuance by non-financial corporates in Western Europe

(€ mn)
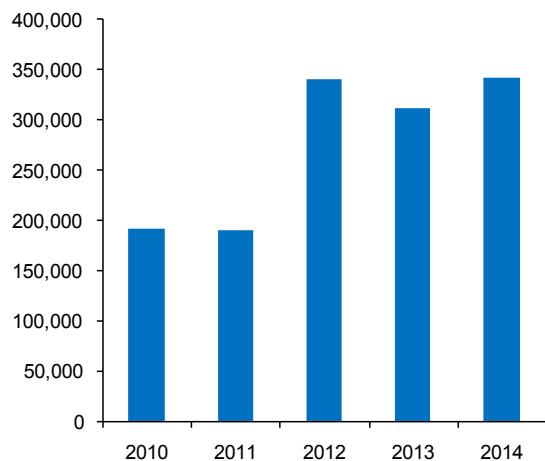
Sources: Dealogic, Bloomberg, AFI.

Exhibit 6

Average life and yield on corporate debt issues

(Years and %)
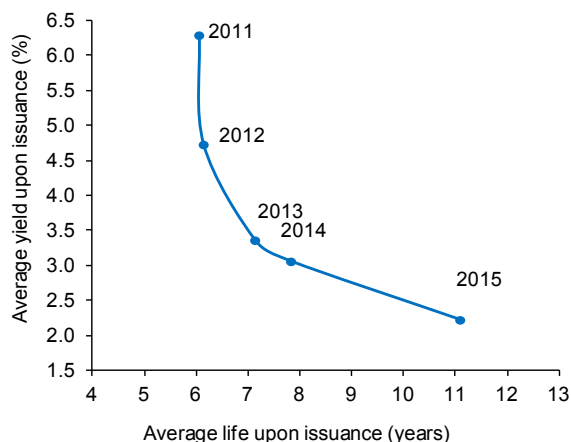
Sources: Dealogic, Bloomberg, AFI.

In the current low interest rate environment, a growing number of European non-financial corporates have placed bonds publicly: in 2014, issuance volumes approached 350 billion euros, which was nearly twice the level of 2008. Among these figures, it is worth highlighting the significance of alternative exchange issues by first-time issuers, both large and medium-sized.

In addition to the interest rate environment, bond issues generally offer issuers greater flexibility relative to the covenants assumed in exchange for bank loans, can be longer-dated and are often articulated as a single bullet repayment at maturity. Given that these issues are public, the use of proceeds, which can vary hugely, must be disclosed to investors and the broader market.

The alternative corporate debt markets offer issuers a broad range of financing opportunities due to the scope for tailoring their structures in terms of maturities, repayment regimes, collateral and covenants.

Alternative corporate debt markets are classified as unregulated exchanges although they are managed by official exchanges. MARF, for example, is managed by BME. They are organized as multilateral trading facilities (MTFs), which makes them more flexible by allowing them to tailor their rules and procedures for their issuers.

MARF alone has facilitated 22 issues by 17 issuers, enabling these issuers to raise 1.6 billion euros at an average rate of 5.6% and at maturities ranging from 5 to 25.5 years.

Lastly, as we have already mentioned, one of the biggest advantages afforded by these facilities is the access provided to more medium-sized companies with a wide range of financing needs. MARF issuers, for example, are extremely diverse: their size ranges from 32 to 765 million euros by assets and from 17 to 38 million euros by revenue.

However, the final success of MARF and the rest of alternative corporate markets will depend

Exhibit 7

List of corporate financing alternatives

	Traditional financing	Alternative financing
Debt ⇨	■ Syndicated loans ■ Long-term bank loans ■ Credit facilities ■ Receivable discounting ■ Trade finance	■ Direct lending (or peer-to-peer loans) ■ Debt crowdfunding ■ Fixed-income issues in official or alternative markets
Equity ⇨	■ Friends and family ■ Founder capital	■ Private equity ■ Business angels and equity crowdfunding ■ Share placements on the continuous market or alternative exchange

Source: AFI.

on the depth and liquidity of the market. Low liquidity may affect bond prices, reducing the attractiveness of this financing alternative both for companies, which will continue to depend on bank funding, and for investors, which will face higher volatility and "buy and hold" investments. Moreover, homogeneity and transparency of corporate information will become fundamental for overcoming barriers related to the smaller size of companies and issuances.

Bank financing

As already mentioned, Europe relies heavily on bank financing. Measured in terms of GDP, banking assets represent around 300% of GDP in the EU compared to a figure of around 60% in the US. In Europe, bank debt represents around 30% of total SME liabilities, compared to less than 10% stateside.

Following the capacity adjustment, together with balance sheet clean-up and recapitalization efforts made by banks after the crisis, corporate lending volumes have been recovering since the end of 2013, during which time they have also been

becoming more flexible (in terms of maturities and rates).

Measured in terms of GDP, banking assets represent around 300% of GDP in the EU compared to a figure of around 60% in the US.

However, even though most SMEs can currently access bank financing, the new challenges faced by the sector, coupled with the threat of future financial shocks, mean that it is important not to lose momentum in terms of the trend toward diversification. In this manner, if such shocks were to recur, Europe's corporates would boast more solid capital structures and have access to financing alternatives so that their businesses would not be as affected.

Here it is worth noting that the recovery in new loans has been propped up by the liquidity injected by the extraordinary measures taken by the European Central Bank (ECB) precisely to this end.

Exhibit 8

SME loans, interest rates

(< €1 million, %)

- Germany
- Spain
- France
- Italy
- Eurozone
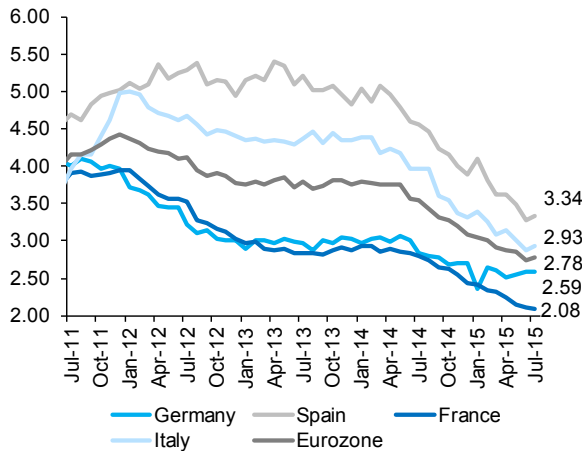
Sources: ECB, Eurostat, BACH database, AFI.

Exhibit 9

Penetration of bank financing across main European economies
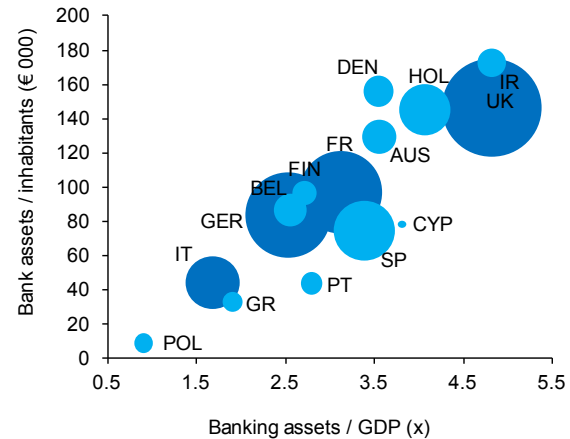
Sources: ECB, Eurostat, BACH database, AFI.

According to the Bank of Spain's bank lending survey, most European and Spanish banks participated in the ECB's targeted long-term refinancing operations (TLTRO) in the first quarter of 2015 with the aim of using the funds obtained mainly for the purpose of granting corporate loans and also refinancing other liquidity facilities extended by the Eurosystem.

There is no assurance that these stimuli will not be withdrawn – we must not forget that they are extraordinary in nature and not permanent – or that the requirements imposed under new macroprudential regulations will not affect the flow of credit in the medium term. Indeed, the banking sector's return on equity (RoE) has fallen drastically in recent years due to more stringent capital requirements (in Spain, from 12.1% to 5.3% over six years). This could make credit more expensive, as could the trend in interest rates and the banks' ability to tap the wholesale funding markets.

Note that a potential increase in the cost of credit would affect the smallest companies (micro-SMEs) disproportionately. These companies, which account

for roughly 90% of all companies in both Spain and Europe, face greater barriers to accessing alternative financing and will inevitably continue to need bank financing to fund their businesses.

It is vital to ensure the continued liquidity of the funding instruments used by the banks themselves, while also fostering the use of SME collateral, all with a view to channelling fresh credit to companies.

In addition to facilitating corporate access to the capital markets, it is vital to ensure the continued liquidity of the funding instruments used by the banks themselves, especially those related to the wholesale funding markets, while also fostering the use of SME collateral, all with a view to channelling fresh credit to companies.

Factoring in these considerations, the European Commission, in addition to the Capital Market Union Action Plan, has just published complementary

initiatives related to securitisation (a package of two legislative proposals) and to covered bonds (a consultation paper).

Securitisation enables banks to use capital markets to fund their portfolios (usually home mortgages and consumer and SME loans). However, since the crisis began, securitisations have fallen dramatically and remain low. The idea behind the two new legislative proposals presented by the European Commission is the creation of a 'high-quality' securitisation market (criteria for simple, transparent and standardised securitisations) to make this instrument once again be perceived as reliable and to enhance the capital treatment of securitisations in order to stimulate their use.

Elsewhere, the EC is looking to reduce fragmentation and inefficiency in the covered bond market. The existence of dual recourse to the issuer in the case of covered bonds rendered this instrument a stable source of funding during the crisis, to which end the EC wants to open up new possibilities, including the use of new collateral, such as SME loans.

Conclusions

Rather than viewing bank financing and alternative sources of financing as in competition against each other, what is becoming increasingly clear is how complementary both types of financing are to each other.

Banks will continue to play a crucial role in fulfilling a significant portion of credit demand, in particular for the smallest companies. Consequently, it is important to ensure that they have ongoing access to stable and long-term funding tools in an effort to prevent, to the extent possible, a repeat of the dysfunctions observed during the recent crisis.

In addition, it is necessary to make companies more aware of the importance of equity financing and the advantages in terms of growth and value

creation of bringing in third-party equity investors who can offer liquidity in exchange for shares. There are a host of equity financing options, which are accessible to smaller, rapidly-growing companies (equity crowdfunding and venture capital), as well as to larger-scale, high-potential companies (alternative exchanges and later-stage private equity).

Finally, on the debt front, companies need to understand that there are different providers of funds in the market and that it is important to diversify their sources of financing in order to reduce excessive dependence on any one source and to optimise their debt structures. Although bank lending will continue to represent the major debt funding source for companies, exchanges such as MARF are creating an opportunity for medium-sized companies to access the capital markets by issuing debt securities and obtaining rewards, such as longer-term financing, visibility and recognition in the process.

Many obstacles remain as regards changing the mentality of SMEs towards alternative financing. Moreover, the size of European SMEs remains the main barrier for companies to attract equity and non-bank debt, while at the same time is the main motivation for a change in their funding model, with the objective of securing higher and more stable economic growth. In this regard, the progress and achievements of the European Capital Markets Union project will be crucial.

Unit labour costs and the evolution of the Spanish manufacturing industry between 2000 and 2014

María Jesús Fernández Sánchez[1]

Although Spain´s manufacturing sector suffered cost-competitiveness losses throughout the growth phase and early years of the crisis, falling wages during subsequent years may be underpinning the sector´s more recent recovery. At the same time, breaking down performance into export-oriented industry segments and ones that serve the domestic market reveals a need to strengthen the latter.

During the economic expansion from 2000 to 2007, the Spanish manufacturing industry's cost-competitiveness deteriorated as a result of rising unit labour costs (ULCs). However, this only affected industry segments catering to the domestic market, whose prices rose in line with ULCs in order to protect profit margins. The result was a loss of market share to imports, which helps explain the small size of the sector and its limited capacity to respond to rising domestic demand. This has translated into a pattern of economic growth that produces imbalances. Hence, for the Spanish economy to grow in a more balanced and sustainable way, the industrial sector's share of the economy needs to grow and gain market share against imports in the domestic market, so demand growth can be translated more directly into GDP growth. By contrast, the competitiveness of export-oriented industries, in terms of costs and products, progressed more favourably. Consequently, Spanish exporters' market share has done well relative to global exports. Falling wages during the crisis years could be driving manufacturing's recent take-off, although it is still too early for definitive conclusions.

Introduction

One of the characteristic features of Spain's economic cycle is that when the economy grows, the contribution of the external sector to growth turns negative. This pattern, which is once again manifesting itself in the current recovery, is a consequence of the high elasticity of imports to domestic demand rather than an insufficient export capacity. This elasticity ultimately reflects the inability of Spain's manufacturing industry to respond to growing domestic demand. As well as slowing growth by diverting domestic demand towards imports, this pattern causes imbalances, such as the balance of payments deficit or foreign debt.

For the economy to grow in a more balanced and sustainable way, the industrial sector's share of the economy needs to grow (it currently represents 13% of GVA compared to a euro area average of 16%) and it needs to gain market share against

María Jesús Fernández Sánchez

imports in the domestic market, so that demand growth can be translated more directly into growth

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The high elasticity of import demand reflects the inability of Spain´s manufacturing industry to respond to growing domestic demand, ultimately fueling imbalances, such as the balance of payments deficit and foreign debt.

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of Spain's GDP. For this to happen, the sector needs to gain competitiveness and become more attractive as a destination for productive investments.

This article analyses the possible relationship between the loss of cost competitiveness during the years of expansion and the performance of the manufacturing industry during this period. It also looks at the possible effect of falling wages during the crisis on the sector's growth potential and its role as a motor for growth, and therefore, on the

capacity of the Spanish economy to generate more balanced growth.

Evolution of cost competitiveness in the Spanish manufacturing industry from 2000 to 2014

As is well known, unit labour costs (ULCs) are defined as the ratio of total labour costs to real output. Exhibit 1 shows the evolution of the two components of ULCs in the Spanish manufacturing industry between 2000 and 2014. As of 2000, throughout the economic expansion, wage growth outpaced productivity, causing ULCs to rise steadily. Thus, between 2000 and 2007 (the most recent year in which there was growth in industrial activity) the sector's ULCs rose by 16.2%. Comparing 2000 and 2009, the increment in ULCs was 24.9%, as the upward trend persisted, and even intensified, during the early years of the economic crisis (2008 and 2009).

The pattern changed in 2010, and although wages continued to rise in nominal terms throughout

Exhibit 1

Unit labour costs and their components in manufacturing
(% annual growth rate)
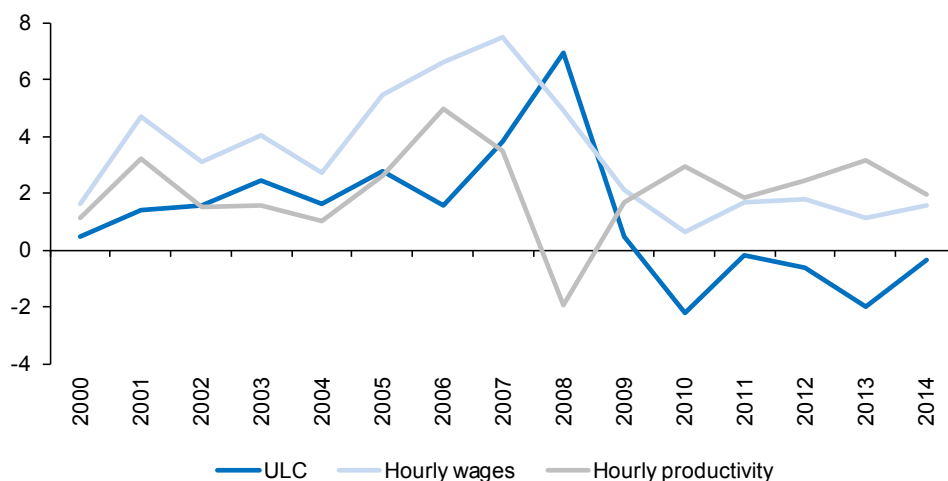
Source: The author, based on INE data.

Exhibit 2

Relative manufacturing unit labour costs in Spain/EMU
(2000=100)
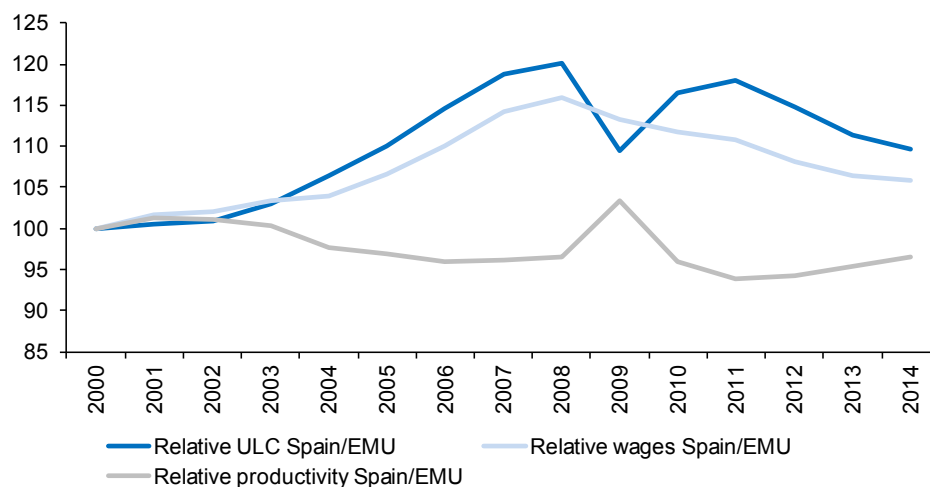
Source: The author, based on EUROSTAT data.

the recession (according to national accounts figures), they grew more slowly than productivity. As a result, between 2010 and 2014 ULCs in the manufacturing industry fell by 5.3%, although they remained higher than in 2007.

Exhibit 2 compares the evolution of nominal manufacturing ULCs in Spain, and its components,

As of 2008, there was a relative drop in ULCs of 8.7%, basically as a result of the drop in relative wages, enabling almost half of the cost competitiveness lost in the previous phase to be regained.

with the euro area average. From 2000 to 2008, Spain's ULCs grew by 20.2% more than the euro area average, as a result of relative wage growth and declining relative productivity. From 2008 onwards, there was a relative drop in ULCs of 8.7%, basically as a result of the drop in relative wages, enabling almost half of the cost

competitiveness lost in the previous phase to be regained.

Nevertheless, during the growth phase, the prices charged by the manufacturing industry, measured by the variation in the sectoral GVA deflator, grew even faster than ULCs: 21.3% between 2000 and 2007, compared with the 16.2% growth in ULCs already mentioned (Exhibit 3). In other words, despite strong growth in nominal ULCs, in real terms, ULCs fell during the period, as the prices charged by firms rose faster. This implies that during this period, business's profit margins rose despite the loss of cost competitiveness relative to the euro area.

However, this overall result masks a significant divergence between export-oriented and domestic-market-oriented manufacturing segments, as export prices rose much less than prices charged in the domestic market, and ULCs evolved very differently in the two sectors.

Thus, if we consider export-oriented branches to be those selling more than 40% of their output

Exhibit 3

Nominal and real unit labour cost in manufacturing
(2000=100)
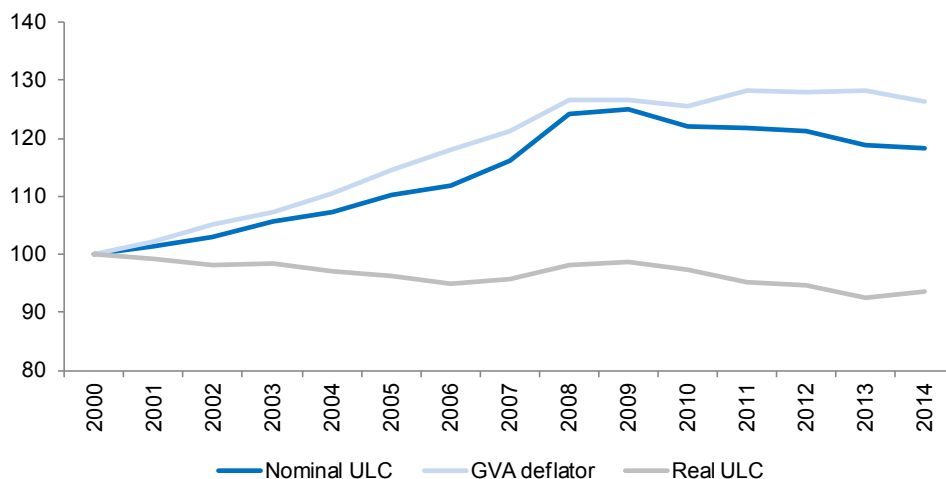
Source: The author, based on INE data.

abroad,[2] nominal ULCs in this group grew by 4.8% between 2000 and 2007, well below the 24% growth in the domestic-market-oriented sector. This was the result of much more vigorous productivity growth (42.6% compared with 8.7%) and occurred despite faster wage growth (49.4% compared with 34.8%) (Exhibits 4.1 and 4.2).

Profits in the domestic-market-oriented segments did not improve, although they did not worsen significantly either, as ULC growth was virtually the same as the increase in prices charged by firms, whereas profits in exporting industry segments increased markedly.

Comparing nominal ULC growth with prices, in order to analyse the performance of profit margins in each group, the GVA deflator for export-oriented branches grew by 18.3%, well above the 4.8% by which its ULCs grew, while the GVA deflator for the segments oriented towards the domestic market grew by 23.4%, slightly less than nominal ULCs. Thus, profits in the domestic -market-oriented segments did not improve, although they did not worsen significantly either, as ULC growth was virtually the same as the increase in prices charged by firms, whereas profits in exporting industry segments increased markedly. The conclusion remains unchanged even if we use the performance of export prices rather than the GVA deflator as an indicator for export prices.

In the case of domestic-market-oriented segments, the need to raise prices in line with labour costs to maintain profit margins may have undermined their competitiveness relative to imports. Moreover, profit growth in other sectors of the

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[2] The textile industry, apparel manufacturing, leather and footwear; coking and petroleum refining; chemical industry; pharmaceutical products; computer, electronics and optical products, electrical equipment and materials; machinery and equipment n.e.c.; motor vehicles and other transport equipment.

Exhibit 4.1

Unit labour costs in export-oriented manufacturing
(2000=100)

Wages — Productivity
Nominal ULC — Real ULC
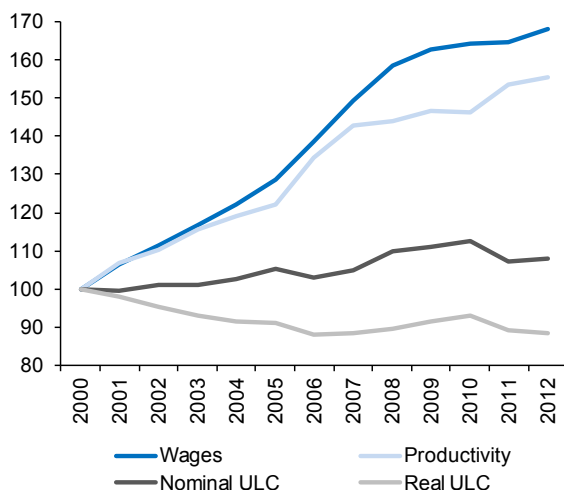
Exhibit 4.2

Unit labour costs in domestic-market-oriented manufacturing
(2000=100)

Wages — Productivity
Nominal ULC — Real ULC

Source: The author, based on INE data.

economy not subjected to foreign competition may have made the latter more attractive as a destination for productive investment at the expense of manufacturing. The foregoing would explain the latter's scant output growth during the period of economic growth. Thus, GVA of the domestic-market-oriented manufacturing sector grew by 16.7% between 2000 and 2007, well below domestic demand growth, which was 34.7%, and also a long way from the growth registered in goods imports, which rose by 59.3%. The Spanish manufacturing industry had suffered a significant loss of market share to imports.

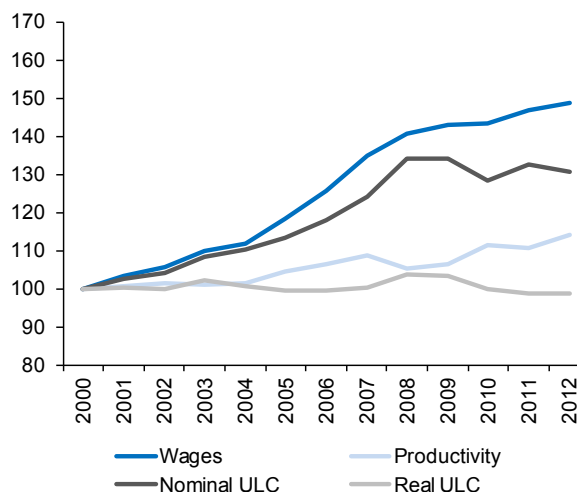In the case of manufacturing segments oriented towards the foreign market, relative prices of Spanish exports, measured in terms of the export unit value index relative to developed countries, rose by 2% between 2000 and 2007. Thus, bearing in mind the appreciation of the euro over this same period, the loss of cost competitiveness came to almost 9%. Exhibit 5 shows how the share of Spanish exports in the global market grew between 2000 and 2003 from 1.78% to 2.06% (still benefiting from the impact of the

devaluations in 1993 and 1994) and then began to decline to a minimum of 1.60% in 2012. This loss of market share was, however, less than that suffered by most developed countries, in a trend

Although Spain's prices rose faster than those of its competitors, the market share of its exports outperformed the competition, which may mean other improvements justified price increases.

often attributed to the strong growth of China's exports. In other words, although Spain's prices rose faster than those of its competitors, the market share of its exports outperformed the competition. This may mean that the price increases were justified by Spain's products being more competitive (quality, technology content, etc. although there may be other factors underlying market share trends, such as the opening up of new markets).

María Jesús Fernández Sánchez

Exhibit 5
Market share of Spanish exports
(% of global exports)
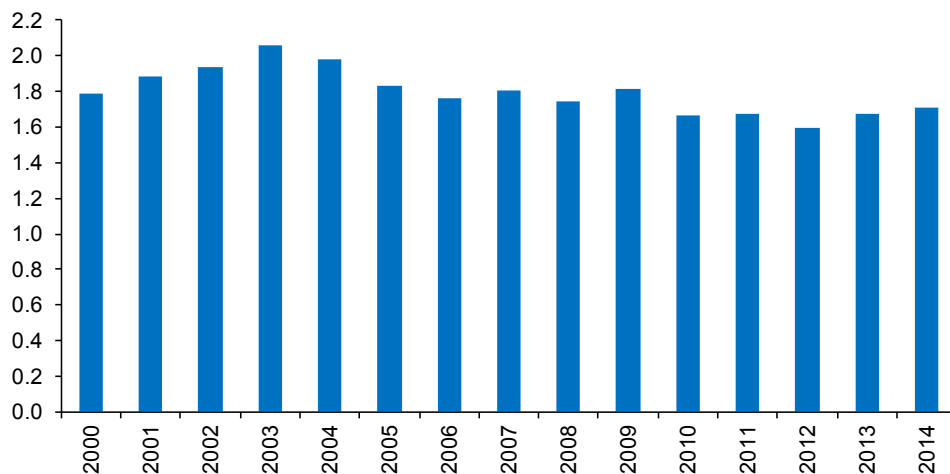
Source: WTO.

As regards the trends during the recession, as already mentioned, during the first two years of recession (2008 and 2009) ULCs continued to rise, and then underwent a correction. Prices continued to rise faster than ULCs, such that ULCs again dropped in real terms (*i.e.* operating surplus increased again). As regards the difference between the export-oriented and domestic-market-oriented sectors, data with the necessary level of disaggregation to allow the analysis to be done are only available up until 2012. During this period, the performance of profits in each sector was the inverse of what it had been in the expansion phase: in export-oriented sectors there was no change (the rising prices charged by the sector were almost equal to the increase in ULCs), while in domestic-market-oriented branches they increased, albeit modestly. Thus, in the latter, nominal ULCs rose by 5.3% compared with a growth of the deflator by 7.3%.

This improvement in profits of the manufacturing industry segments oriented towards the domestic market is the *sine qua non* for the manufacturing industry to recover its attractiveness as a destination for productive investment, and thus

increase its size, its market share relative to imports, and its ability to meet rising demand. That is to say, it is a necessary condition for the

The improvement in profits of the domestic -market-oriented manufacturing industry segments is a necessary condition for the process of structural transformation to begin, but it is still too early to know whether we are really in a process of a reallocation of resources to manufacturing.

process of import substitution and structural transformation of the economy to begin.

Are falling wage costs bringing about a structural transformation in the Spanish economy?

It is still too early to know whether the recovery in cost competitiveness in the manufacturing

industry is really bringing about this process of reallocation of resources. This is a structural change, and as such, takes a long time. However, recent developments in the sector offer promising signs. Since the Spanish economy began to recover in the third quarter of 2013, up until the second quarter of 2015, the manufacturing industry has led growth. Its GVA has risen by 6.3%, compared with GDP growth of 4.4%, something which had never happened during the 2000-2007 expansion. Moreover, this output growth was possible with growth in final demand over the period of 6.2%. Goods imports over the same period rose by 11.3%, which is still faster than the sector's output, but the ratio between the growth of the two variables has dropped considerably since the previous phase. At the same time, the second quarter of 2015 was the sixth consecutive quarter in which the number of full-time equivalent jobs grew in this sector. Since 2000, there has not been such a long period of employment growth in manufacturing.

Obviously, this positive performance by the manufacturing industry since the start of the recovery may be deceptive, as it may just be a return to normal in the wake of the sharp fall suffered during the recession. Only time will tell if we are at the start of a process of structural transformation towards a more balanced and sustainable growth model.

Concluding remarks

During the economic expansion from 2000 to 2007, the Spanish manufacturing industry lost cost competitiveness relative to the euro area due to faster growth in domestic ULCs. Nevertheless, the prices charged by the sector rose faster than ULCs, which meant that profits rose. Additionally, the market share of Spain's exports held up better than those of other developed countries.

These apparent inconsistencies are a result of the difference in how the export-oriented and domestic-market-oriented branches of industry

behaved. Export-oriented industry performed well during the economic expansion, with strong productivity gains that allowed wages to rise faster than in domestic-market-oriented branches with almost no effect on ULCs. Firms were also able to raise prices faster than their competitors, boosting profits, without this having an adverse impact on relative market share. This suggests that their products must have also become more competitive.

By contrast, manufacturing industry segments oriented towards the domestic market saw modest productivity growth, which, in conjunction with wage rises, led to a significant increase in ULCs. This was passed on to final prices, thus maintaining profits. However, the fact that the sector's output growth consistently fell short of growth in both domestic demand and imports suggests that domestic manufacturers very likely lost market share to imports in the domestic market.

As of 2010 there was an adjustment in wages in the industry segments oriented towards the domestic market, which in conjunction with rising prices made it possible for them to boost profits, therefore making them better able to attract investments. This could explain the sector's strong performance since the start of the economic recovery. The so-called "internal devaluation" could have begun to have a positive effect on the sector's growth capacity and its role as a motor of economic growth, the *sine qua non* for reducing Spain's high level of elasticity of imports to domestic demand growth, and therefore for generating a more balanced and sustainable growth model. Nevertheless, although the signs are positive, it is still too early to draw definitive conclusions.

The internationalisation of the Spanish economy: Progress, limitations and best practices

Ramon Xifré[1]

Spanish exports of goods and services over recent years grew at a rate comparable only to Europe´s leading major exporters. However, the level of concentration in just a few exporting companies suggests smaller companies at the base of Spain´s exporting pyramid still face considerable constraints, leaving significant room for growth and improvement.

In aggregate terms, Spanish businesses have improved their internationalisation markedly in recent years. However, the Spanish economy is still a long way from presenting net exports comparable with those of Germany, the Netherlands or Italy. This is partly due to the serious constraints faced by many businesses at the base of the pyramid of exporting firms (small and medium-sized firms that export sporadically in an ad hoc way) when seeking to start, continue or scale up their process of internationalisation. This is demonstrated by the extremely high concentration of Spanish exports in a small group of companies. This article includes a review of some international best practices in helping businesses at the base of the pyramid overcome these hurdles.

Introduction

In order to recover fully, and achieve more stable and sustainable growth that minimises the risk of future crises, the Spanish economy needs to become more open to foreign markets. The weight of the various different sectors needs to be balanced, reducing the non-tradable sectors' share of the economy, while at the same time making a concerted effort to sell more goods and services abroad. This is the prescription followed by comparable countries that have recovered more quickly from the crisis.

In this context, this article aims to analyse recent trends in the level of internationalisation of the Spanish economy and its firms. Firstly, from a macroeconomic perspective, it examines evidence in support of the Spanish economy´s reorientation towards foreign demand in the wake of the crisis. Spain´s position is analysed in comparative terms relative to the four other large economies of the euro area.

Businesses, of course, play a fundamental role in this process of opening up to the exterior. This article therefore approaches the question from a microeconomic perspective, analysing the latest data available on Spanish exporting businesses. The aim is to deepen our understanding of the business demography that has supported growth

of Spanish exports, and in particular, analyse what role small and small to medium businesses play, as these are the firms that face the most difficult competitive conditions.

The article concludes with a short review of some international best practices that have been adopted to support the internationalisation of these types of firms.

Macroeconomic analysis

Spain's exports of goods and services grew between 2000 and 2014 at a rate comparable only with the leading exporters among the euro area's five major economies: Germany and the Netherlands. Measured in current euros, Spanish exports have almost doubled in value over this 15-year period (Exhibit 1).

As is well known, services exports include expenditure by foreign tourists in Spain. However, even excluding this item, and analysing only goods exports, the Spanish external sector's performance has been robust – as previously described. Spanish goods exports virtually doubled between 2000 and

2014. Growth in goods exports therefore exceeds that of the Netherlands and is only behind that of Germany when comparing with the top five euro area economies (Exhibit 2).

However, despite the more than satisfactory performance of exports, Spain's process of internationalisation is also being held back by some significant limitations.

The Spanish economy´s internationalisation suffers from three types of structural weaknesses: (i) a productive structure focused on low and medium-low technology intensive manufacturing, (ii) a business structure with an excess of small firms; and, (iii) a geographical structure focused on EU destinations.

According to the work of Myro (2013), the Spanish economy's internationalisation suffers from three types of structural weaknesses: (i) a productive structure with a pattern of specialisation that is narrowly focused on low and medium-low

Exhibit 1
Exports of goods and services in current euros
(Index 2000=100)
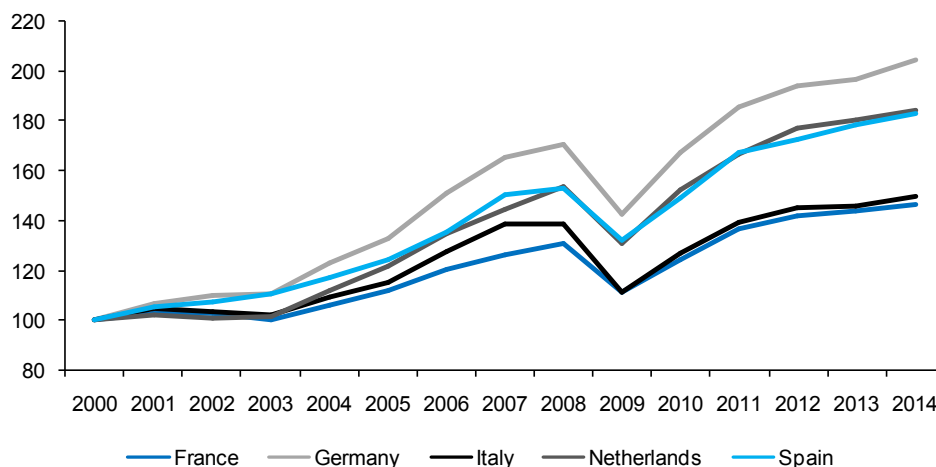
Source: Eurostat.

Exhibit 2

Exports of goods in current euros
(Index 2000=100)
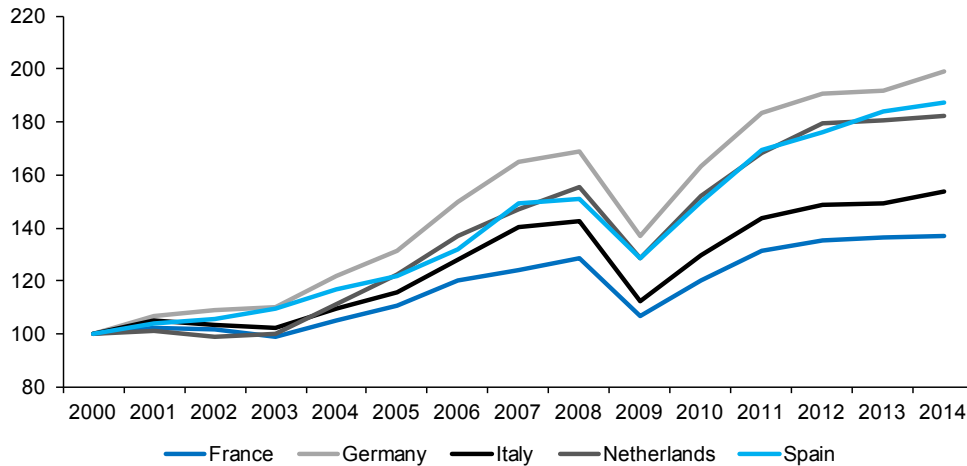
Source: Eurostat.

technology intensive manufacturing, (ii) a business structure with an excess of small firms; and, (iii) a geographical structure of exports and international activity as a whole that is still very much focused on EU destinations. Moreover, García-Canal (2013) points to additional weaknesses, such as declining Spanish investments (FDI) abroad.

On top of this are a number of complementary traits characterising the Spanish export model.

Exhibit 3 shows Spain's net exports of goods and services as a percentage of GDP, together with the total balance, i.e. the sum of the individual goods and services balances. Exhibit 4 represents the same series for the other four largest euro area economies (Germany, the Netherlands, France and Italy). Table 1 shows the averages for these five countries over the period 2000-2014 as a whole and for the intermediate periods 2000-2008 and 2009-2014.

Exhibit 3

Net exports by Spain of goods and services (and total) as % of GDP (Percentage)
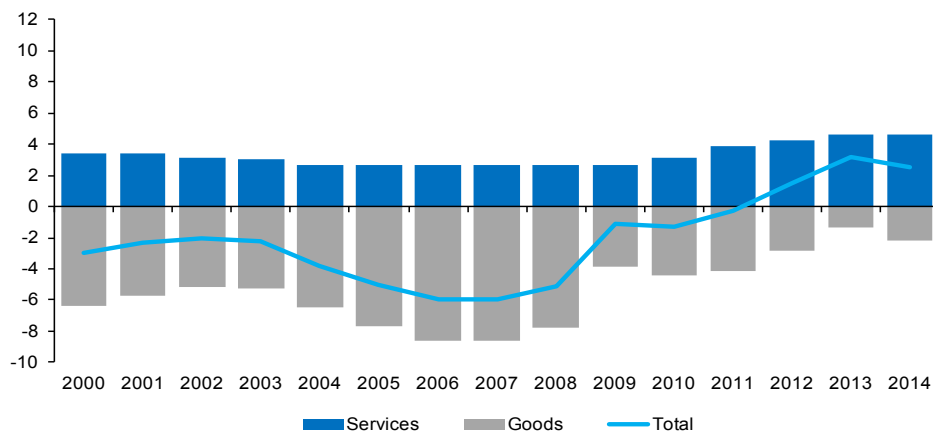
Source: Eurostat.

Exhibit 4

Net exports by Germany, the Netherlands, France and Italy of goods and services (and total) as % of GDP
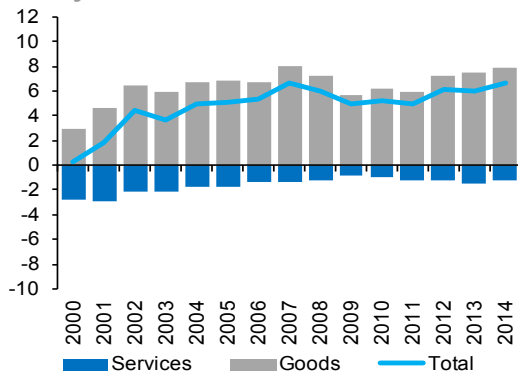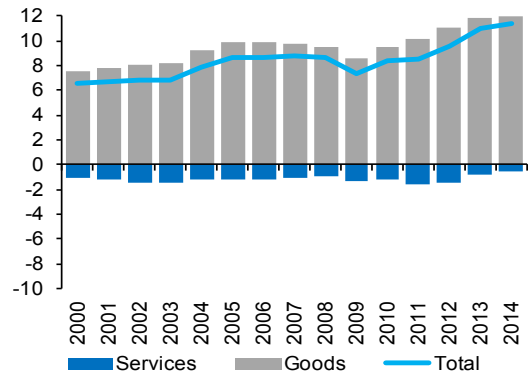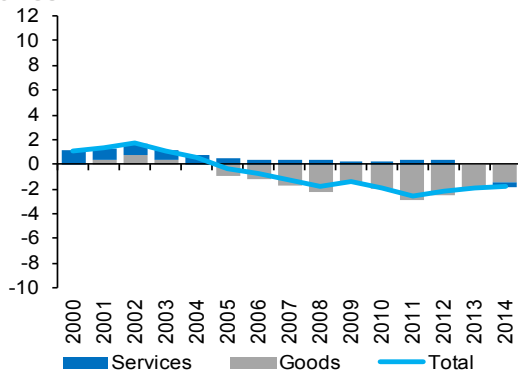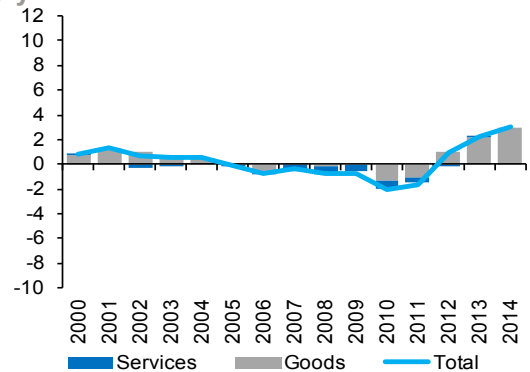
Source: Eurostat.

Spain's trade deficit tripled between 2003 and 2007, rising from 2% to 6% of GDP. Since then, the balance has improved continuously; the balance was in equilibrium in 2011 and, according to the latest data, there was a surplus of 2% in 2014. This performance places Spain's model mid-way between Germany and the Netherlands on the one side, both of which are exporting powers, with trade surpluses of 8% and 10%, respectively, and France, on the other, where the trade balance has been deteriorating since 2002. Italy is a case apart, with trade performance that is modest, but relatively stable and there has been a clear trend towards improvement since 2011.

To refine the analysis, we analyse the balance of goods exports, distinguishing between energy and non-energy goods (Exhibit 5 and Exhibit 6). This breakdown makes it possible to determine that the five economies examined have a structural deficit in energy products of around 3% of GDP (slightly less in the case of the Netherlands) as a result of net fuel imports. Apart from this component, which is unlikely to change significantly in the medium term, the really important issue for a country's commercial competitiveness –and that of its businesses– is how net non-energy goods exports behave.

In this regard, Exhibit 5 and Exhibit 6 allow us to conclude that Spain's situation is not only a long way from that of the leading exporters –Germany and the Netherlands– but also from that of Italy. In particular, from 2011 to 2014,

Table 1

Net exports of goods and services (and total) as % of GDP. Average over period

		Total	Goods	Services
2000 - 2014	**Germany**	4.8	6.4	-1.6
	Netherlands	8.4	9.5	-1.2
	France	-0.7	-1.1	0.4
	Italy	0.3	0.5	-0.2
	Spain	-2.1	-5.4	3.3
2000 - 2008	**Germany**	4.2	6.2	-1.9
	Netherlands	7.7	8.9	-1.2
	France	0.2	-0.5	0.7
	Italy	0.2	0.4	-0.2
	Spain	-3.9	-6.9	2.9
2009 - 2014	**Germany**	5.6	6.8	-1.1
	Netherlands	9.4	10.5	-1.1
	France	-2.0	-2.1	0.1
	Italy	0.4	0.6	-0.3
	Spain	0.7	-3.1	3.9

Source: Eurostat.

Germany and the Netherlands had a non-energy trade surplus with the rest of the world of over 10%, Italy ran a surplus of around 5%, while Spain's maximum was 1.6% of GDP in 2013, dropping to 0.5% the following year (the last in the series). The difference between these balances gives an idea of how far Spain has to go in order to obtain an external sector with a share of GDP comparable to that of the other large European economies.

Exhibit 5

Spain's net exports of goods as a % of GDP by type of goods (energy and non-energy)
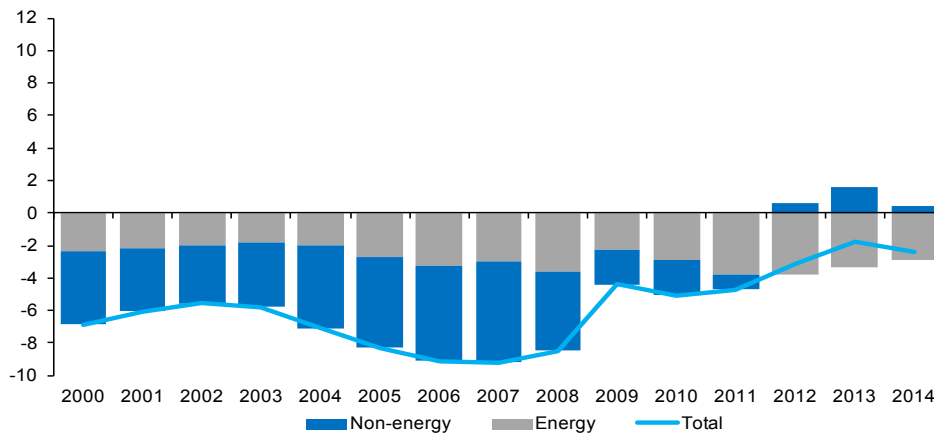

Note: The SITC06 group of products are considered energy goods.
Source: Eurostat.

Exhibit 6

Net exports by Germany, the Netherlands, France and Italy of goods as a % of GDP by type of goods (energy and non-energy)

Germany
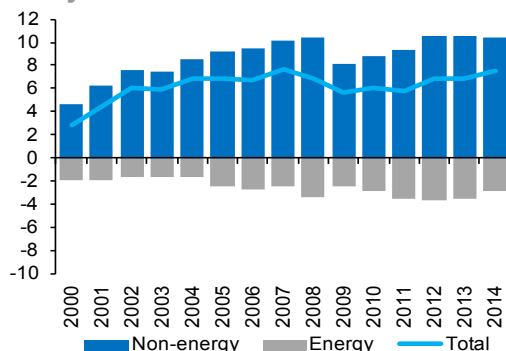
The Netherlands
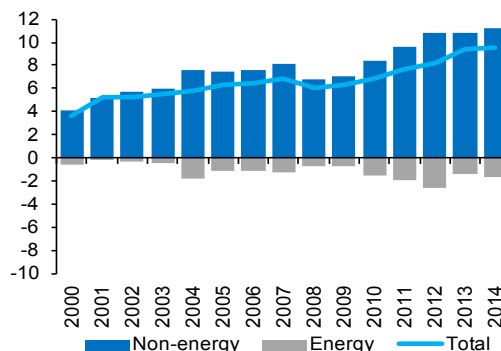
France
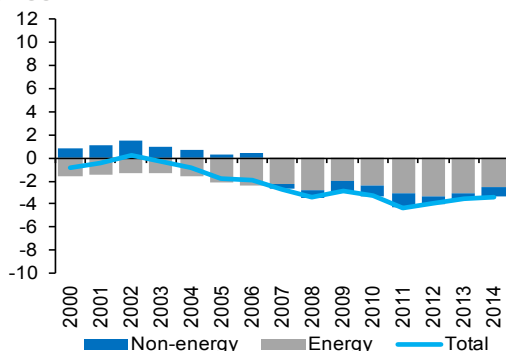
Italy
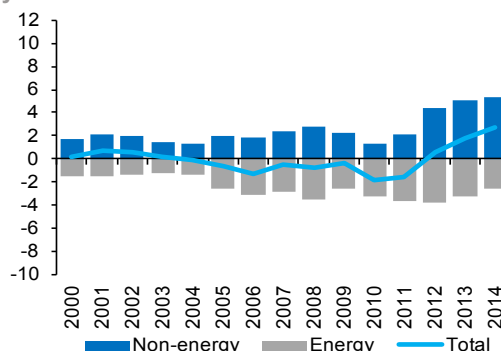
Note: The SITC06 group of products are considered energy goods.
Source: Eurostat.

Microeconomic analysis

In many ways, two small businesses from two different countries have a lot more in common than two businesses of very different sizes from the same country.

In particular, in the field of internationalisation, the analysis by Barba Navaretti *et al.* (2010) shows that the differences in intensity of foreign activity by Spanish and German firms are relatively small in the case of large firms (over 250 employees). However, in the case of smaller firms (fewer than 20 workers), German firms are much more active abroad than are their Spanish counterparts.

These findings are in line with those of Correa-López and Doménech (2012) based on the *Encuesta sobre Estrategias Empresariales [Business Strategy Survey]*. In particular, Correa-López and Doménech (2012) find that the percentage of exporting firms –another complementary measure of export activity– increases significantly with firm size. Thus, while approximately 25% of Spanish businesses with fewer than 20 employees export, more than 90% of firms with more than 200 employees do so.

It is therefore necessary to understand the business structure underlying the international expansion of the Spanish economy. Exhibit 7.a shows Spanish exporters grouped by size and type of export

Exhibit 7
Spanish exporting firms

(a) Number of Spanish exporters by size and type of export activity
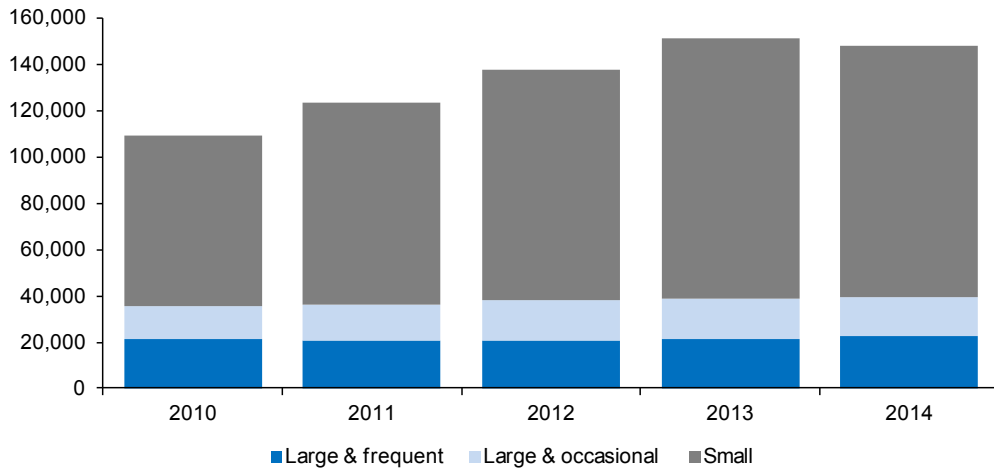
(b) Concentration of Spanish exports by firm size and export activity (Percentage)
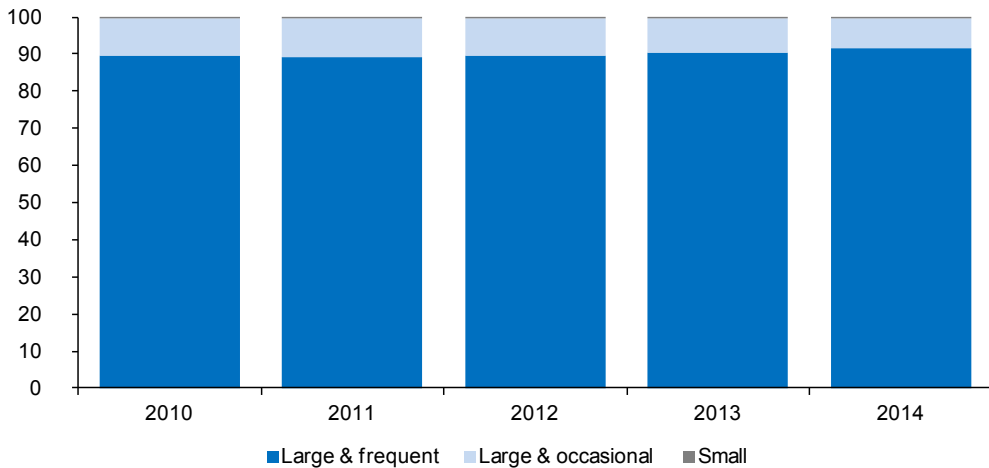
Note: Small firms are defined as those with exports of less than 50,000 euros a year. A frequent exporter is defined as a firm that has been exporting over the last four years.
Source: ICEX.

activity. Exhibit 7.b shows the concentration of Spain's total exports according to these parameters. The exhibit divides exporting firms into three groups according to ICEX nomenclature: small exporters, *i.e.* those with exports of less than 50,000 euros a year; large and frequent exporters, *i.e.* those with exports of more than 50,000 euros a year and which have been exporting over the last four years; and,

finally, large but occasional exporters, *i.e.* firms with exports of more than 50,000 euros a year, but which have not exported continuously over the last four years.

Firstly, the group gaining most firms between 2010 and 2014 was that of small firms, which grew by 46% from 74,000 to 108,000. This group of firms,

referred to as the base of the Spanish business pyramid (Xifré, 2014), is important because in many cases these are firms with a sound business project that are starting to export, and may turn into regular exporters.

Although large, frequent exporters make up just 15% of all exporting firms, they account for 90% of Spain's exports by volume.

However, in terms of their contribution to total exports, as Exhibits 7.a and 7.b clearly show, although large, frequent exporters make up just 15% of all exporting firms, they account for 90% of Spain's exports by volume. Indeed, the group of large, regular exporters grew by just 6.7% between 2010 and 2014, from 21,237 to 22,654.

Table 2 gives additional information on the degree of concentration of Spanish exporters. At the tip of the export pyramid there are 95 firms with exports of more than 250 million euros a year. This select group of companies represents just 0.1% of the census of export businesses, but generates 40% of Spain's total exports. Taking all the firms with exports of over 5 million euros into account, although the group comprises less than 5,000 operators, they are responsible for 80% of total exports.

Although in all countries export activity is usually concentrated in just a few companies (Bernard *et al.,* 2012), and although there is no methodologically comparable information on concentrations in other economies, these data suggest that Spain's export business base has considerable scope for growth and improvement. It is therefore worth studying specific measures to support it, based on an understanding of the specific features of the process of international expansion among small firms.

Conclusion: International best practices

A review of European Commission studies on the topic (European Commission, 2007 and 2008) and contributions from other sources (OECD,

International studies clearly highlight that the most effective strategies for supporting international expansion are those tailored to each firm.

1997; USAID, 2004; NESTA, 2011) allows for the identification of a number of international best practices on stimulating international expansion at the base of the business pyramid (for more information on the specific case of Spain, see Xifré, 2014).

■ The most effective means of promoting internationalisation is through individually tailored support to firms. International studies clearly highlight that the most effective strategies for supporting international expansion are those tailored to each firm. This is largely due

Table 2
Concentration of Spanish exports by volume of exports

Firms´ export volume	Number of firms	Total number of firms (%)	Total exports (%)
Over 250 million euros	95	0.1	39.7
Between 50 and 250 million euros	449	0.3	18.8
Between 5 and 50 million euros	4,153	2.8	24.9
Total: more than 5 million euros	**4,697**	**3.2**	**83.4**

Source: ICEX.

to the dynamic and highly specific nature of the obstacles each exporting firm has to overcome in order to expand internationally.

- It is advisable for firms to network and build alliances. This means the goods and/or services that firms offer can complement one another so as to offer the target market or customer a higher value product and service experience. This is also a way of achieving the commercial critical mass necessary to participate in certain international projects or invitations to tender.

- There is a strong link between internationalisation and innovation, and more generally, competitiveness. It is therefore preferable for firms to address the internationalisation process as part of a wider strategy aiming to boost business competitiveness. This idea is also relevant to the organisation of public activities to support firms' internationalisation and suggests that multidimensional agencies are preferable to raise competitiveness, focusing on innovation, entrepreneurship, business growth, etc.

- Companies need to fully take advantage of the potential of information and communications technologies (ICTs) and other new technologies to stimulate internationalisation. Best practices examined show that ICTs can play two important roles in catalysing this process: they can support communications networks, and enable market prospecting, information and contacts with foreign partners. Technologies of this type have also been found to be highly cost effective.

References

Barba, G.; Bugamelli, M.; Ottaviano, G., and F. Schivardi (2010), "The Global Operations of European Firms," *Bruegel Policy Brief,* 2010/05.

Bernard, A.B; Jensen, J.; Redding, S.J., and P.K. Schott (2012), "The Empirics of Firm Heterogeneity and International Trade," *Annual Review of Economics*, 4: 283-313.

European Commission (2007), *Supporting the internationalisation of SMEs,* Final Report of the Expert Group, DG Enterprise and Industry.

— (2008), *Supporting the internationalisation of SMEs. Good practice selection,* DG Enterprise and Industry.

Correa-López, M., and R. Doménech (2012), La Internacionalización de las Empresas Españolas, BBVA Research, *Documento de Trabajo* 12/29.

García-Canal, E. (2013), "The international expansion of Spanish firms: Strengths and weaknesses," *Spanish Economic and Financial Outlook*, 2(6).

Myro, R. (2013), "La política de internacionalización de la empresa española," *Economía Industrial,* 387 (2013): 119-130.

NESTA (2011), *Barriers to growth. The views of high-growth and potential high-growth business*, Research summary, November 2011.

OECD (1997), *Small Business, Job Creation and Growth: Facts, Obstacles and Best Practices.*

USAID (2004), *Best Practices in Export Promotion,* Technical Report submitted by Nathan Associates Inc. to USAID.

Xifré, R. (2014), "La internacionalización en la base de la pirámide empresarial española: análisis y propuestas," *Documento de Trabajo* 189/2014, Fundación Alternativas.

Changes in the structure and composition
of public-sector employment during the crisis

Antonio Montesinos, Javier J. Pérez and Roberto Ramos[1]

Following a period of growth from 2007-2011, public sector employment cuts, in part driven by fiscal consolidation efforts, brought employee levels back in line with pre-crisis levels. The reduction, however, was mainly achieved through job losses affecting staff on temporary contracts, while the number of open-ended contracts actually increased, posing future policy challenges related to the cyclical or structural nature of the policies implemented and also related to securing an adequate provision of public services.

This article analyses the evolution of public-sector employment in Spain during the crisis, taking into account the impact of recent fiscal consolidation measures. Specifically, changes in the structure and composition of public-sector employment between 2007 and 2014 are examined, broken down by level of government, branch of activity, and type of employment contract. Furthermore, the impact of recent legislative changes in this area are assessed. Our findings show that while there were public-sector employment cuts in 2012-13, these follow a period of growth in public-sector employment between 2007 and 2011, such that the number of public-sector employees in 2014 was similar to that in 2007. The impact of the cuts, however, was mitigated by the general increase in the working week, with an increase in the number of hours worked. In 2014 compared to 2007, there was an increase in the number of public-sector employees in the autonomous regions, the health and social services sectors, and in the number of employees on open-ended contracts. By contrast, the number of staff in other areas of the public administration fell, along with the number of staff in education and the number of employees on temporary contracts.

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Introduction

Government is a major player in labour markets in OECD countries, employing an average of 15%-20% of the economy's total workforce.[2] The role of public-sector employment is particularly important in sectors associated with the provision of public goods and services that governments often supply to society quasi-monopolistically (such as justice or defence) and in relation to those public services traditionally associated with the welfare state (education, health, social services).

As part of the fiscal consolidation underway in recent years, many European Union (EU) countries, including Spain, have reviewed the function and structure of their general government expenditure. In particular, this has included measures affecting government salaries and staffing levels.[3]

This article explores the trends in government employment in Spain[4] over the course of the crisis and the recent process of fiscal consolidation. Our analysis of this process focuses in particular on the changes in the structure and composition of public-sector employment broken down by level of government, type of contract, and branch of activity. We also present evidence on the role the various measures approved to correct the government deficit may have played, particularly since 2011. The article does not, however, address other important issues, such as the links between government employment and the efficiency with which public goods and services are delivered. Nor does it discuss the public or private provisions of public goods and services, or the evaluation of the observed or desirable design of government salary and staff policies. There is abundant specialised literature focusing on analysing public sector efficiency, the management of public sector employment, and the broader question of the "quality of public expenditure" in general. See, for example, López Casasnovas (2010), González Páramo and Onrubia (2003), Afonso, Schuknecht and Tanzi (2005) or Hernández de Cos and Pérez (2015).

We have used data from the *Labour Force Survey* (LFS), published quarterly by the National Statistics Institute (INE), to measure the number of employees working in the public administration in Spain.[5] Despite the various changes in methodology and base, the INE provides uniform linked series since 1987, which allows this study to take a broader perspective. Additionally, the availability of individual LFS microdata enables the discussion and analysis to be enriched, particularly, as we shall see, when analysing the impact of recent budgetary consolidation measures. Other statistical sources exist for the number of government employees, in particular national accounts, published by the INE, and the central register of government staff, published by the Ministry of Finance and Public Administration. Compared with the national accounts, the LFS has the advantage that it is published quarterly rather than annually, and it is more up-to-date than the national accounts, which tend to be published with a significant time lag.[6] The LFS also gives fuller coverage of employment in the public administration than does the register of government staff.

The main findings of our analysis are as follows. Firstly, the measures to curb public-sector employment implemented in 2012-2013 were implemented after a period of expansion in 2007-2011, such that the number of public-sector employees in 2014 was similar to that in 2007. The number of hours worked was greater in 2014 given the general increase in the working week, which was extended from 35 hours to 37.5 hours across government as a whole over the period examined. Over the period 2007-2014, there was an increase in the number of public-sector employees in the autonomous regions, the health and social services sectors, and those on open-ended contracts. By contrast, the number of staff elsewhere in the public administration fell, along with the number of staff in education and the number of employees on temporary contracts.

[3] See, for example, Pérez *et al.* (2015), Gaudillat (2014) or Demmke and Moilanen (2010).

[4] Title II of Law 7/2007 of April 12th, 2007, on the Basic Statute of Public Employment establishes the categories of government employees. These are: (a) career civil servants; (b) interim civil servants; (c) contract staff (whether permanent, open-ended or temporary contracts); and (d) temporary staff.

[5] See Montesinos, Pérez and Ramos (2014) for a discussion of the various different statistical sources available in Spain to study the role of government as an employer.

[6] At the time of writing, the most recent data available refer to 2009.

Exhibit 1

Long-term trend in government employment

Trend in govt. employment

Thousands of employees

% Change

% Change (R.H. Axis) ▬▬▬ Govt. employees

Government employment relative to population

%

%

▬▬▬ % of total population (L.H. Axis) ▬▬▬ % of labour force (R.H. Axis)

Public spending and public consumption per govt. employee

Thousand euros per employee

Thousand euros per employee

Deflated public spending (a) (L.H. Axis)
Deflated public consumption (a) (R.H. Axis)

Note: (a) GDP deflator used in both cases.

Source: Eurostat and national statistics.

The remainder of this article is organised as follows. The next section analyses the characteristics of changes in public-sector employment during the crisis and in the recent period of budgetary consolidation. Subsequently, we focus on the impact of the main adjustment measures adopted regarding general government employment, which have driven these changes. Finally, we offer some concluding remarks.

Evolution of public-sector employment over recent decades and during the crisis

From a historical perspective, according to the LFS, the number of government employees grew almost continuously from 1987, outpacing growth in both the population and the labour force, with particularly rapid growth in the early 2000s (see Exhibits 1 and 2). Thus, the number of employees rose from 1.5 million in 1987 to 3.1 million

After a period of growth between 2007 and 2011, the number of public-sector employees fell to just slightly below the level in 2007 – similar to that in comparable countries, although below the average.

in 2011, with a slight reduction in public-sector employment in just three years during this period (1993, 1994 and 2006). This process, associated in particular with the expansion of the welfare state, public services, and transfers of powers to the autonomous regions, began to be reversed in 2012, within a general process of consolidation of the public accounts. Therefore, between 2011 and 2014 the number of public-sector employees fell by around 345,000 and the share of the total working population employed in the public sector dropped from 13.3% in 2011 to 12.1% in 2014.

This process brought the number of public-sector employees to close to 2.8 million in 2014, which is slightly (1.3%) below the level in 2007. It is worth noting that from an international perspective, the size of general government in Spain, in terms of direct employment, is similar to that in comparable countries, although below the average.[7]

The recent period of public-sector employment restraint was preceded by a number of years of widespread increases. The expansion in government employment in the period 2007-2011 was led by the autonomous regions (see Exhibit 3),

From 2012 to 2014, total public-sector employment fell by slightly more than 11%, mainly affecting temporary workers. The autonomous regions accounted for 70% of this reduction, the Social Security system 17%, and local authorities 13%.

whose staff levels peaked in 2011 (1.8 million employees), with cumulative growth over the period exceeding 15%. Thus, the adjustment in 2012-2014 partly offset the increase in previous years, such that the number of employees working for the autonomous regions in 2014 was 1.7% higher than in 2007. In the case of the central government, the Social Security system and local authorities, the adjustment in employment between 2012 and 2014 led to a net reduction in staff levels of 1.3% and 4.5%, respectively, compared to 2007. Thus, over the three years as a whole, total public-sector employment fell by slightly more than 11%, the autonomous regions accounting for 70% of this reduction,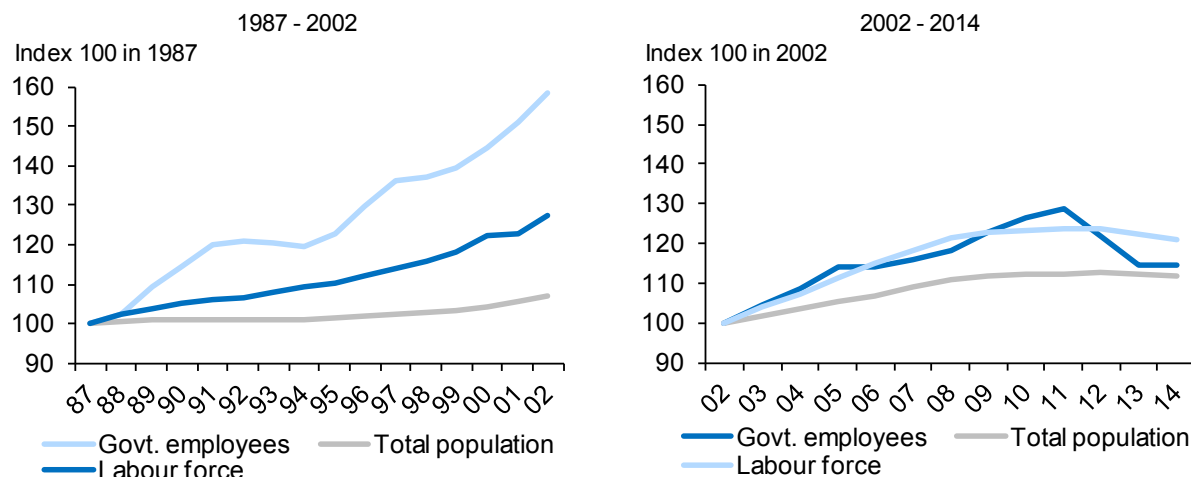 the Social Security system 17%, and local authorities 13%. The drop was concentrated in the period 2012-2013, with zero growth in public-sector employment in 2014 in aggregate terms.

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[7] On this point, see Montesinos, Pérez and Ramos (2014).

Exhibit 2

Phases of trends in government employment and population

1987 - 2002

Index 100 in 1987

2002 - 2014

Index 100 in 2002

Govt. employees — Total population — Labour force

Govt. employees — Total population — Labour force

Source: Labour force survey *(INE).*

The sharp adjustment in employment seen in 2012 and 2013 mainly affected temporary workers, although the number of employees on open-ended contracts also contracted in 2013 (see Exhibit 3). Given that temporary employment accounted for slightly more than 25% of the total, this pattern of adjustment means caution is needed before interpreting it as irreversible, the reduction in public-sector employment during the crisis being cyclical as well as structural. Thus, there were more employees on open-ended contracts in 2014 than in 2007 (slightly more than 140,000 staff), while the number of temporary employees fell by almost 25% since 2007, equivalent to a reduction in the workforce of slightly more than 175,000 between 2007 and 2014.

By sectors of activity, public-sector employment as a whole in all branches (education, health and social services, public administration and Social Security) fell in 2012 and 2013 (see Exhibit 4).[8] The biggest contribution was from the public

administration and Social Security branch, which, had increased considerably during the initial expansion phase (2007-2011), however, such that throughout the entire duration of the crisis, the number of employees remained practically constant. The number of employees in health and social services, on the other hand, increased in net terms in 2007-2014, given that the significant adjustment in 2012-2014 (-10%) was insufficient to offset the initial increase (15% between 2007 and 2011). Education was the only branch that experienced a reduction in the workforce during the crisis, losing slightly more than 8.5% of its employees.

Government channels the provision of certain goods and services through public-sector enterprises. In the national accounts, public-sector enterprises are classified as being outside the public administration sector, and are defined as legal entities owned or controlled by these administrations, and which produce most of their

[8] The education branch includes wage earners in section 85 of the 2009 National Classification of Economic Activities (CNAE) and the health and social services branch in sections 86, 87, 88 and 75. Other public administration employees are included in the public administration and Social Security branch, which primarily includes section 84 of CNAE 2009. For data prior to 2008, a comparable classification (CNAE 1993) was used.

64

Exhibit 3

Government employment expansion and contraction during the crisis

By level of govt.

Base 2007 = 100

- Autonomous regions
- Local authorities
- Central government, Social Security, etc.

By level of govt.

% change and relative shares

- Autonomous regions
- Local authorities
- Central government, Social Security, etc.
- Total govt.

By contract type

% Change and contributions

Open-ended   Temporary   Total govt.
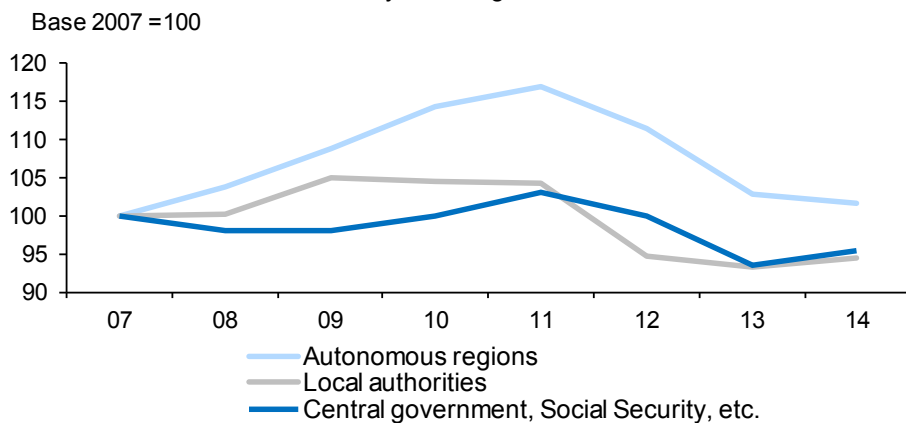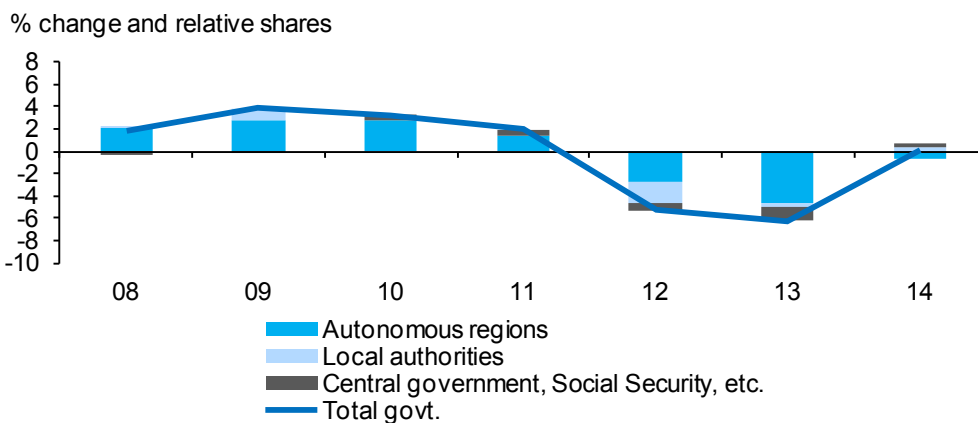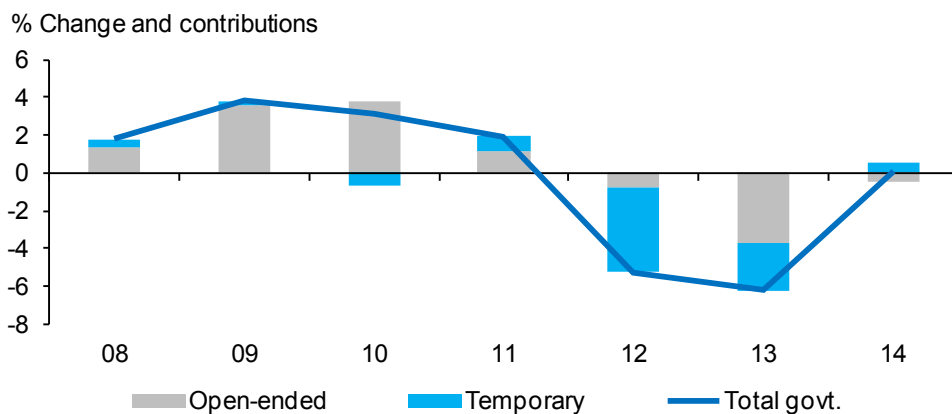
Source: Labour force survey *(INE).*

goods and services with a market orientation at economically significant prices. According to the LFS, public-sector enterprises in Spain employed approximately 150,000 people in 2014, mainly in the transport, postal services and communications branches. In recent years, employment in public-sector enterprises could, in general terms, be characterised as evolving in the opposite direction to employment in the public administration sector: net job losses of 14.0% between 2006 and 2010, followed by an increase of 11.5% between 2010 and 2013. In 2014, the 8.7% reduction in the number of employees brought employment in public-sector enterprises back to 2005 levels. Employment in public-sector enterprises as a share of total public sector employment (defined as the aggregate of public-sector enterprises and government), has remained around 5% throughout the period.

The impact of consolidation measures

The policies on staff serving the public administration are determined on a discretionary basis by the various levels of government within their areas of competence. Therefore, the change in the number of public-sector employees during the crisis and the process of fiscal consolidation we have described in the previous section has been determined by economic policy measures. As early as 2008, the various levels of government began to implement measures to restrict recruitment by the public administration, in particular by gradually curtailing the possibility of replacing staff and imposing tighter restrictions

on temporary contracting. Since 2011, however, the need to control the public deficit led to the implementation of an even stricter package of measures.[9] In 2013, in parallel, the report on

Beginning in 2008, various levels of government began implementing measures to restrict recruitment by the public administration. These became even stricter with the increased need for fiscal consolidation.

public administration reform (CORA report) established improving public administration efficiency, including a set of measures on public employment, as one of its three pillars of action.[10]

Although the aggregate impact of the corrective measures is visible in the evolution of the main public administration employment aggregates in 2012 and 2013, it is difficult to isolate the specific effects of each of the particular measures.[11] For this reason, we set out below some additional anecdotal evidence on the impact of two measures affecting public-sector employment taken in late 2012: the restrictions on new recruitment, and the extension of the working week to thirty seven and a half hours.

Restrictions on new recruitment

The measures in Royal Decree-Law 20/2011 of December 30th, 2011, on urgent budgetary, tax, and financial measures to correct the public deficit,

[9] In particular, the measures contained in Royal Decree-Law 20/2011 of December 30th, 2011, on urgent budgetary, tax, and financial measures to correct the public deficit, and Royal Decree-Law 20/2012 of July 13th, 2012, on measures to ensure budgetary stability and stimulate competitiveness.

[10] See Montesinos, Pérez and Ramos (2014) and Ministerio de la Presidencia (CORA report, 2012) for a description of the main measures affecting government employment enacted in recent years, with particular emphasis on measures enacted since late 2011.

[11] The CORA report offers some estimates of the fiscal savings deriving from the various measures taken from 2012 onwards. However, it does not give any details about the methods used in its preparation and to obtain these budgetary impacts. See also Montesinos, Pérez and Ramos (2014) for a discussion and simple estimate of the impact on public-sector employment of the limitation on the staff replacement rate based on microdata from the *Muestra Continua de Vidas Laborales [Continuous Working Lives Sample]* (MCVL).

Exhibit 4

Government employment by branch of activity

Expansion and contraction during the crisis

Base 2007=100

- Health and Social Services
- Education
- Public Administration, Social Security, etc.
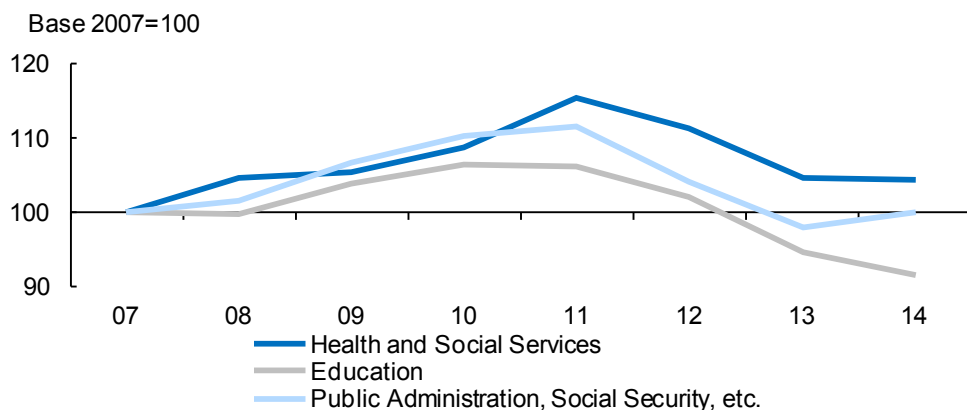
Change by branch of activity

% change and contributions

- Education
- Public Administration
- Health and Social Services
- Total government

Permanent employees

Base 2007=100

- Health and Social Services
- Education
- Public Administration, Social Security, etc.

Temporary employees

Base 2007=100

- Health and Social Services
- Education
- Public Administration, Social Security, etc.
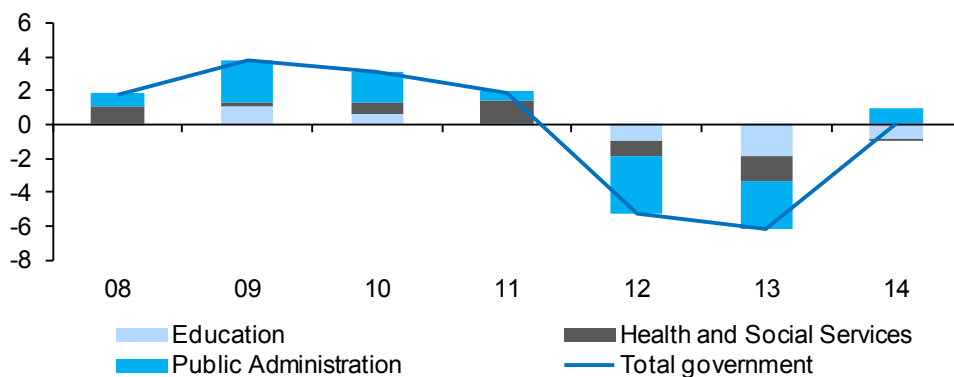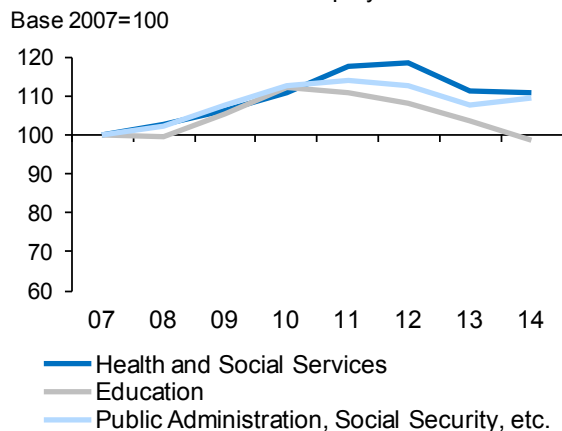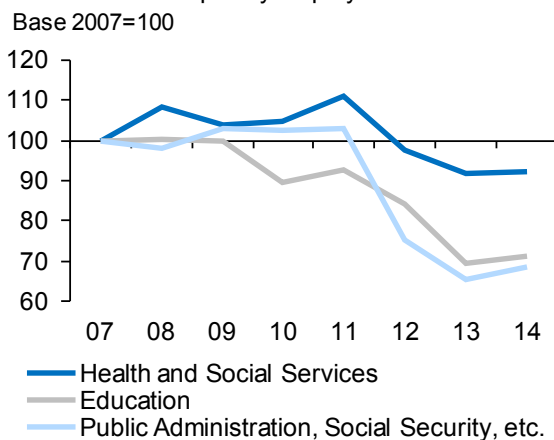
Source: Labour force survey *(INE).*

Exhibit 5

Dynamic of government recruitment (a)

Total
% Stock of total contracts

Change
% annual change and relative shares

Open-ended
% Stock of open-ended contracts

Temporary
% Stock of temporary contracts
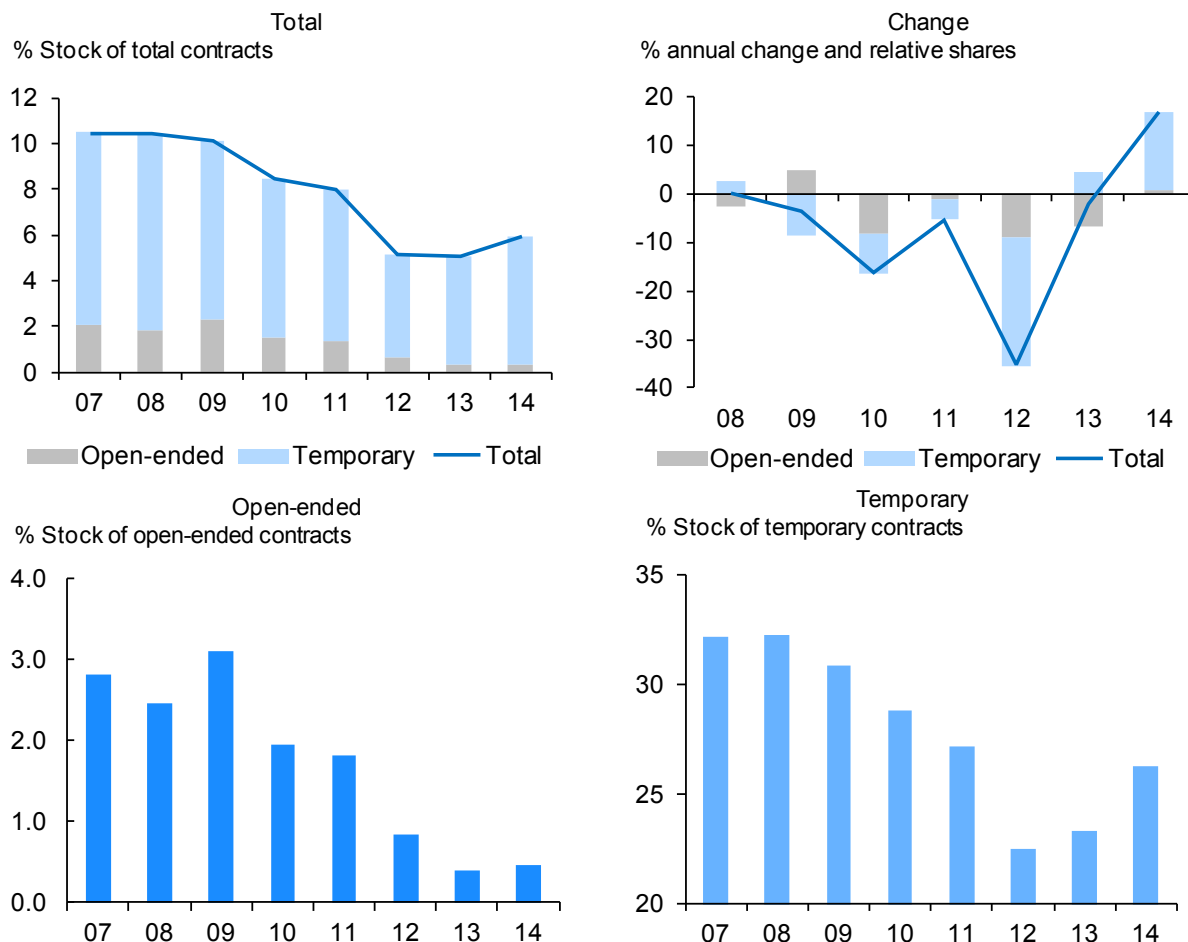
Note: (a) Workers with contract in force in fourth quarter of each year with length of service of less than one year.
Source: Labour force survey *(INE).*

included a ban on the public administration's recruiting new staff, except in exceptional circumstances, and a freeze on filling posts left vacant by staff retiring, except in those cases where a replacement rate of 10% was set. This tightened up the conditions for replacing staff, beyond the restrictions already introduced by the legislation in previous years. It is therefore to be expected that this new measure would mean that there would be less recruitment of government employees than in previous years, assuming that

the number of people retiring remained similar. It is worth asking, therefore, whether these restrictions implemented since 2009, although with varying degrees of intensity, had an effect on the age profile of government employees.

The number of employees in the last quarter of each year who have been working for the government for less than 12 months was used as a proxy for government recruitment (see Exhibit 5). The share of the total these new contracts

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Exhibit 6
Age structure of government employees

Percentage distribution by age groups

31-45 years   46-60 years   < 30 years   >60 years

Annual change in percentage distribution distribution by age groups

< 30 years   31-45 years   46-60 years   >60 years
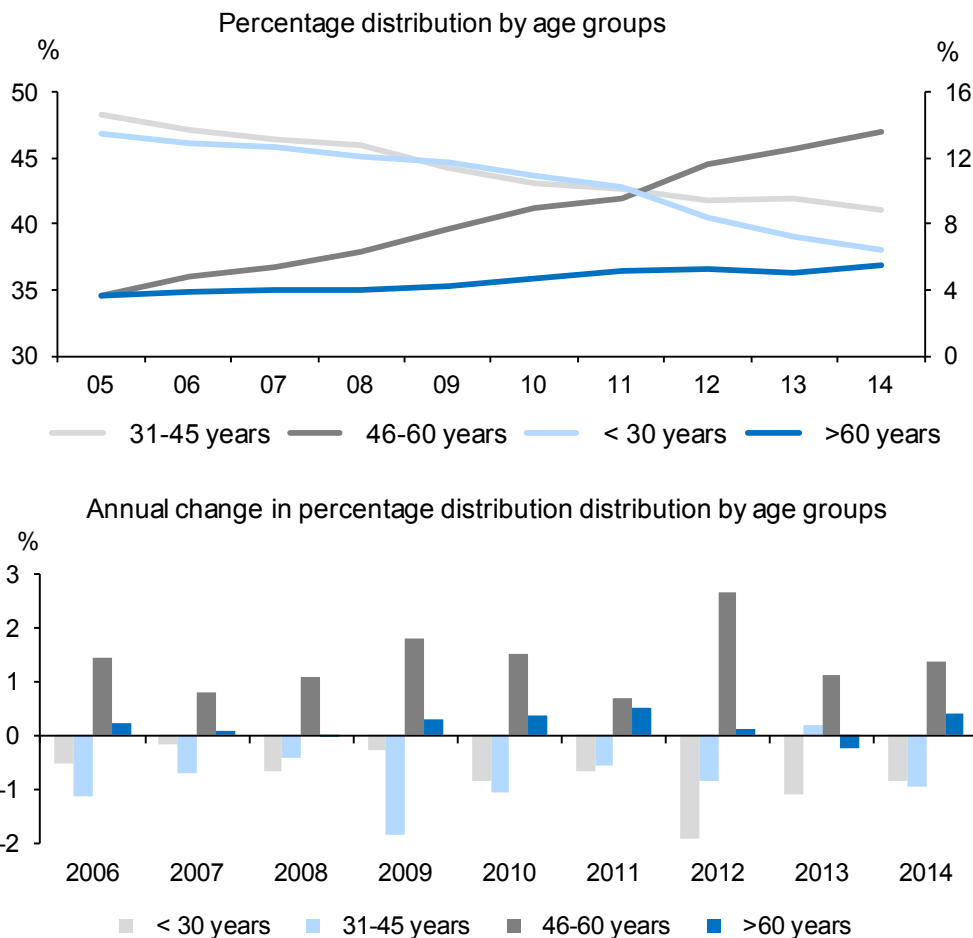
Source: Labour force survey *(INE).*

represent in the fourth quarter has declined considerably since 2010, in the case of both open-ended and temporary contracts. This trend gained pace in 2012, with a year-on-year drop of more than 35%. In 2013 and 2014, on the other hand, recruitment of temporary workers recovered, while the number of new open-ended contracts fell in 2013 and remained stable in 2014.

It could therefore be argued that it is likely that the tighter restrictions on recruitment have accentuated the existing trend towards a higher average age of public-sector employees, as new recruits tend to be younger than the stock of government employees. Indeed, over the years, a decline in the percentage of employees aged under 45 has been observed, with the 46-60 year old group increasing. However, this phenomenon seems to form part of a longer-term trend (see Exhibit 6). This issue requires more thorough analysis, in particular considering the transitions of workers between age brackets and towards retirement, and its determinants.

Measures to increase the number of hours worked

Together with tighter restrictions on recruitment, Royal Decree-Law 20/2011 extended state public-sector working hours from thirty-five to thirty-seven and a half hours a week, on an average annualised basis. Subsequently, Royal Decree-Law 20/2012, of July 13th, 2012, enacted a series of additional measures relating to the hours worked by public-sector employees.

These measures have had a visible impact on the normal working hours of public-sector employees, where there has been a genuine change in the working week from thirty-five to thirty-seven and a half hours (see Exhibit 7). The number of

contracts and temporary contracts. Broken down by levels of government, the normal working hours at the central government level were already thirty-seven and a half hours before the crisis, while the autonomous regions and local authorities have converged to this figure since 2012.

The increase in the number of hours per worker has made it possible to mitigate the effects of the reduction in the total number of government employees observed in 2012 and 2013 (see Exhibit 8). Thus, the total number of hours worked by government employees in 2007-2014 (calculated as the number of hours worked per employee multiplied by the number of employees) has remained above 2007 levels, although between 2011 and 2013 it dropped by 9.1%, and

Exhibit 7

Changes in government employees' average working week

Normal working week: Percentage of employees
% employees
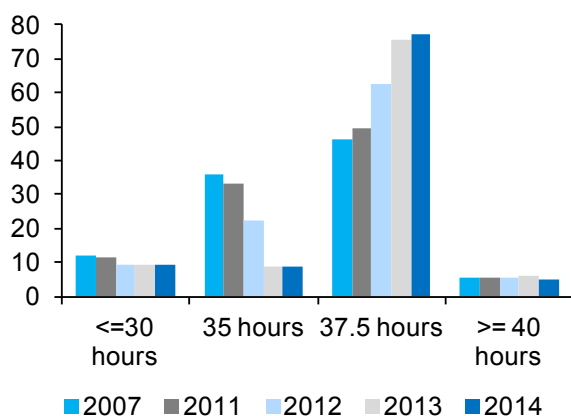
Normal working hours by level of government
Median number of hours

■2007 ■2011 ■2012 ■2013 ■2014

Source: Labour force survey *(INE).*
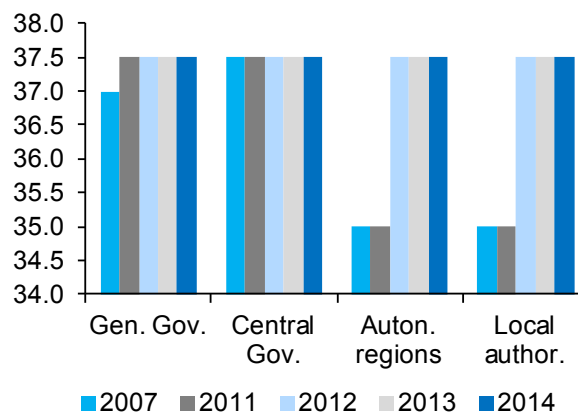
employees with a normal working week of thirty-seven and a half hours represented approximately 45% of total in 2007. This share rose to 75% in 2014, while the share of employees with a normal working week of thirty-five hours has fallen from 36.1% in 2008 to 8.6% in 2014. These changes have affected employees on both open-ended

then remained fairly stable in 2014. By sectors, the effect has been particularly significant in public education, given that the total number of hours worked by employees in the sector was 1.6% less in 2014 than in 2007, a significantly smaller drop than the 8.5% reduction in the number of employees.

Exhibit 8

Sector adjustment in employment and hours in government

Total

Base 2007=100

Activities of "General Government, Social Security, etc."

Base 2007=100

State education

Base 2007=100

Public health and social services

Base 2007=100
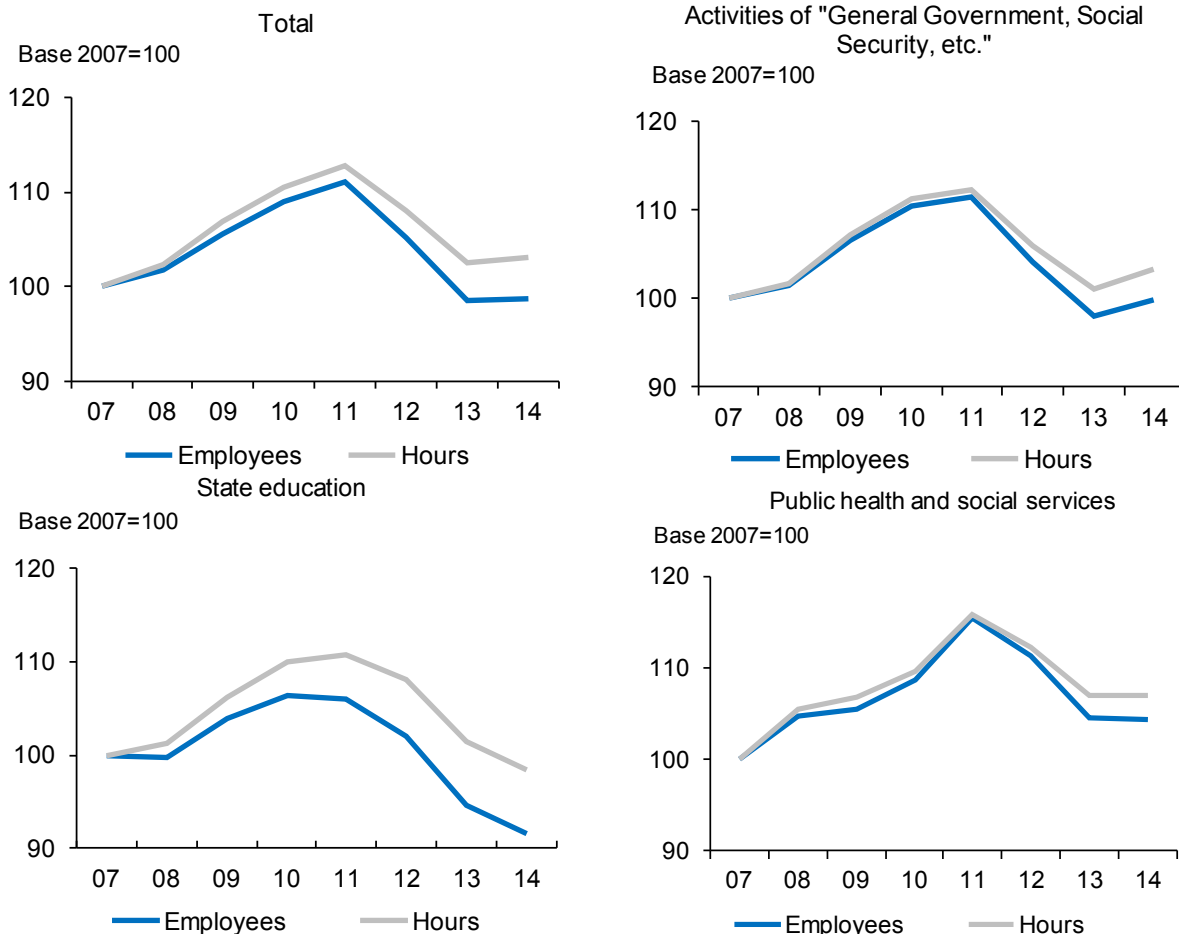
Source: Labour force survey *(INE).*

Concluding remarks

Two phases can be distinguished in the evolution of public-sector employment in Spain during the recent crisis. Firstly, between 2007 and 2011, the government as a whole increased its workforce in both absolute terms and relative to the population and the labour force. In the second phase, starting in 2012, the fiscal consolidation process led to a significant correction in public-sector employment, such that between 2007 and 2014 the number of employees working for the public administration was reduced by approximately 35,000.

This reduction was mainly due to net job losses affecting staff on temporary contracts, as there was an increase in the number of staff on open-ended contracts of 140,000. This poses challenges for the future as regards the cyclical or structural nature of the policies implemented, in particular if bottlenecks or shortcomings are detected in the provision of certain public goods and services.

It is also worth noting that, in aggregate terms, the number of hours worked by government employees increased between 2007 and 2014, as the average working week went from 35 hours before the crisis to 37.5 hours after the

crisis. Over this period, moreover, there was an increase in the share of public-sector employees in the autonomous regions, the health and social services sectors, and those on open-ended contracts.

References

Afonso, A.; Schuknecht, L., and V. Tanzi (2005), "Public sector efficiency: An international comparison," *Public Choice,* 123: 321-347.

Demmke, C., and T. Moilanen (2010), "Civil Services in the EU of 27. Reform Outcomes and the Future of the Civil Service," Ed. Peter Lang GmbH, Frankfurt am Main.

Gaulliat, P. (2014), "Spending reviews in the EU: methodologies and objectives," presented in the *8th Meeting of the Network of Public Finance Economists in Public Administration,* organised by the European Commission (DG ECFIN), 11 February, Brussels.

González Páramo, J.M., and J. Onrubia (2003), "Información, evaluación y competencia al servicio de una gestión eficiente de los servicios públicos," *Papeles de Economía Española,* 95: 2-23.

Hernández de Cos, P., and J.J. Pérez (2015), "El impacto de los salarios y el empleo público. Una perspectiva macroeconómica", *Presupuesto y Gasto Público,* forthcoming.

López Casasnovas, G. (2010), "La calidad del gasto público y su influencia en el desarrollo económico: una validación empírica para los países de la OCDE 1970-2005", *Hacienda Pública Española,* 193: 9 - 48.

Ministerio de la Presidencia (2012), "Informe sobre la Reforma de las Administraciones Públicas (CORA)."

Montesinos, A.; Pérez, J.J., and R. Ramos (2014), "El empleo de las Administraciones Públicas en España: caracterización y evolución durante la crisis," *Documentos Ocasionales,* Bank of Spain, No 1402.

Pérez, J.J.; Ramos, R.; Aouriri, M.; Celov, D.; Pesliakaité, J.; Campos, M.M.; Depalo, D.; Papapetrou, E., and M.

Rodríguez-Vives (2015), "The government wage bill and the crisis in the EU," mimeo, WGPF-ESCB.

The consequences of graduating in a recession in Spain

Daniel Fernández Kranz[1] and Núria Rodríguez Planas[2]

Rigidities in Spain´s labour market appear to increase the negative impact on workers´ earnings for those entering the market in times of recession. While the much needed recent labour market reform in Spain has changed some important aspects of the Spanish labour market, it has done little to reduce segmentation, decreasing the likelihood of improving this situation for new entrants in Spain during the latest financial crisis.

The undesirable effects on workers´ earnings from increases in unemployment are a function of both the workers´ education level and the characteristics of labour market institutions. Although there is variation across skill levels, generally, workers graduating at a time of high unemployment feel a greater negative impact on wages in the case of inflexible labour markets, such as that of Spain, relative to flexible ones. Moreover, economic conditions at the time of labour market entry and for the subsequent 10-15 year period are also an important factor, where once again, workers in inflexible labour markets are more adversely affected by entry during recessions. In addition, in the case of Spain, the effects of conditions at entry on earnings are driven more by greater difficulty to find employment than decreases in the level of wages. Finally, the negative effects of recession on workers in Spain (in particular for college graduates) appear to have been exacerbated following the 1984 reform, which increased reliance on fixed-term contracts.

Introduction

In their recent work published in the *American Economic Journal*: *Applied Economics,* Oreopoulos *et al.,* 2012, explain that, "the long-term impact from graduating in recessions can depend on how recessions affect the quality and availability of initial job opportunities, wage adjustments within firms, knowledge about workers' productivity by potential employers, and human capital accumulation." Hence, recent findings based on flexible labour markets in the US and Canada (Kahn, 2010; Oreopoulos *et al.,* 2012, and Altonji *et al.*, Forthcoming 2016) may

not necessarily apply to rigid and segmented labour markets, such as those in Spain.

The extent of damage caused by unemployment depends on both workers' education levels and labour market characteristics. Among college graduates in flexible labour markets, the evidence indicates initial wage losses ranging between 2.5 and 6 percent for a 4 percentage point increase in the unemployment rate, the average increase in a typical US recession. Although the effect eventually fades away, the wage reduction adds up to a loss of between 5 and 18 percent of cumulated

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earnings over the first 10 years for Canada and the US—see Oeropolous *et al.* (2012) for findings on Canada and Kahn (2010) and Altonji *et al.* (Forthcoming 2016) for findings on the US. In contrast, Kondo (2008), Genda *et al.* (2010) and Hershbein (2012) estimate small and temporary negative wage losses for low-skilled workers in the US, suggesting that this market resembles a spot labour market.

In more rigid labour markets, large and persistent earnings and employment effects are found among *both* lower- and higher-educated workers, as shown by Raaum and Roed (2006) for Norway, Genda *et al.* (2010) for Japan, and Brunner and Kuhn (2014) for workers with vocational training in Austria. For France, Gaini *et al.* (2014) find that an increase in the unemployment rate when leaving school lowers the employment rate of new entrants during the first 3 years, but has no significant wage effects.[3] For Germany, Biewen and Steffens (2010) find negative effects of labour market entry conditions on wages of low-and medium skilled workers, but these negative effect fade away within 3 years.

In this article, drawing from the work in Fernandez-Kranz and Rodriguez-Planas (2015), we analyse the long-term consequences of graduating during a recession in Spain, using Social Security records from the 2008 *Continuous Sample of Working Histories* (hereafter CSWH). In particular, we focus on Spanish males that graduated from high school, vocational training, or college between 1979 and 1991, and follow their labour market outcomes from a year after they graduated up to 2008. Our sample is unusually large, comprising 4,878,043 quarterly-individual level observations, 2,152,300 (or 44%) of which are high-school graduates, 1,905,192 (or 39%) of which have vocational training, and 820,551 (or 17%) have a college degree. Understanding how the business cycle at labour market entry affects the employment careers of male workers in Spain is a step forward for designing policies to cope with the currently high unemployment rates.

Methodology

The empirical strategy is to compare the employment and career paths of individuals that graduated at different moments in time and

Exhibit 1

Rate of unemployment and of employment under fixed-term contract in Spain
(Percentages)
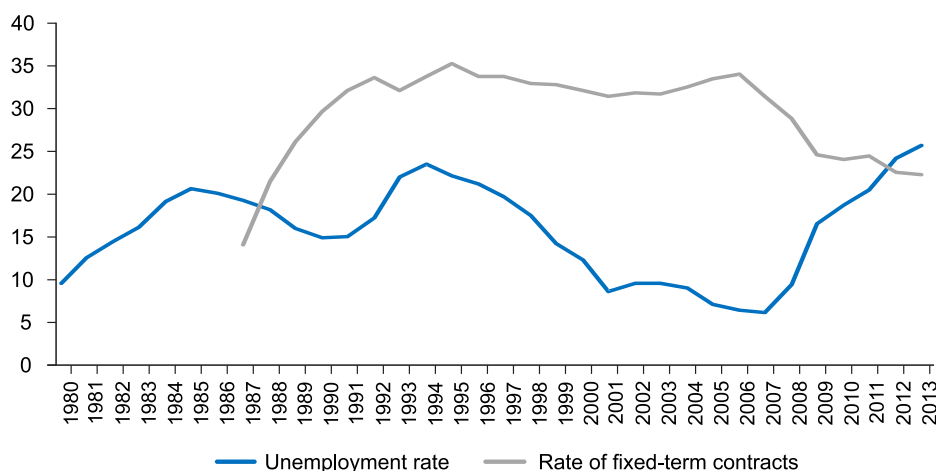
Source: OECD.

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[3] Because the authors use national unemployment rates as a measure of labour market entry conditions, their estimates may be biased towards zero due to measurement error.

across different regions, hence under very different economic conditions. To measure entry conditions, in line with convention, we use the regional unemployment rate one year before the individual finished his studies. Our period of labour market entry (between 1980 and 1992) includes both a recession with unemployment increasing from 11% in 1980 to 22% in 1985, and an economic expansion lowering unemployment back to 16% in 1992 (shown in Exhibit 1).

Summary of main findings

We find that graduating in a time of high unemployment in Spain results in substantial and persistent annual earnings losses. The average effect over a 10 year period of an 8 percentage-point increase in the unemployment rate at entry – the average shift from boom to recession – is a 9.6%, 12.5% and 6.4% decrease in annual earnings for high-school graduates, workers with vocational training, and college graduates, respectively. For college graduates, the negative effect persists for 5 years, and for those without a college degree, it persists for 7 years. For those without a college

The average effect over a 10 year period of an 8 percentage-point increase in the unemployment rate at entry is a 9.6%, 12.5% and 6.4% decrease in annual earnings for high-school graduates, workers with vocational training, and college graduates, respectively.

degree, the main reason for losses is the poor likelihood of finding employment. For college graduates, earnings losses are explained by both a lower likelihood of being employed and a lower probability of working under a permanent contract. These results are in sharp contrast to findings in

more flexible labour markets, such as the US and Canada, where the effects on hours worked and earnings (conditional upon working) are modest for all education groups. The results have been subject to a variety of sensitivity tests and do not seem to be driven by factors, such as cross-provincial mobility, employee's unobserved attributes, and graduation decisions.

We also analyse the dynamic effects and find that economic conditions are important *both* at the beginning of one's career and during the first decade (for high-school graduates) or the first fifteen years (for workers with vocational training and college graduates) following entry, suggesting that workers who entered the labour market during economic downturns do worse in the long term because they benefit less from the following economic expansion than those who joined the labour market during the economic boom. Hence,

In contrast to the case in flexible markets, workers who entered the labour market during economic downturns do worse in the long term because they benefit less from the following economic expansion than those who joined the labour market during the economic boom.

labour market entry conditions continued to have a strong effect on Spanish college graduates' careers even 10 or 15 years *after* they began. This finding contrast with the situation in flexible labour markets (Oreopoulos *et al.,* 2012). Similarly, another finding that differs from that of more flexible labour markets is the lack of evidence that firm mobility helps in the catch-up process among college workers.[4] While poor labour-market entry conditions increase the mobility of college workers across firms and industries, evidence suggests that this is the result

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[4] Oreopoulos *et al.,* 2012 find that the"earnings adjustment process is characterized initially by increased mobility across employers and industries and improvements in the characteristics of the average employer."

of churning across fixed-term contracts, as opposed to moving to better jobs.

## Labour income profiles by year of entry

Exhibit 2 shows the general experience profiles in annual earnings for our baseline Spanish data by highest education level completed. For high-school graduates and individuals with vocational training, we observe sharp and sizeable differences in starting earnings across graduation cohorts, with those entering between 1981 and 1987 (for high-school graduates) and 1983 and 1986 (for those with vocational training) having lower annual earnings. While fluctuations

Exhibit 2

Labour income profiles by graduation year and highest education level

a) - HS degreee
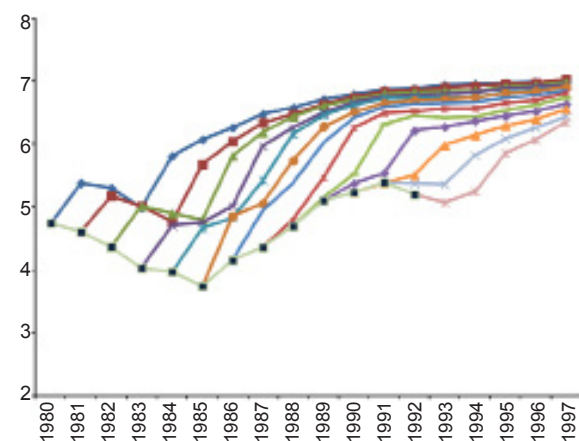
b) - Vocational training
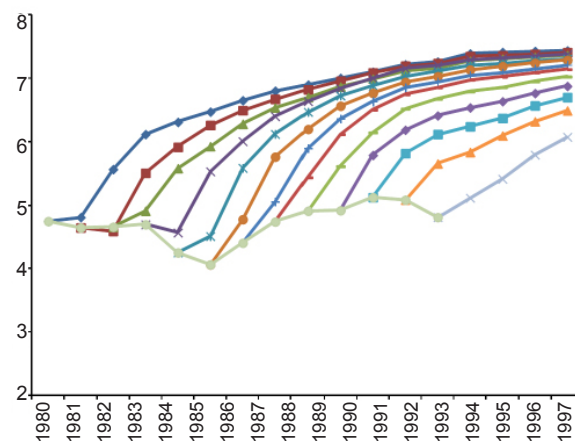
c) - College

Note: The exhibit shows the log of average monthly earnings for a particular experience-year and for each entry-year cohort. The reason for the seemingly low values at initial levels of experience is due to the fact that many young individuals remain without employment with zero income.

Source: Authors' calculations using the CSWH (2008).

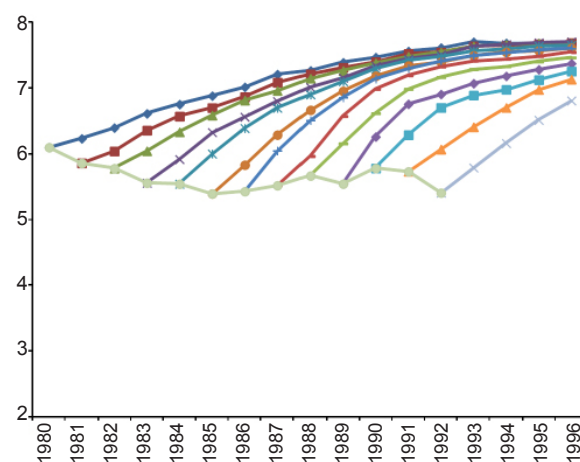of starting earnings across graduation cohorts are also observed among college graduates, they are smoother. Interestingly, Exhibit 2 shows a clear pattern of convergence for all education groups, suggesting that initial differences in starting conditions tend to fade over time and become negligible for all groups around 7 years after entry. In what follows, we will analyse the mechanisms that explain these earnings gaps and the convergence patterns in each education group.

Effects of entry conditions on annual earnings

Exhibit 3 shows estimates of the effects of labour market entry on annual earnings by highest education level. Average earnings are defined as average labour income including non-workers, for which labour income is set to zero. The exhibit shows the effect of an 8 percentage points increase in the provincial unemployment rate (the average increase during a typical recession

Exhibit 3

The effect of graduating in a recession on earnings, employment and wage rates

a) - Earnings (0 for non-workers)
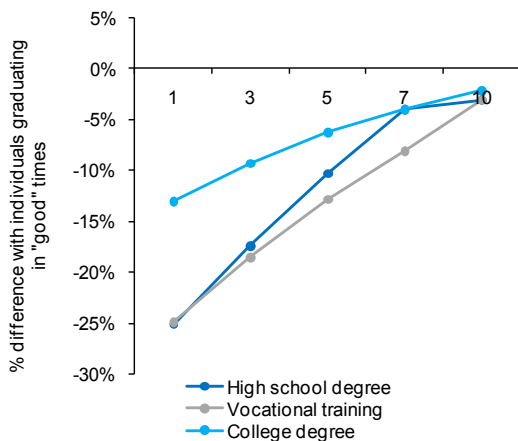
b) - Probability of empoyment
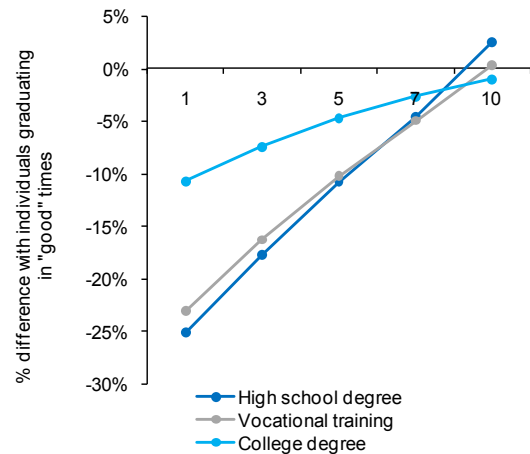
c) - Wage rates
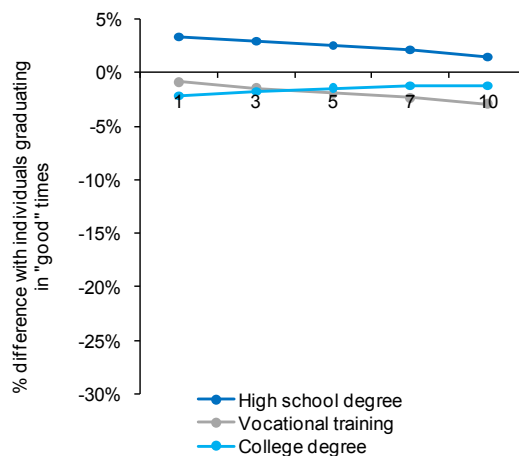
Source: Authors' calculations using the CSWH (2008).

in Spain) at labour market entry at different years of potential experience (at 1, 3, 5, 7, and 10 years experience).

The shifts due to experience profiles are shown in Panel (a) of Exhibit 3. They show that the negative shock is more persistent for individuals without a college degree. The effect of the negative shock at labour market entry is a decrease in earnings of 25.1% and 24.9% during the first year in the labour market for high-school graduates and workers with vocational training, respectively. The effect of the shock decreases to 17.4% and 18.5% at experience year 3, and further to 10.3% and 12.8% at experience year 5, respectively. For both groups, the negative effect of the shock on earnings fades away at experience year 10. For college graduates, the full effect of an increase of 8 percentage points in the unemployment rate fades away within 7 years. College graduates experience a 13% decrease in earnings during the first year in the labour market, a 9.3% decrease at experience year 3, and a 6.3% decrease at experience year 5. All of these effects are statistically significantly different from zero at the 99%, 95%, and 90% level, respectively. After 7 years, the effect becomes smaller and is no longer statistically significantly different from zero.

Panel (b) in Exhibit 3, shows estimates of the effects of labour market entry on the likelihood of being employed by highest education level. Estimates in Panel (b) resemble closely those in Panel (a) for all education levels, and their magnitude ranges between 75% and 100% of the effects found in Panel (a). Hence, consistent with studies analysing rigid labour markets (Raaum and Roed, 2006, and Genda *et al.,* 2010), we find that the effects of conditions at labour market entry on annual earnings (shown in Panel a) are driven by differences in the likelihood of being employed, not by differences in the level of wages.

We turn now to the results of wages, shown in Panel (c). These estimates are obtained using only employed individuals. They give guidance on whether differences in monthly wages conditional

on working drive any of the observed negative and persistent effects of entering the labour market during an adverse shock. However, as labour market entry conditions affect employment, results from this analysis need to be taken with caution because of sample selection. Overall,

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In Spain, the effects of conditions at labour market entry on annual earnings are driven by differences in the likelihood of being employed, not by differences in the level of wages.

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we find modest impacts of labour-market entry conditions on monthly earnings, which is not surprising given the extent of wage rigidity in the Spanish labour market before 2008, implying that most of the effects found in Panel (a) are driven by employment. More specifically, for high-school graduates, we observe a small, but statistically significant, positive effect on monthly wages. This small positive effect is consistent with the idea that during recessions there is substantial job shedding with lower quality jobs being destroyed and only higher quality jobs surviving. Therefore, those observed working do so at higher than average wages.

The effect of entry conditions before and after the 1984 reform

Exhibit 4 presents estimates by whether labour market entry occurred after 1984, one year after fixed-term contracts had first been legalized in Spain. In theory, the effect of the 1984 reform is ambiguous. On the one hand, the existence of fixed-term contracts could have a positive effect on those who enter during recessions by offering them the chance to start in a temporary job, with the hope that later the worker would transition into a job with a permanent contract. To put it differently: temporary contracts could act as a stepping stone into employment and better jobs for those who

faced difficult conditions at entry. However, the generalization of fixed-term contracts could lead to the segmentation of the labour market, with those under temporary contracts trapped in poor and precarious jobs for long periods of time.

The results of this analysis need to be taken with caution, since there are possible confounding factors that could explain the differences in the results between the periods before and after 1984. Exhibit 4 suggests that the detrimental effects of entering the labour market during a recession are

much larger and much more persistent for those cohorts who entered after the labour market reform that legalized fixed-term contracts. For college graduates, we observe statistically significant effects of a negative shock on annual earnings if they entered the labour market after 1984. For those without a college degree, the negative shock is also observed prior to the legalization of fixed-term contracts. The effect is not only more negative the initial years after entry, but becomes more persistent, especially for individuals with a college degree, suggesting that fixed-term

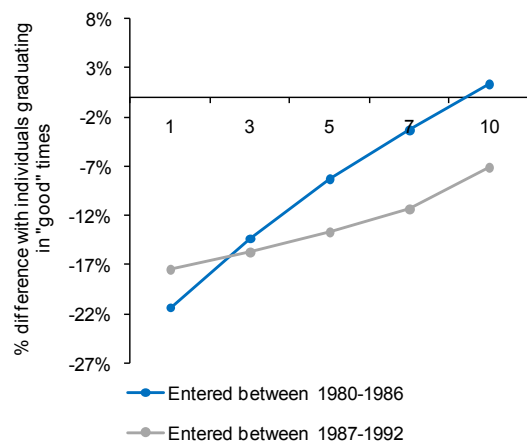Exhibit 4

The effect of graduating in a recession on earnings: Before and after the 1984 reform
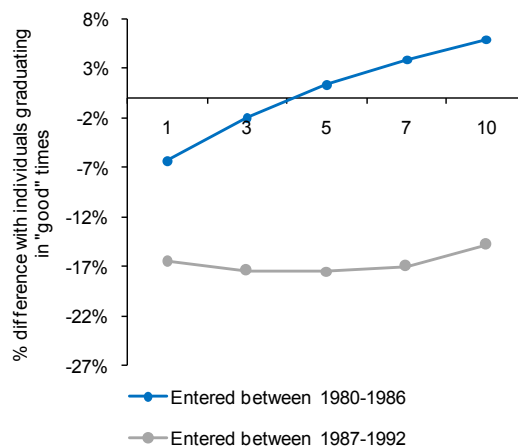
a) - High School Graduates
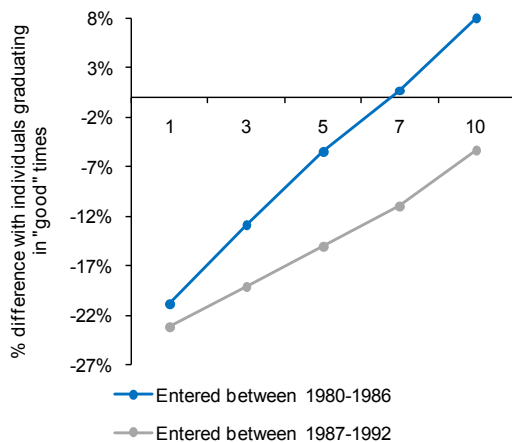
b) - Vocational Training

c) - College Graduates

Source: Authors' calculations using the CSWH (2008).

contracts, rather than acting as a stepping stone into better jobs, trap workers in the precarious segment of the labour market.[5]

Fixed-term contracts, rather than acting as a stepping stone into better jobs, trap workers in the precarious segment of the labour market.

Also consistent with this idea, we find that ten years after entry, individuals with a college degree that graduated in a recession have a 10% higher probability of holding a temporary contract than individuals that graduated during an economic boom and change firms and industries more often even though these changes do not result in better jobs or higher wages. Instead, individuals with a high school degree face the same probability of holding a temporary contract, regardless of whether they graduated during a recession or during an economic boom. Since lower educated individuals tend to work under temporary contracts with a high probability in general, but college graduates do not, the deteriorating effects of poor entry conditions are more important for the latter group once temporary contracts became a dangerous possibility for college graduates who entered the labour market during recessions.[6]

Final remarks

This article shows the results of an ongoing analysis of the effects of labour-market entry conditions on workers' careers in a context of both high structural unemployment and segmented labour markets. The evidence presented shows that, in such conditions, workers entering the labour market during a recession experience large and persistent earnings losses, especially if they do not hold a college degree. For lower-educated workers, the effect is driven by a lower likelihood of employment. For college graduates, our results are surprisingly similar to those found by other researchers in more flexible labour markets such as the US and Canada, but the mechanisms are radically different as the negative impact on earnings is driven not by lower wages but instead by a higher probability of difficulties to find employment and of employment under a fixed-term contract.

The present study exploits the variation in entry conditions during the period 1980-1992 and follows individuals up until 2008. This study is useful to extract lessons about the possible career paths of individuals that graduated during the recent financial crisis. However, the 2012 labour market reform has changed important aspects of the Spanish labour market and it will be interesting to see in future years if the negative effects of poor entry conditions are different now compared to previous recessions. Unfortunately, one is led to believe that the negative effects that we find in this study will probably be present also for the current generation of young individuals that graduated during the recent financial crisis. The reason for this is that the 2012 reform did little to modify the segmentation of the Spanish labour market, and once again we see many of the features that characterized our labour market at the outset of past recessions: high levels of unemployment, especially of long duration and amongst youth, and a strong divide between individuals holding a permanent contract and those trapped in temporary jobs, with more than 90% of the newly signed contracts in the past two years being fixed-term contracts.

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[5] Our findings show that the higher the education level, the greater the impact of the 1984 reform on the effects of entry conditions on future labour market prospects of youth in Spain. This contrasts with Garcia-Perez *et al.* (2015) findings that the 1984 reform had more negative impacts on lower educated individuals. Our study is different from theirs in that we analyse the impact of business cycle conditions at entry on future career prospects.

[6] Garcia-Perez *et al.,* 2015 use a cohort regression discontinuity design to estimate the effects of the 1984 reform on employment of high-school dropouts. They find that the reform increased their likelihood of working by age 19, but in the long run, it reduced their days worked and earnings.

References

ALTONJI, J.; KHAN, L., and J. SPEER. (Forthcoming 2016), "Cashier of Consultant? Entry Labour Market, Field of Study, and Career Success," *Journal of Labour Economics.*

BIEWEN M., and S. STEFFES (2010), "Unemployment Persistence: Is There Evidence for Stigma Effects?," *Economic Letters*, 106: 188-190.

BRUNNER, B., and A. KUHN (2014), "The Impact of Labour Market Entry Conditions on Initial Job Assignment and Wages," *Journal of Population Economics*, 7: 705-738.

FERNÁNDEZ-KRANZ, D., and N. RODRÍGUEZ-PLANAS (2015), "The Perfect Storm: Effects of Graduating in a Recession in a Segmented Labour Market," City University New York, Queens College, mimeo.

GAINI, M.; LEDUC, A., and A. VICARD (2014), "A Scarred Generation? French Evidence on Young People Entering into a Tough Labour Market," EU Commission.

GARCÍA-PÉREZ, J.I.; MARINESCU, I., and J. VALLS CASTELLO (2015), "Can Fixed-Term Contracts Put Low-Skilled Youth on a Better Career Path? Evidence from Spain," *UPO Working Paper*, No. 15.12.

GENDA, Y.; KONDO, A., and S. OHTA (2010), "Long-Term Effects of a Recession at Labour Market Entry in Japan and the United States." *Journal of Human Resources*, 45(1).

HERSHBEIN, B. (2012), "Graduating High-School in a Recession: Work, Education and Home Production," *B E J Econom Anal Policy,* 2012 Jan 31;12(1), Epub 2012 Jan 31.

KAHN, L. B. (2010), "The Long-Term Labour Market Consequences of Graduating from College in a Bad Economy," *Labour Economics,* Vol. 17, No. 2: 303-316.

KONDO, A. (2008), "Differential Effects of Graduating During Recessions Across Race and Gender," Mimeo.

OREOPOULOS, P.; VON WACHTER, P., and A. HEISZ (2012), "Short and Long-Term Career E_ects of Graduating in a Recession," *American Economic Journal*: *Applied Economics,* Volume 4, No. 1: 1-29.

RAAUM, O., and K. ROED (2006), "Do business cycle conditions at the time of labour market entry affect future employment prospects?," *Review of Economics and Statistics*, 88(2): 193-210.

Recent key developments in the area of Spanish financial regulation

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

Royal Decree-Law regulating fees for the withdrawal of cash from automated teller machines (Royal Decree-Law 11/2015, published in the official gazette (BOE) on October 3rd, 2015).

Royal Decree-Law 11/2015, amending the Payment Services Law, establishes a new fee-charging model for cash withdrawals from automated teller machines (ATMs) to avoid duplication of charges upon users. The law came into force on the date of its publication, although certain provisions were postponed until January 1st.

The Royal Decree-Law (RDL) states that ATM operators may not charge customers of other institutions authorised in Spain or customers of branches of foreign credit institutions operating in Spain any fee whatsoever, without prejudice to the fee that may be charged by the card or payment instrument issuing institution.

Moreover, prior to the debit cash withdrawal, the ATM operator must inform the customer of the fees due to be charged by the card or payment instrument issuer, and the possibility that this fee will be passed on to the ATM operator, in whole or in part. In the case of cash withdrawals on credit, the customer will be informed of the maximum additional amount the issuer may charge.

The fee the issuer is to pay the ATM operator may be set by an agreement between the two parties, or in the absence of such an agreement, will be a flat rate throughout Spain.

The issuer may not charge its customers a sum exceeding the fee charged by the ATM operator in the case of debit cash withdrawals from third-party ATMs. The issuer may charge the customer an additional amount in the case of a credit cash withdrawal.

ATM operators or card or payment instrument issuers must inform the Bank of Spain of the fees they charge for cash withdrawals. The Bank of Spain is therefore authorised to determine the reporting format, content and periodicity.

The RDL also provides that:

■ Non-compliance with the provisions of this RDL shall be considered a serious infringement.

■ The National Markets and Competition Commission will send a report to the Ministry of Economic Affairs and Competitiveness on institutions' agreements and decisions regarding cash withdrawal fees. The first report will be sent in the first half of 2016.

Royal Decree implementing the savings banks and banking foundations Law, regulating the reserve fund certain banking foundations are to constitute (Royal Decree 877/2015, published in the BOE on October 3rd, 2015).

The **main features** of Royal Decree 877/2015 are as follows:

I. Banking foundations

This Royal Decree (RD) will be applicable to all banking foundations with a direct or indirect shareholding of 50% or more in a credit institution or a shareholding giving them control over the credit institution under the terms of Article 42 of the Commercial Code, requiring them to **constitute a reserve fund,** unless they have stated their intention to be covered by Article 44.3.b[1] of Law 26/2013.

The Bank of Spain shall determine the circumstances and ways in which the banking foundation is to make use of its reserve fund to meet the **solvency needs of the investee institution.**

The **main features** are summarised below.

- The RD determines the **minimum target amount** of the reserve fund, calculated as a percentage of total risk-weighted assets of the consolidated group or sub-group whose parent company is the investee credit institution. The percentage will be set depending on the ratio of total CRR capital held by the consolidated group or sub-group whose parent company is the investee credit institution:

  - 1.75% if the total capital ratio is less than 10%;

- 1.5% if it is between 10% and 11%;

- 1.25% if it is between 11% and 12%;

- 1% if it is between 12% and 13%;

- 0.75% if it is greater than or equal to 13%.

Adjustments will be made to this **calculation of the minimum target amount** depending on various circumstances:

- It will be reduced by **0.5%** if the investee credit institution is a listed company, provided that more than 25% of its shares are owned by third parties outside the group to which the institution belongs.

- It will be increased by **1%** if the sum of the instruments eligible as own funds the foundation holds in other financial institutions, excluding its shareholding in the investee credit institution, exceeds 40% of the foundation's net worth.

- Depending on the direct shareholding in the credit institution, or indirect shareholding through an intermediary company, it may be reduced or increased:

  - ✓ By **-0.5%** if the shareholding in the credit institution is less than 50%;

  - ✓ By **0%** if it is between 50% and 60%;

  - ✓ By **0.5%** if it is between 60% and 70%;

  - ✓ By **1%** if it is greater than or equal to 70%.

The target amount of the reserve fund may not be less than **0.6% of the risk-weighted assets** (RWA), unless the Bank of Spain sets a lower percentage based on the individual characteristics of the banking foundation.

[1] Inclusion of a divestment programme in their diversification plan that sets out in detail the measures the foundation is due to implement to reduce its shareholding in the credit institution within a maximum period of five years.

- As regards the way in which the reserve fund is constituted, it must be invested in **high credit quality, high liquidity financial instruments.** The fund may be set up within the banking foundation or through a **holding entity,** when the **following requirements** are met:

  a) It is 100% directly owned by the banking foundation. If several banking foundations have shareholdings in a credit institution and constitute a single holding entity, 100% of the direct shareholding in it must be distributed between the banking foundations in proportion to each one's shareholding in the credit institution.

  b) The holding entity owns assets of sufficient liquidity and credit quality that are freely available to it immediately and without any limitations whatsoever.

  c) It is not within the perimeter of consolidation of the credit institution in which the banking foundation has a direct or indirect shareholding.

- The assets making up the reserve fund may only be allotted to the investee credit institution to meet its solvency needs. In this case, those assets that need to be sold or swapped prior to their transfer to the investee credit institution shall be recognised in the reserve fund with a **haircut of up to 33%** (to be determined by the Bank of Spain depending on the liquidity of these assets and the estimated loss in value that may take place at the time of their sale or swap).

- The fund's target volume must be reached within a **maximum period of five years** from the entry into force of the Bank of Spain Circular implementing this Royal Decree.

- For the **submission of the financial plan** or to update a submitted or approved plan, banking foundations will have up to **three months** after the entry into force of the Bank of Spain

Circular developing this Royal Decree. This plan must include a **timetable of allocations,** which are to be linear over time.

II. Other amendments

The amendments to the Royal Decree implementing the Account Auditing Law include the inclusion of **banking foundations as public-interest entities** and the waiver for collective investment institutions and pension funds from the obligation to have an **Audit Committee.**

Finally, the **liquidity ratio for collective investment institutions of a financial nature** has been made more flexible, and the **cash control function** contained in the Regulation implementing the Law on collective investment institutions has been amended.

Royal Decree on clearing, settlement and registration of securities represented in book-entry form, on the legal framework and transparency requirements of central securities depositories and central counterparties, and on transparency requirements upon issuers of securities traded on an official secondary market (Royal Decree 878/2015, published in the BOE on October 3rd, 2015)

Royal Decree 878/2015 aims to adapt the Spanish securities clearing, settlement and registration system to the new European context and enable Spain's future membership in the Target 2-Securities system. It therefore aims to modernise share trading to make it more efficient and to lower transaction costs. This Royal Decree completes the transposition of the transparency and prospectus Directives. It is due to come into force on February 3rd, 2016, except for certain articles and provisions which will come into effect earlier.

As regards the representation of **marketable securities in the form of book-entries,** it clarifies the structure and functioning of the Spanish securities book-entry system, which is structured as a **two-tier system.** The first tier is held on a central register managed by the central securities depository (CSD), and the second tier comprises the retail registers managed by entities participating in the depositary.

The main changes affecting **securities clearing and settlement** are:

■ The **central counterparty (CCP)** and **central securities depository (CSD)** are introduced:

 ● The main task of the CCP is to accept and register transactions and the novation of accepted transactions.

 ● Market participants will have the option of being a clearing member and/or participant of the CCP. This means that participants need to adopt urgent decisions regarding the nature of their participation in CCPs.

■ **"Register references"** through which securities trades were previously effected have been eliminated and replaced by a system based on securities balances, and the fixed-income securities registration system. This greatly simplifies and streamlines transaction settlement.

■ The Spanish **transaction settlement** system has been adapted to the European CSD system, which comes into force in early 2016. Application of this standard will enable Spain's future integration in pan-European post-trade infrastructure, such as the Target 2-Securities system.

■ The information system for supervision of securities clearing, settlement and registration, termed the **post-trading interface,** will be managed by the CSD and will have all the information provided by all the participants in the post-trading process.

■ The amendments to this Royal Decree do not apply to fixed-income securities traded on an official secondary market, to multilateral trading facilities, or public debt traded on the book-entry public debt market. This is due to the fact that securities of this type are already cleared using the balance system.

Bank of Spain Circular implementing the accounting specificities of the Management Company for Assets Arising from the Banking Sector Reorganisation (Sareb) (Circular 5/2015, published in the BOE on October 2nd, 2015).

This Circular derives from the authorisation given to the Bank of Spain by Law 9/2012 of November 14th, 2012, on Credit Institution Restructuring and Resolution, whereby the Sareb is required to comply with general obligations to prepare annual accounts under the Share Capital Companies Law.

According to the Circular, the Sareb will:

■ Evaluate the need to make **value adjustments for impairment** to each of its asset units/types.

■ **Develop the relevant criteria** for the methodology for estimating value adjustments for impairment.

■ Have valued at least 50% of the assets acquired that remain on its balance as at December 31st, 2015, according to the above criteria, these assets being sufficiently representative of the different types and locations, and the totality of the assets on the balance sheet on December 31st, 2016.

The General Accounting Plan will be applicable to all points not covered by this Circular.

Spanish economic forecasts panel: November 2015[1]

FUNCAS Economic Trends and Statistics Department

The growth forecast for 2015 remains unchanged at 3.2%

According to the preview of the INE's provisional figures, GDP grew by 0.8% in the third quarter, which is in line with panellists' expectations. The indicators suggest domestic demand slowed over the period, and that both export and import growth slackened.

The consensus forecast for 2015 remains unchanged at 3.2%. There was a slight modification to the expected composition of domestic demand, which is forecast to growth 3.4%, as in the previous Panel, due to the slight downward revision to the forecast for growth of private consumption and increase in that of public consumption and investment.

GDP growth is expected to slow by a tenth of a percent in the fourth quarter, to 0.7% (Table 2).

The forecast for 2016 has been revised downwards a tenth of a point to 2.7%

The consensus forecast for GDP growth in 2016 is 2.7%, one tenth of a percentage point less than in the previous Panel. This revision is a result of the smaller expected contribution of domestic demand, which has dropped to 2.8 percentage

points, while the contribution of the external sector will be -0.1 pp.

The quarterly profile is for a growth rate of around 0.6% over the year as a whole.

Favourable outlook for the industrial sector

The industrial production index's growth rate slowed in the third quarter, although it remains dynamic, and according to social security affiliation figures, job creation in the sector remains strong. Other indicators, such as the sector's PMI or confidence indicators, suggest activity slowed during the period.

The consensus forecast for IPI growth in 2015 is unchanged at 3.1%, and that for 2016 is 3.3%. These would be the best figures since 2006.

Low oil prices are keeping inflation negative

The price of oil has hovered around 47 dollars per barrel in recent weeks, down from its levels at the start of the year, and even more so from prices a year ago. As a result, headline inflation remains negative, although core inflation has been around 0.8% in recent months –its highest level in two

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[1] The Spanish Economic Forecasts Panel is a survey run by FUNCAS which consults the 16 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 16 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.

years–indicating the absence of deflationary pressures in the economy.

The inflation forecast has been cut by one tenth of a percentage point for 2015 and 2016, to -0.4% and 1%, respectively. The forecast for December's year-on-year rate has also been revised down to 0.5% in 2015 and 1.3% in 2016 (Table 3).

Positive trend in employment

According to the social security affiliation and LFS figures, the pace of job creation slowed somewhat in third quarter of the year. The employment growth forecast for 2015, in terms of full-time equivalent jobs, remains unchanged at 3%, and that for 2016 has been cut by two tenths of a percent to 2.5%. The unemployment rate is therefore expected to come to 22.2% this year and 20.4% the next; one tenth of a percent lower than in the previous panel in both cases.

Using the consensus estimates for GDP, employment and wage growth to estimate implicit productivity and unit labour cost (ULC) growth, productivity per worker is expected to rise by 0.2% in 2015 and 2016, while ULCs are expected to change by 0.4% this year and 0.7% the next.

The current account balance continues to improve

The current account of the balance of payments to August posted a surplus of 6,308 million euros, compared with a surplus of 761 million euros registered in the same period of the previous year. This improvement is partly a result of a declining energy balance deficit, due to falling oil prices, and also the smaller negative balance on the income and transfers account.

The consensus forecast for the current account balance is for a surplus of 1.2% of GDP in 2015 and 1.1% in 2016; two tenths of a percent up on the previous Panel forecast.

The government deficit will overshoot the target by a few tenths of a percent

The overall balance of the central government, the social security funds and autonomous regions to August was 3.4% of annual GDP, eight tenths of a percent lower than in the same period in 2014. In the case of the autonomous regions, the deficit was 0.7%, three tenths of a percent lower than in the year-earlier period, but already at the limit set for the year as a whole. The social security fund's deficit was 0.3%, which is two tenths of a percent higher than in the same period of the previous year. Although the target for 2015 as a whole is 0.6%, there is very little leeway, as the bulk of the deficit is concentrated at the end of the year.

The consensus forecast for the general government deficit for 2015 and 2016 has been raised one tenth of a percent with respect to the previous Panel to 4.6% and 3.3% of GDP, respectively, thus overshooting the government's targets in both cases.

The perception of the state of the global economy has barely changed

The international economic context is still being shaped by the slowdown in China and deterioration of the emerging economies, whose situation could become even more difficult when the United States starts to raise interest rates, which could happen in December. For its part, the U.S. economy grew by 1.5% on an annualised quarter-on-quarter basis in the third quarter. U.S. trend growth remains somewhat unsatisfactory, but in any event, is better than that in the eurozone.

The majority view among panellists is that the situation in the EU is neutral, and opinions about the trend over the next few months are divided between those who expect no change and those who expect an improvement.

As regards the situation outside the EU, as in the previous Panel, there is still a split between

neutral and unfavourable, with the majority still expecting the situation to remain unchanged over the coming months.

The consensus view is that long-term interest rates are too low

Short-term interest rates (three-month EURIBOR) have been negative since mid-April. As in previous Forecast Panels, the rate is still felt to be too low, but is expected to remain unchanged over the months ahead.

Long-term interest rates (10 years) have fallen to close to 1.7% in recent weeks, having stood at over 2% in the summer. However, this level is still higher than in the first few months of the year. Most panellists continue to think this level is very low, but expect it to remain stable over the coming months.

The euro will continue to depreciate

The euro has hovered around 1.10 dollars in recent weeks. Most panellists consider this exchange rate to be neither over- nor undervalued, but expect the value of the euro to decline over the next few months.

Fiscal policy is too expansionary

As in the previous Panel, most participants consider fiscal policy to be expansionary relative to the state of the Spanish economy, and that the fiscal policy stance ought to be neutral. As regards monetary policy there is unanimity that it is expansionary, and near unanimity that this stance is appropriate.

Exhibit 1
Change in forecasts (Consensus values)
(Percentage annual change)
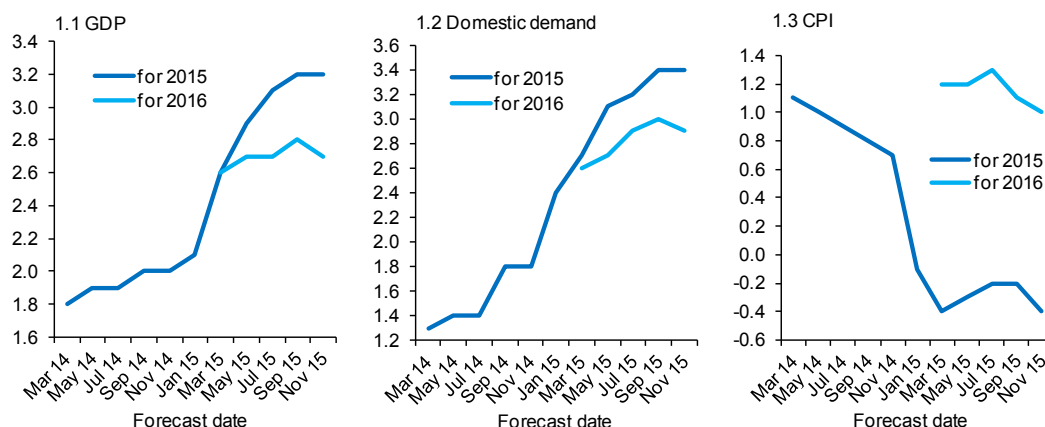
Source: FUNCAS Panel of forecasts.

Table 1

Economic Forecasts for Spain – November 2015
(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	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Analistas Financieros Internacionales (AFI)	3.2	2.7	3.5	3.0	1.2	1.1	5.8	5.0	8.6	7.1	5.3	4.9	3.4	2.9
Banco Bilbao Vizcaya Argentaria (BBVA)	3.2	2.7	2.9	2.5	1.8	0.4	6.2	5.5	8.9	6.3	5.6	5.0	3.3	2.6
Bankia	3.2	2.8	3.4	3.0	0.8	0.6	6.2	5.3	9.6	8.2	5.1	3.8	3.4	3.0
CaixaBank	3.1	2.7	3.0	2.5	1.9	0.1	6.2	4.5	9.1	5.6	5.1	3.8	3.3	2.4
Cemex	3.1	2.5	3.0	2.5	2.0	1.2	5.8	5.6	8.2	5.3	4.8	5.9	3.2	2.8
Centro de Estudios Economía de Madrid (CEEM-URJC)	3.2	2.7	3.4	2.7	1.0	0.8	5.5	5.7	6.7	6.2	5.4	5.9	3.2	2.8
Centro de Predicción Económica (CEPREDE-UAM)	3.1	2.4	3.5	2.8	0.9	1.0	6.2	5.4	9.5	7.0	5.0	4.6	3.5	2.9
CEOE	3.2	2.9	3.4	2.8	1.0	0.7	6.1	4.9	9.3	6.0	5.1	4.7	3.3	2.8
Fundación Cajas de Ahorros (FUNCAS)	3.2	2.8	3.0	3.5	1.3	0.8	6.0	5.2	8.9	7.0	5.5	4.5	3.4	3.2
Instituto Complutense de Análisis Económico (ICAE-UCM)	3.1	2.8	3.3	2.6	1.0	0.9	5.8	5.1	8.9	7.3	5.0	4.8	3.2	2.7
Instituto de Estudios Económicos (IEE)	3.3	2.7	3.4	3.0	1.3	0.9	6.0	5.3	9.1	7.6	5.2	4.9	3.4	3.0
Instituto Flores de Lemus (IFL-UC3M)	3.2	2.7	3.3	2.3	1.3	-0.7	6.1	6.2	9.6	10.6	4.9	4.1	3.3	2.7
Intermoney	3.2	2.9	3.5	3.1	1.6	0.4	6.3	5.6	9.2	7.6	5.5	4.8	3.6	3.2
Repsol	3.2	2.9	3.4	2.9	1.4	0.8	6.4	5.3	10.0	7.9	5.4	4.0	3.4	2.9
Santander	3.2	2.9	3.6	3.1	1.1	1.0	6.3	5.9	8.9	5.4	5.4	6.4	3.5	3.2
Solchaga Recio & asociados	3.2	2.7	3.4	3.0	0.9	1.0	6.4	5.5	8.8	6.9	5.4	5.5	3.5	3.1
CONSENSUS (AVERAGE)	3.2	2.7	3.3	2.8	1.3	0.7	6.1	5.4	9.0	7.0	5.2	4.9	3.4	2.9
Maximum	3.3	2.9	3.6	3.5	2.0	1.2	6.4	6.2	10.0	10.6	5.6	6.4	3.6	3.2
Minimum	3.1	2.4	2.9	2.3	0.8	-0.7	5.5	4.5	6.7	5.3	4.8	3.8	3.2	2.4
Change on 2 months earlier[1]	0.0	-0.1	-0.1	-0.1	0.2	-0.1	0.1	0.0	0.2	-0.1	0.1	0.0	0.0	-0.1
- Rise[2]	4	2	3	4	7	2	6	3	5	3	5	5	4	1
- Drop[2]	2	5	5	2	1	4	1	4	2	5	1	2	5	5
Change on 6 months earlier[1]	0.3	0.0	0.0	0.1	0.6	0.1	0.7	0.1	1.2	0.1	1.7	0.5	0.3	0.2
Memorandum ítems:														
Government (September 2015)	3.3	3.0	3.4	3.0	0.1	0.3	6.2	5.4	--	--	5.5	5.5	3.4	3.0
Bank of Spain (June 2015)	3.1	2.7	3.4	2.3	0.1	0.1	5.9	6.1	8.8	8.9	4.8	4.5	--	--
EC (November 2015)	3.1	2.7	3.4	2.7	0.8	0.2	6.3	5.4	9.6 [3]	8.2 [3]	--	--	3.5	2.8
IMF (October 2015)	3.1	2.5	4.1	2.8	0.5	-0.2	5.9	3.8	--	--	--	--	3.7	2.4
OECD (November 2015)	3.2	2.7	3.1	3.0	1.4	0.3	6.4	5.1	--	--	--	--	3.4	2.9

[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 – November 2015
(Average year-on-year change, as a percentage, unless otherwise stated)

	Exports of goods & services		Imports of goods & services		Industrial output		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]	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Analistas Financieros Internacionales (AFI)	5.3	5.6	6.4	6.9	--	--	-0.4	1.0	--	--	3.0	2.5	22.4	20.9	0.4	0.3	-4.7	-4.0
Banco Bilbao Vizcaya Argentaria (BBVA)	5.2	5.2	6.1	5.2	--	--	-0.4	1.2	0.7	1.5	3.0	2.5	22.2	20.5	1.5	1.9	-4.5	-3.0
Bankia	6.1	5.9	7.1	6.9	2.9	2.7	-0.5	0.7	0.4	0.6	2.9	2.4	22.2	20.5	1.8	2.0	--	--
CaixaBank	5.4	5.9	6.4	5.1	3.0	3.0	-0.4	1.3	0.7	1.1	3.0	2.5	22.2	20.3	1.9	1.7	-4.8	-3.3
Cemex	5.5	5.3	6.7	7.1	--	--	-0.4	1.2	--	--	2.7	2.7	22.2	20.5	1.0	0.5	-4.2	-2.8
Centro de Estudios Economía de Madrid (CEEM-URJC)	5.6	5.7	6.1	6.3	--	--	-0.5	0.8	--	--	3.2	2.6	21.9	19.8	0.8	0.7	-4.2	-3.0
Centro de Predicción Económica (CEPREDE-UAM)	5.7	5.4	7.3	7.4	2.5	2.7	-0.4	1.0	0.4	1.1	2.8	1.6	22.2	21.4	0.3	-0.2	-4.9	-3.6
CEOE	6.0	5.9	6.7	5.9	--	--	-0.5	0.9	0.5	1.0	3.0	2.7	22.2	20.2	1.4	1.2	-4.2	-3.0
Fundación Cajas de Ahorros (FUNCAS)	5.7	4.5	6.9	6.2	4.1	4.9	-0.5	0.9	0.5	0.9	2.9	2.5	22.2	20.2	1.8	1.6	-5.2	-4.0
Instituto Complutense de Análisis Económico (ICAE-UCM)	5.8	6.6	6.4	7.1	2.9	2.8	-0.3	1.1	--	--	3.0	2.5	22.3	20.6	1.2	1.2	-4.5	-3.0
Instituto de Estudios Económicos (IEE)	4.9	4.8	5.8	6.0	3.3	3.2	-0.3	0.9	0.6	0.8	3.1	2.8	22.2	20.6	0.9	0.8	-4.6	-3.4
Instituto Flores de Lemus (IFL-UC3M)	4.3	4.1	5.3	4.1	3.2	3.3	-0.5	0.6	--	--	2.9	1.9	22.2	20.4	--	--	--	--
Intermoney	4.7	5.2	6.3	6.9	--	--	-0.5	1.0	--	--	3.0	2.6	22.1	20.4	1.0	0.9	-4.7	-3.3
Repsol	4.7	5.0	5.9	5.6	3.2	3.6	-0.5	1.0	0.8	0.6	3.2	2.9	22.7	20.6	1.1	0.7	-4.3	-3.0
Santander	4.6	4.6	5.8	5.9	--	--	-0.4	0.7	0.8	1.0	3.0	2.4	22.1	19.8	1.6	1.2	-5.0	-2.8
Solchaga Recio & asociados	5.3	4.7	6.8	6.4	--	--	-0.3	1.3	--	--	3.0	2.8	22.2	19.9	1.5	1.6	-4.7	-3.6
CONSENSUS (AVERAGE)	5.3	5.3	6.4	6.2	3.1	3.3	-0.4	1.0	0.6	0.9	3.0	2.5	22.2	20.4	1.2	1.1	-4.6	-3.3
Maximum	6.1	6.6	7.3	7.4	4.1	4.9	-0.3	1.3	0.8	1.5	3.2	2.9	22.7	21.4	1.9	2.0	-4.2	-2.8
Minimum	4.3	4.1	5.3	4.1	2.5	2.7	-0.5	0.6	0.4	0.6	2.7	1.6	21.9	19.8	0.3	-0.2	-5.2	-4.0
Change on 2 months earlier[1]	0.2	0.0	0.2	-0.2	0.0	0.0	-0.1	-0.1	0.0	-0.1	0.0	-0.2	-0.1	-0.1	0.2	0.2	-0.1	-0.1
- Rise[2]	6	4	7	5	2	2	0	2	3	1	2	0	2	2	7	7	0	1
- Drop[2]	3	5	2	4	1	2	13	8	1	2	5	6	6	7	1	2	5	2
Change on 6 months earlier[1]	-0.1	-0.5	-0.2	-0.4	0.9	0.5	-0.1	-0.2	0.4	0.1	0.4	0.1	0.0	-0.1	0.4	0.3	-0.2	-0.1
Memorandum items:																		
Government (September 2015)	5.5	6.0	6.0	6.4	--	--	--	--	0.5	1.4	3.0	3.0	22.0	19.7	1.2	1.2	-4.2	-2.8
Bank of Spain (June 2015)	5.1	5.7	5.3	5.9	--	--	-0.2	1.3	--	--	2.9	2.6	--	--	1.2 [6]	1.1 [6]	--	--
EC (November 2015)	4.9	5.3	6.1	5.8	--	--	-0.5	0.7	0.7	0.6	2.8	2.5	22.3	20.5	1.4	1.3	-4.7	-3.6
IMF (October 2015)	5.1	5.1	7.4	4.8	--	--	-0.3	0.9	--	--	3.0	2.0	21.8	19.9	0.9	1.1	-4.4	-3.2
OECD (November 2015)	5.6	5.1	6.5	5.8	--	--	-0.6	0.3	--	--	3.0	2.7	22.1	19.8	1.5	1.3	-4.2	-2.9

[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 - November 2015[1]

	Quarter-on-quarter change (percentage)							
	15-Q1	**15-Q2**	**15-Q3**	**15-Q4**	**16-Q1**	**16-Q2**	**16-Q3**	**16-Q4**
GDP[2]	0.9	1.0	0.8	0.7	0.7	0.6	0.6	0.6
Household consumption[2]	0.7	1.0	0.8	0.8	0.7	0.6	0.6	0.6

[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 – November 2015[1]

Monthly change (%)				Year-on-year change (%)	
Sep-15	Oct-15	Nov-15	Dec-15	Dec-15	Dec-16
-0.3	0.4	0.2	0.1	0.5	1.3

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

Table 4
Opinions – November 2015
(Number of responses)

	Currently			Trend for next six months		
	Favourable	Neutral	Unfavourable	Improving	Unchanged	Worsening
International context: EU	7	9	0	8	8	0
International context: Non-EU	0	8	8	2	12	2
	Low[1]	Normal[1]	High[1]	Increasing	Stable	Decreasing
Short-term interest rate[2]	12	4	0	0	15	1
Long-term interest rate[3]	12	4	0	4	11	1
	Overvalued[4]	Normal[4]	Undervalued[4]	Appreciation	Stable	Depreciation
Euro/dollar exchange rate	3	9	4	0	7	9
	Is being			Should be		
	Restrictive	Neutral	Expansionary	Restrictive	Neutral	Expansionary
Fiscal policy assessment[1]	2	5	9	4	7	5
Monetary policy assessment[1]	0	0	16	0	1	15

[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)
					Total	Construction			Equipment & other products				
						Total	Housing	Other construction					
Chain-linked volumes, annual percentage changes													
2008		1.1	-0.7	5.9	-3.9	-5.6	-9.2	-1.1	-0.3	-0.8	-5.6	-0.4	1.6
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	3.0	1.3	6.0	5.5	3.6	6.9	6.5	5.7	6.9	3.4	-0.2
2016		2.8	3.5	0.8	5.2	4.5	6.0	3.3	5.9	4.5	6.2	3.2	-0.4
2014	I	0.4	0.3	0.0	1.4	-6.5	-6.9	-6.2	11.5	4.6	6.2	0.7	-0.3
	II	1.2	1.1	0.2	4.3	0.8	-1.5	2.7	8.3	2.8	5.2	1.8	-0.6
	III	1.7	1.4	0.2	3.4	1.3	0.6	1.8	5.7	6.4	7.3	1.8	-0.1
	IV	2.1	1.8	-0.5	4.9	4.1	2.5	5.2	5.7	6.5	6.8	2.0	0.1
2015	I	2.7	2.5	1.3	6.0	6.2	2.9	8.8	5.8	5.9	7.1	2.9	-0.2
	II	3.1	2.9	1.7	6.1	5.4	3.3	7.1	6.8	6.2	7.0	3.2	-0.1
	III	3.4	3.3	1.2	6.1	5.3	3.7	6.6	6.9	5.1	5.8	3.5	-0.1
	IV	3.4	3.4	0.9	5.8	5.0	4.5	5.4	6.6	5.5	7.8	4.0	-0.6
2016	I	3.2	3.6	0.2	5.6	4.8	5.8	4.0	6.4	5.5	7.0	3.6	-0.3
	II	2.9	3.6	0.2	4.7	3.8	5.6	2.5	5.5	5.0	6.5	3.2	-0.3
	III	2.7	3.5	1.0	5.1	4.5	6.0	3.3	5.8	3.8	5.8	3.2	-0.5
	IV	2.5	3.4	1.7	5.3	4.8	6.4	3.5	5.9	4.0	5.5	2.9	-0.4
Chain-linked volumes, quarter-on-quarter percentage changes, at annual rate													
2014	I	1.5	0.0	-0.2	1.5	-3.1	-1.0	-4.8	6.4	6.6	7.3	1.4	0.0
	II	2.0	1.9	-0.8	8.6	11.9	5.7	16.9	5.3	4.8	7.2	2.5	-0.5
	III	2.4	1.9	0.1	3.7	2.8	3.3	2.4	4.7	14.0	13.7	1.9	0.5
	IV	2.7	3.1	-1.0	5.7	5.2	2.3	7.5	6.2	0.8	-0.6	2.3	0.5
2015	I	3.5	2.9	7.0	6.0	5.2	0.5	8.8	6.8	4.5	8.8	4.7	-1.1
	II	3.9	3.7	1.0	9.1	8.6	7.2	9.6	9.7	5.7	6.6	4.0	-0.1
	III	3.4	3.5	-2.0	3.5	2.3	4.8	0.5	4.8	9.5	8.7	2.8	0.6
	IV	2.9	3.7	-2.0	4.6	4.1	5.5	3.0	5.2	2.3	7.1	3.4	-0.6
2016	I	2.8	3.7	4.0	5.2	4.3	5.8	3.2	6.2	4.6	5.7	4.0	-1.2
	II	2.4	3.5	1.0	5.3	4.6	6.2	3.4	6.0	3.6	4.5	3.4	-1.0
	III	2.5	3.3	1.0	5.3	4.9	6.6	3.6	5.8	4.6	5.9	3.2	-0.7
	IV	2.4	3.1	1.0	5.4	5.2	7.0	3.8	5.6	3.2	6.0	3.2	-0.8
	Current prices (EUR billions)	**Percentage of GDP at current prices**											
2008	1,116.2	56.8	18.8	29.2	19.5	10.4	9.1	9.7	25.3	30.4	105.1	-5.1
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	1,083.0	57.5	19.0	20.2	10.3	4.5	5.9	9.8	33.3	30.4	97.1	2.9
2016	1,123.7	58.0	18.8	20.7	10.6	4.6	5.9	10.2	34.0	31.8	97.8	2.2

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

Sources: INE (Quarterly National Accounts) and FUNCAS (Forecasts).
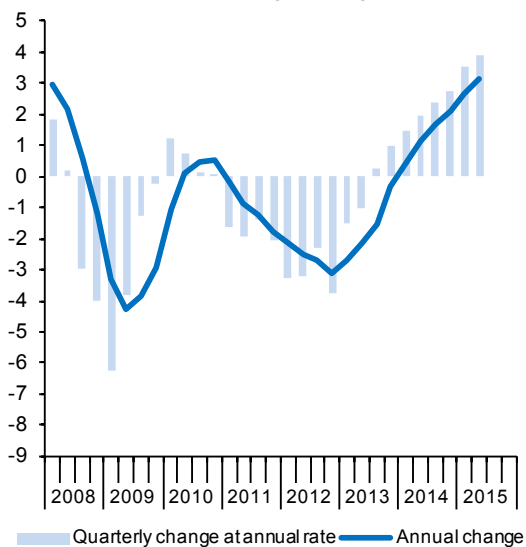
Chart 1.1.- GDP
Percentage change

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |

Quarterly change at annual rate — Annual change

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

GDP — Domestic demand — Net exports
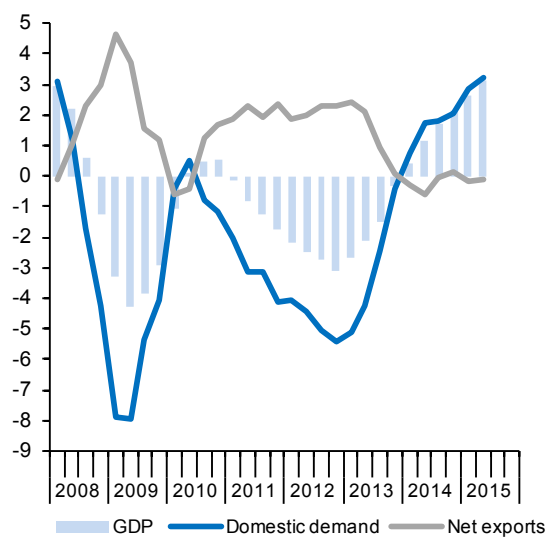
Chart 1.3.- Final consumption
Annual percentage change

National consumption — Private consumption
Public consumption
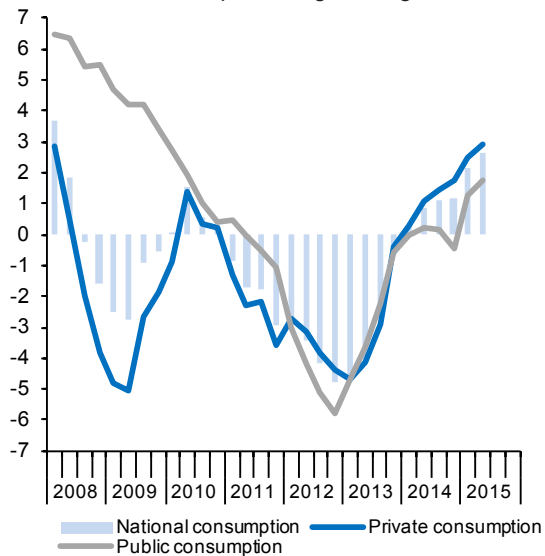
Chart 1.4.- Gross fixed capital formation
Annual percentage change

Total
Construction
Equipment & other products
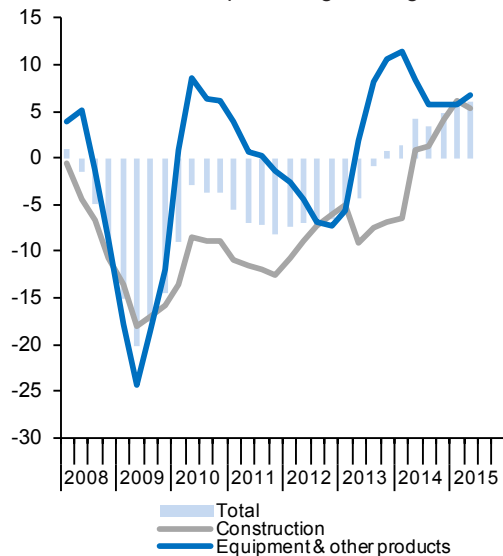
Table 2

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													
2008	1.3	-2.7	-0.8	0.2	2.3	-0.1	2.5	3.2	2.4	1.8	5.0	3.0	-0.9
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	-0.2	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	-1.9	-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	-1.2	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	1.5	-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	3.2	-1.9	3.8	5.0	3.1	4.7	4.6	0.3	1.5	5.8	0.9	4.3	3.1
2016	2.7	2.4	3.0	4.5	2.6	2.8	3.2	2.5	3.5	3.5	1.0	3.1	3.7
2014 I	0.7	3.2	-0.8	-7.3	1.3	2.5	4.4	-1.8	1.1	1.1	-0.5	3.4	-0.4
II	1.3	-6.0	1.5	-3.9	1.8	3.1	4.3	-1.2	1.2	3.1	-0.5	4.4	0.8
III	1.7	-2.9	1.5	0.2	2.1	3.3	5.0	-0.6	1.3	4.1	-0.5	4.9	1.3
IV	2.1	-8.7	2.5	3.1	2.5	4.0	5.0	-0.2	1.1	5.3	-0.2	5.0	1.7
2015 I	2.7	-4.2	3.0	5.9	2.6	4.1	4.1	-2.4	1.1	5.8	0.6	4.7	2.6
II	3.2	2.1	3.8	6.1	2.9	4.3	5.1	-0.1	1.1	6.1	0.7	4.6	2.6
III	3.4	-2.5	4.1	4.7	3.4	5.2	4.8	1.1	1.3	6.4	1.2	3.8	3.1
IV	3.3	-3.0	4.1	3.3	3.4	5.0	4.5	2.5	2.5	5.2	1.1	3.9	4.2
2016 I	3.1	-0.5	3.3	3.2	3.3	4.4	4.4	3.1	3.5	4.7	0.8	3.5	3.6
II	2.7	0.2	2.6	4.3	2.7	3.4	3.1	2.6	3.7	3.1	0.9	3.0	4.3
III	2.5	4.6	2.8	5.0	2.2	1.8	2.8	2.2	3.5	3.2	1.0	2.9	4.3
IV	2.6	5.3	3.0	5.3	2.1	1.8	2.5	1.9	3.3	3.2	1.1	2.8	2.7
Chain-linked volumes, quarter-on-quarter percentage changes, at annual rate													
2014 I	1.3	-19.4	3.7	-5.6	2.4	5.2	5.3	8.3	-0.9	1.7	-1.0	5.5	1.4
II	2.0	-18.2	2.7	-0.2	3.0	5.2	3.3	-5.3	2.8	6.7	0.1	5.3	0.3
III	2.6	4.2	1.0	8.5	2.4	3.7	5.4	-1.0	3.1	3.8	-1.0	6.3	0.5
IV	2.7	0.9	2.5	10.5	2.1	1.8	5.8	-2.4	-0.7	9.4	1.2	2.8	4.7
2015 I	3.7	-2.2	5.9	5.0	2.9	5.9	2.0	-0.6	-0.8	3.3	2.2	4.3	4.8
II	4.0	5.5	5.9	0.8	4.1	5.8	7.2	3.8	2.7	7.8	0.6	5.0	0.4
III	3.3	-13.1	2.2	2.8	4.4	7.4	4.4	3.8	4.2	5.0	0.8	3.1	2.6
IV	2.3	-1.4	2.5	4.6	2.2	0.9	4.6	3.0	4.0	4.6	0.7	3.3	9.0
2016 I	2.9	8.6	2.8	4.8	2.4	3.6	1.5	1.9	3.3	1.3	1.1	2.8	2.7
II	2.4	8.2	2.9	5.1	1.9	1.7	2.0	1.9	3.3	1.6	1.1	2.8	3.0
III	2.5	3.4	3.1	5.4	2.2	1.2	3.2	1.9	3.3	5.3	1.1	2.8	2.6
IV	2.4	1.0	3.2	5.7	2.0	0.8	3.4	1.9	3.3	4.8	1.1	2.8	2.6
	Current prices (EUR billions)	**Percentage of value added at basic prices**											
2008	1,025.7	2.5	17.9	11.0	68.5	21.9	4.3	5.4	9.0	7.3	16.9	3.8	8.8
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	986.2	2.4	17.2	5.5	74.9	24.5	4.2	4.0	11.7	7.6	18.5	4.3	9.8
2016	1,020.6	2.4	17.3	5.7	74.6	24.2	4.1	4.0	11.9	7.7	18.3	4.4	10.1

Seasonally and Working Day Adjusted.

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

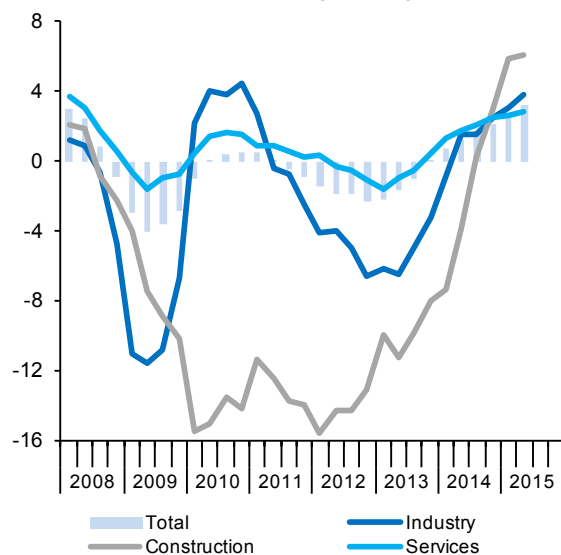## Chart 2.1.- GVA by sectors
Annual percentage change

Legend:
- Total
- Industry
- Construction
- Services

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

Legend:
- Total
- Public administration, education, health and social work
- Rest of services
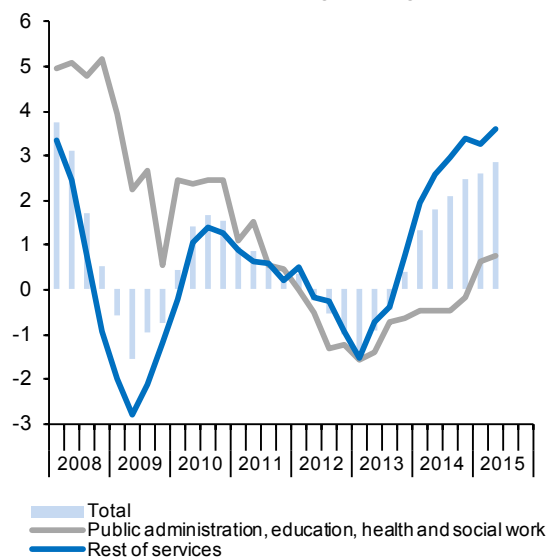
Chart 2.3.- GVA, services (II)
Annual percentage change

Legend:
- Trade, transport, accommodation and food services
- Information and communication
- Finance and insurance
- Professional, business and support services
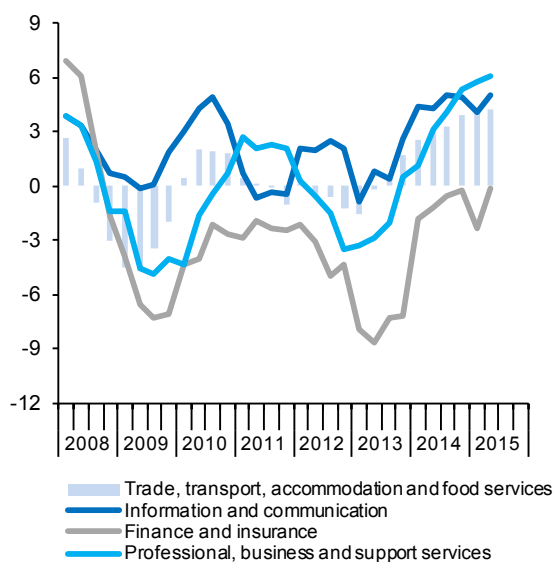
Chart 2.4.- GVA, structure by sectors
Percentage of value added at basic prices

Legend:
- Services
- Construction
- Industry
- Agriculture, forestry and fishing
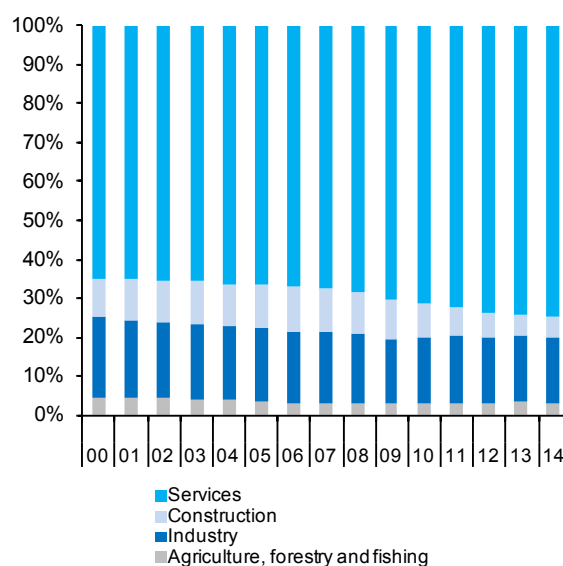
Table 3a
National accounts: Productivity and labour costs (I) (ESA 2010, Base 2010)
Forecasts in blue

		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													
2008		129.1	124.7	103.6	138.3	133.5	99.8	112.4	93.9	119.7	149.3	124.7	98.5
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		123.4	105.8	116.7	148.6	127.3	93.8	97.9	--	--	--	--	--
2016		126.9	108.4	117.1	149.9	128.0	93.5	101.0	--	--	--	--	--
2013	III	117.9	101.4	116.4	149.0	128.1	94.9	92.3	67.0	137.8	164.6	119.4	94.2
	IV	118.2	101.4	116.6	148.6	127.4	94.2	92.9	67.0	138.6	164.4	118.6	93.4
2014	I	118.7	101.6	116.8	147.8	126.6	94.1	93.6	67.2	139.3	164.8	118.3	93.1
	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	121.8	104.6	116.4	148.8	127.8	94.6	96.2	68.8	139.8	165.8	118.6	92.6
	II	123.0	105.6	116.5	148.4	127.4	94.3	97.8	69.8	140.1	166.3	118.8	92.0
Annual percentage changes													
2008		1.1	0.2	0.9	6.8	5.9	3.7	-2.1	-1.0	-1.1	5.5	6.7	2.3
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	2.9	0.2	0.5	0.2	-0.6	3.8	--	--	--	--	--
2016		2.8	2.5	0.3	0.9	0.5	-0.4	3.2	--	--	--	--	--
2013	III	-1.5	-3.3	1.8	1.4	-0.4	-0.6	-1.1	-4.8	3.9	2.1	-1.7	-1.5
	IV	-0.3	-1.9	1.7	3.6	1.9	1.3	1.1	-3.2	4.5	2.0	-2.4	-0.9
2014	I	0.4	-0.7	1.2	-0.6	-1.7	-1.2	1.6	-2.8	4.6	1.7	-2.8	-1.7
	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	-0.3	0.7	0.9	0.5	2.8	2.4	0.4	0.6	0.2	-0.5
	II	3.1	3.0	0.2	0.4	0.2	-0.2	4.1	3.0	1.1	0.0	-1.0	-1.9

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

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

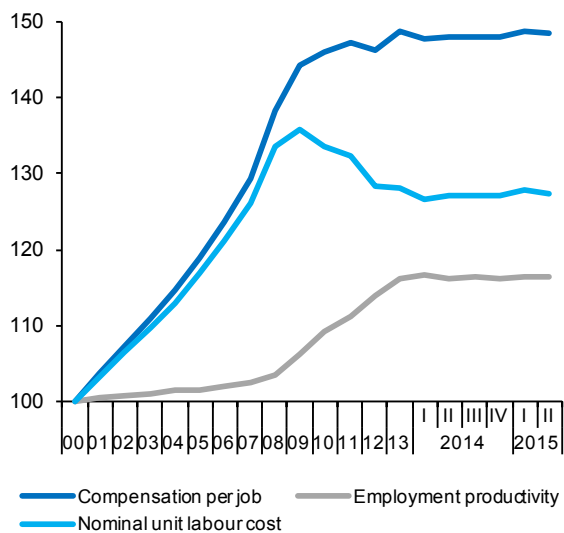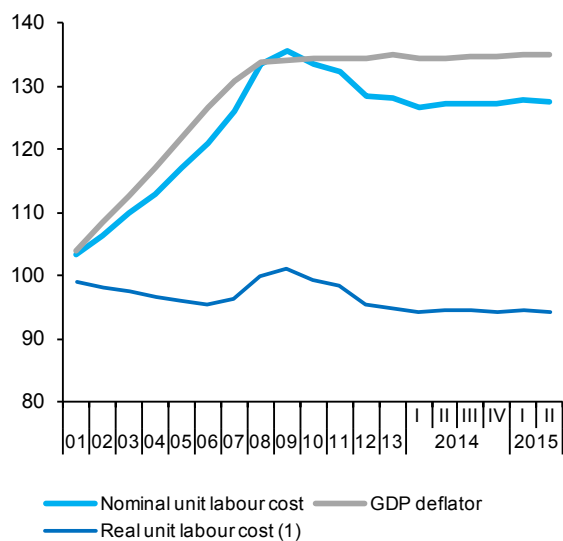## Chart 3a.1.- Nominal ULC, total economy
Index, 2000=100

- Compensation per job
- Nominal unit labour cost
- Employment productivity

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

- Nominal unit labour cost
- Real unit labour cost (1)
- GDP deflator

(1) Nominal ULC deflated by GDP deflator.

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

- Compensation per job
- Nominal unit labour cost
- Employment productivity
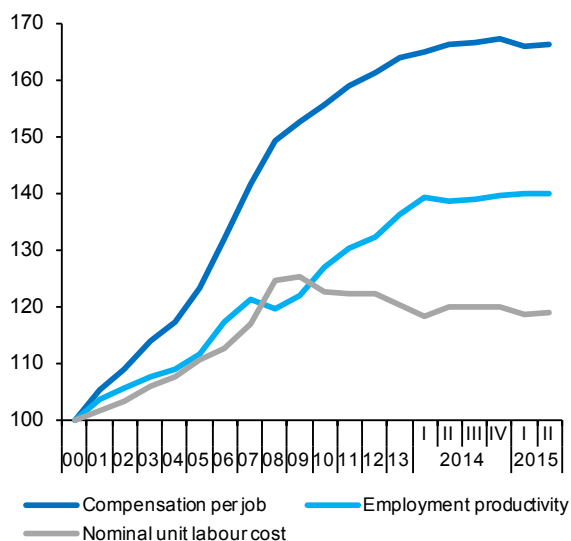
Chart 3a.4.- Real ULC, manufacturing industry
Index, 2000=100

- Nominal unit labour cost
- Real unit labour cost (1)
- GVA deflator
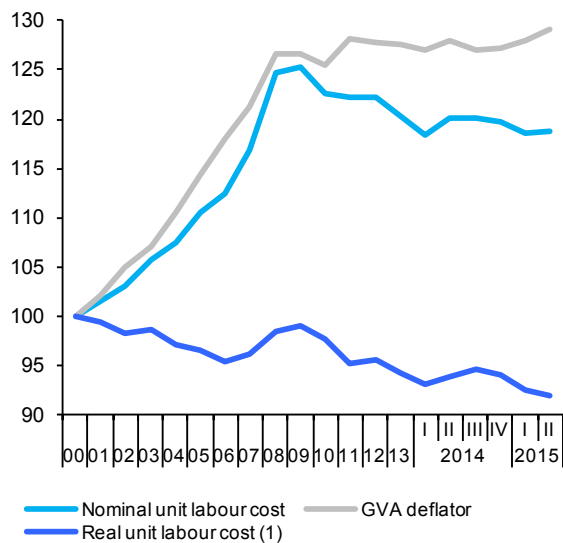
(1) Nominal ULC deflated by GVA deflator.

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													
2008		118.3	126.5	93.5	154.8	165.5	102.3	137.1	137.0	100.1	132.4	132.2	98.5
2009		109.4	99.1	110.4	170.0	154.0	93.6	135.8	133.6	101.6	137.7	135.5	99.2
2010		93.5	85.2	109.7	172.1	156.9	99.2	137.5	132.0	104.2	139.1	133.4	99.1
2011		81.5	72.2	112.8	169.6	150.3	98.0	138.5	130.5	106.1	140.2	132.2	98.0
2012		69.9	58.7	119.1	170.6	143.2	97.9	138.0	126.1	109.4	138.6	126.7	94.3
2013		63.0	50.4	124.9	172.1	137.8	97.9	137.1	122.8	111.7	141.1	126.4	94.4
2014		61.7	48.9	126.3	172.5	136.6	97.1	139.7	124.8	112.0	139.9	124.9	93.7
2015		64.8	52.7	123.0	--	--	--	144.0	128.2	112.3	--	--	--
2016		67.7	54.1	125.1	--	--	--	147.7	131.5	112.3	--	--	--
2013	III	61.8	49.4	125.2	171.3	136.8	98.2	137.4	122.6	112.0	141.4	126.3	94.3
	IV	61.6	48.8	126.3	172.8	136.8	98.2	137.5	122.7	112.1	141.0	125.8	94.3
2014	I	60.7	47.5	127.8	172.6	135.1	94.8	138.4	123.2	112.3	140.2	124.9	93.6
	II	60.7	48.1	126.1	172.3	136.7	97.1	139.4	124.6	111.9	139.9	125.0	93.6
	III	61.9	49.3	125.7	172.4	137.2	98.3	140.2	125.2	112.0	139.9	125.0	93.7
	IV	63.5	50.6	125.6	172.6	137.4	98.3	141.0	126.2	111.7	139.6	124.9	93.8
2015	I	64.3	52.2	123.2	171.6	139.3	97.0	142.0	126.9	111.8	141.1	126.1	94.3
	II	64.4	52.8	121.9	171.2	140.4	98.3	143.4	127.8	112.2	140.7	125.4	94.2
Annual percentage changes													
2007		1.8	5.3	-3.4	2.4	6.0	2.2	5.0	4.0	0.9	4.6	3.7	-0.3
2008		0.2	-11.8	13.6	12.9	-0.6	-3.9	2.3	3.0	-0.7	5.9	6.7	2.5
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	-0.1
2011		-12.8	-15.3	2.9	-1.4	-4.2	-1.2	0.7	-1.1	1.8	0.8	-0.9	-1.2
2012		-14.3	-18.8	5.5	0.6	-4.7	-0.1	-0.4	-3.4	3.1	-1.2	-4.2	-3.8
2013		-9.8	-14.0	4.9	0.9	-3.8	0.0	-0.6	-2.7	2.1	1.9	-0.2	0.1
2014		-2.1	-3.1	1.1	0.2	-0.8	-0.8	1.9	1.7	0.2	-0.9	-1.1	-0.7
2015		5.0	7.8	-2.6	--	--	--	3.1	2.7	0.3	--	--	--
2016		4.5	2.7	1.7	--	--	--	2.6	2.6	0.0	--	--	--
2013	III	-9.9	-13.8	4.6	0.5	-4.0	-0.3	-0.5	-2.3	1.9	1.3	-0.5	0.0
	IV	-8.0	-10.6	2.8	0.7	-2.0	1.3	0.4	-1.2	1.6	4.3	2.6	2.1
2014	I	-7.3	-10.5	3.6	0.4	-3.1	-2.3	1.3	0.0	1.3	-0.6	-2.0	-1.2
	II	-3.9	-4.7	0.9	0.0	-0.9	-1.2	1.8	1.8	0.0	-0.8	-0.9	-0.6
	III	0.2	-0.2	0.4	0.7	0.3	0.1	2.1	2.1	0.0	-1.1	-1.0	-0.7
	IV	3.1	3.7	-0.5	-0.1	0.4	0.1	2.5	2.8	-0.3	-1.0	-0.7	-0.5
2015	I	5.9	9.8	-3.6	-0.6	3.1	2.3	2.6	3.0	-0.4	0.6	1.0	0.8
	II	6.1	9.8	-3.3	-0.6	2.8	1.3	2.9	2.6	0.3	0.6	0.3	0.7

(a) Nominal ULC deflated by GVA deflator.
Sources: INE (Quarterly National Accounts) and FUNCAS (Forecasts).

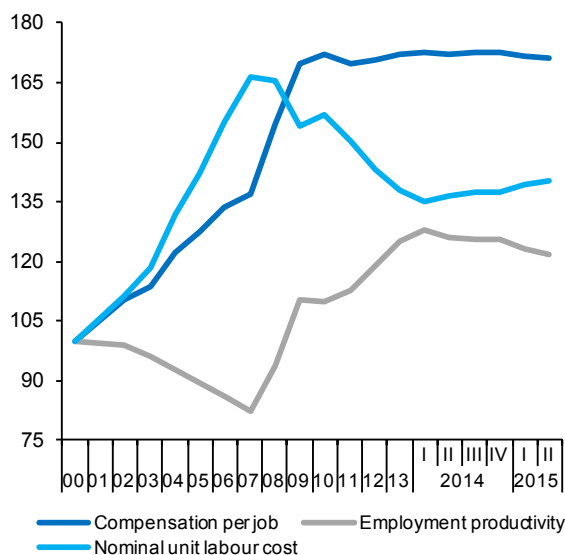## Chart 3b.1.- Nominal ULC, construction
Index, 2000=100

- Compensation per job
- Employment productivity
- Nominal unit labour cost

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

- Nominal unit labour cost
- GVA deflator
- Real unit labour cost (1)

(1) Nominal ULC deflated by GVA deflator.
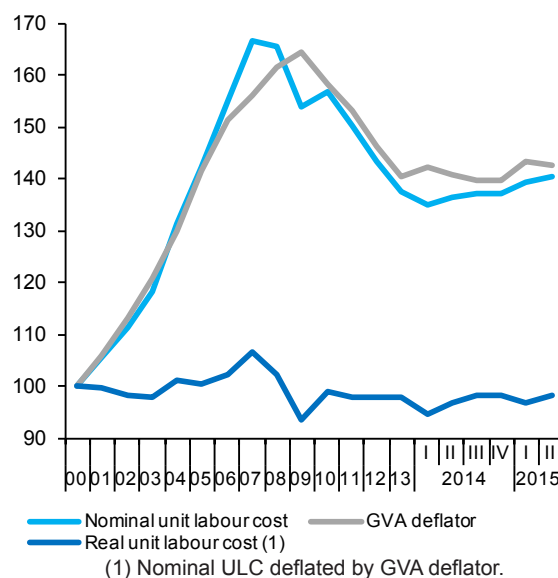
Chart 3b.3.- Nominal ULC, services
Index, 2000=100

- Compensation per job
- Employment productivity
- Nominal unit labour cost
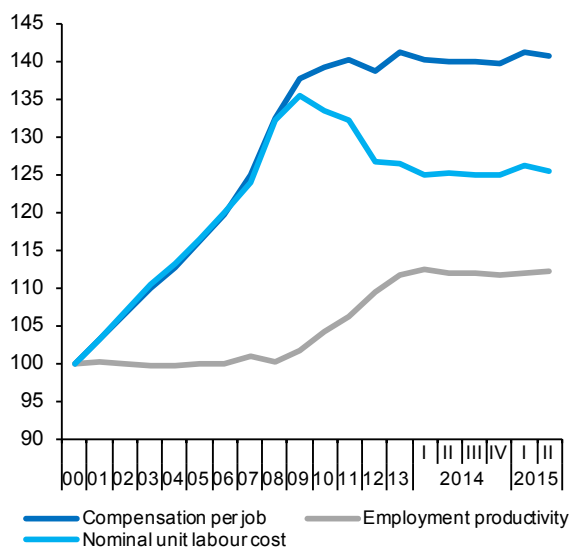
Chart 3b.4.- Real ULC, services
Index, 2000=100

- Nominal unit labour cost
- GVA deflator
- Real unit labour cost (1)

(1) Nominal ULC deflated by GVA deflator.
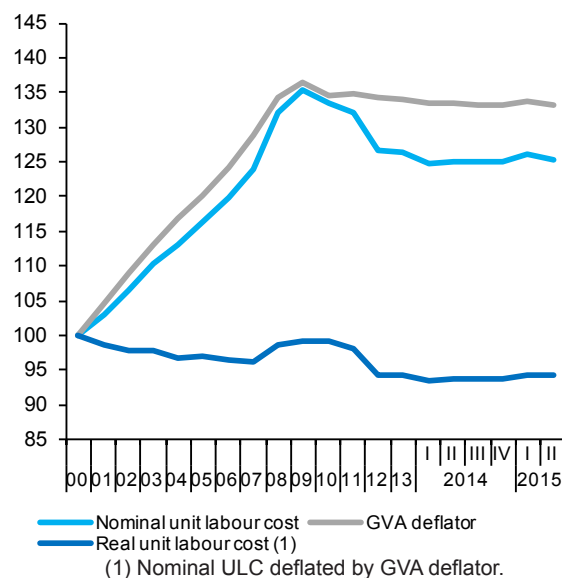
Table 4
National accounts: National income, distribution and disposition (ESA 2010, Base 2010)
Forecasts in blue

		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**		
2008		1,116.2	559.8	465.2	91.2	-30.0	1,086.3	-15.7	1,070.6	843.1	227.5	50.1	41.7	8.2
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		1,083.0	509.0	371.2	202.8	0.1	1,083.1	-11.6	1,071.4	829.5	242.0	47.0	34.3	18.7
2016		1,123.7	527.0	385.5	211.3	4.5	1,128.3	-11.8	1,116.5	862.2	254.2	46.9	34.3	18.8
2013	III	1,030.8	485.0	447.2	98.6	-4.2	1,026.7	-13.2	1,013.5	799.2	214.3	47.1	43.4	9.6
	IV	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	I	1,031.0	484.9	445.0	101.1	-3.4	1,027.6	-13.5	1,014.1	801.4	212.7	47.0	43.2	9.8
	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	495.3	449.1	104.8	-3.5	1,045.7	-11.5	1,034.2	812.5	221.7	47.2	42.8	10.0
	II	1,059.4	499.8	452.5	107.2	-1.1	1,058.3	-11.4	1,046.9	818.0	228.8	47.2	42.7	10.1
		Annual percentage changes										**Difference from one year ago**		
2008		3.3	7.1	3.3	-15.6	14.6	3.0	19.1	2.8	4.5	-3.0	1.8	0.0	-1.8
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		4.0	3.7	-16.8	95.1	-101.7	4.4	1.5	4.5	2.5	11.9	-0.1	-8.6	8.7
2016		3.8	3.5	3.8	4.2	6117.2	4.2	1.5	4.2	3.9	5.1	-0.1	0.0	0.1
2013	III	-2.0	-5.1	-0.5	7.7	-64.3	-1.3	-4.5	-1.3	-3.2	6.9	-1.5	0.7	0.9
	IV	-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	I	-0.6	-1.6	-0.9	6.4	-43.4	-0.3	14.6	-0.5	-0.9	1.1	-0.5	-0.1	0.6
	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	0.9	3.6	4.1	1.8	-14.9	2.0	1.4	4.2	0.2	-0.4	0.2
	II	2.6	2.8	1.6	5.7	-81.3	3.0	-12.2	3.2	1.6	9.3	0.1	-0.4	0.3

(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
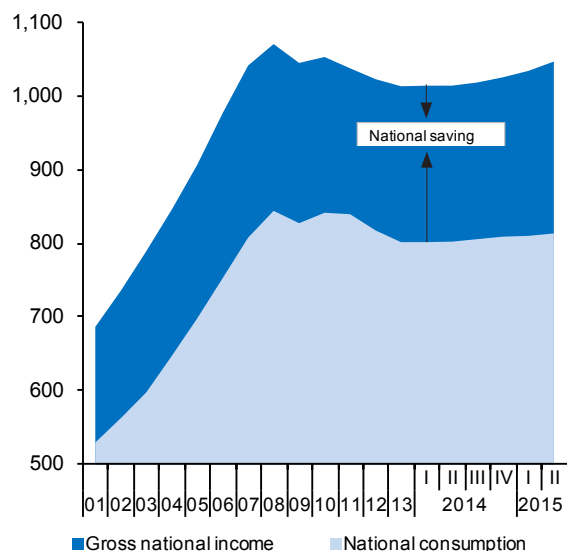EUR Billions, 4-quarter cumulated

Gross national income   National consumption

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

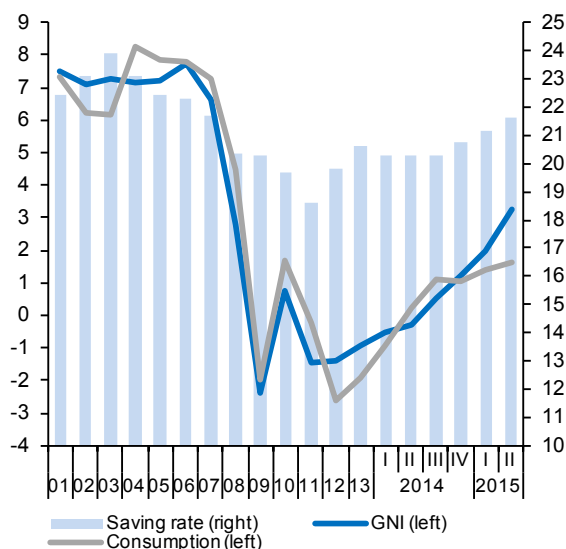Saving rate (right)   GNI (left)
Consumption (left)

Chart 4.3.- Components of National income
Annual percentage change

Compensation of employees
Gross operating surplus
Taxes on production and imports less subsidies
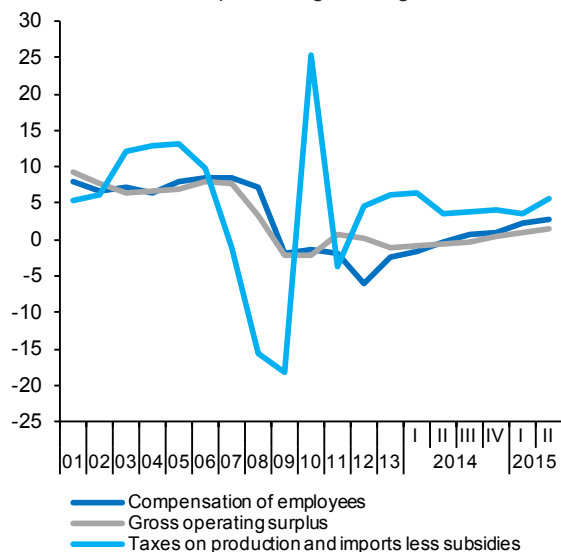
Chart 4.4.- Functional distribution of income
Percentage of GDP, 4-quarter moving averages

Compensation of employees (left)
Gross operating surplus (left)
Taxes on production and imports less subsidies (right)
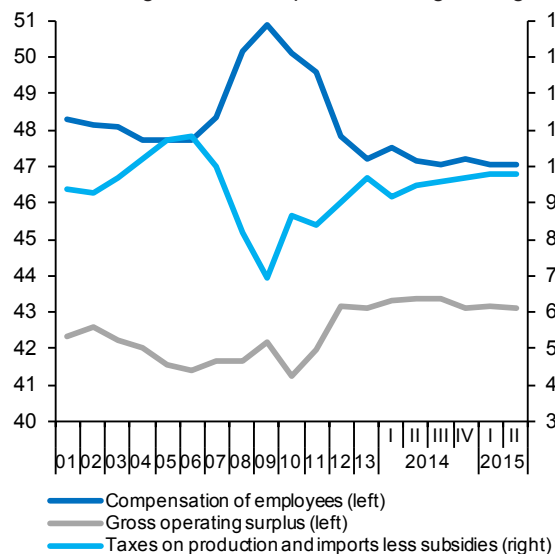
Table 5
National accounts: Net transactions with the rest of the world (ESA 2010, Base 2010)
Forecasts in blue

		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 balance
		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													
2008		-57.2	-87.0	24.0	5.9	-30.0	-15.7	-102.9	5.5	-97.4	227.5	330.4	-102.9
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		30.9	-18.2	28.8	20.3	0.1	-11.6	19.3	6.7	26.0	242.0	222.7	19.3
2016		24.7	-26.1	29.6	21.2	4.5	-11.8	17.4	6.8	24.3	254.2	236.8	17.4
2013	III	32.4	-13.6	28.1	17.9	-4.2	-13.2	15.0	6.8	21.9	214.3	199.3	15.0
	IV	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	I	30.6	-17.2	28.5	19.3	-3.4	-13.5	13.7	8.2	21.8	212.7	199.0	13.7
	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	-3.5	-11.5	12.4	5.2	17.5	221.7	209.3	12.4
	II	27.6	-21.3	28.6	20.3	-1.1	-11.4	15.0	5.7	20.8	228.8	213.8	15.0
Percentage of GDP, 4-quarter cumulated transactions													
2008		-5.1	-7.8	2.1	0.5	-2.7	-1.4	-9.2	0.5	-8.7	20.4	29.6	-9.2
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		2.9	-1.7	2.7	1.9	0.0	-1.1	1.8	0.6	2.4	22.3	20.6	1.8
2016		2.2	-2.3	2.6	1.9	0.4	-1.1	1.6	0.6	2.2	22.6	21.1	1.6
2013	III	3.1	-1.3	2.7	1.7	-0.4	-1.3	1.5	0.7	2.1	20.8	19.3	1.5
	IV	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	I	2.9	-1.6	2.7	1.8	-0.3	-1.3	1.3	0.8	2.1	20.3	19.0	1.3
	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	2.0	21.6	20.2	1.4

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

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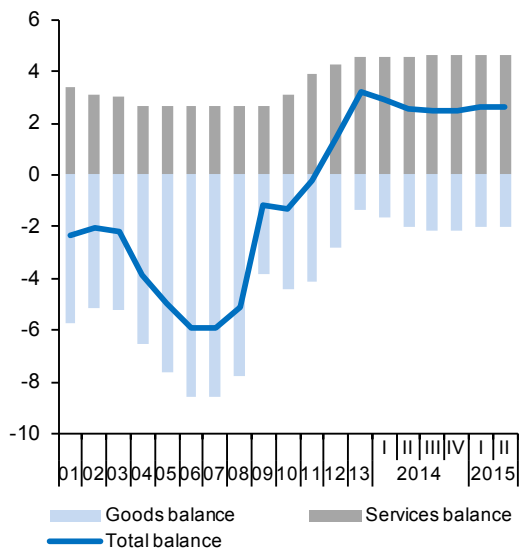Percentage of GDP, 4-quarter moving averages

Goods balance · Services balance · Total balance

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

Non-tourist services balance · Tourist services balance · Total services balance
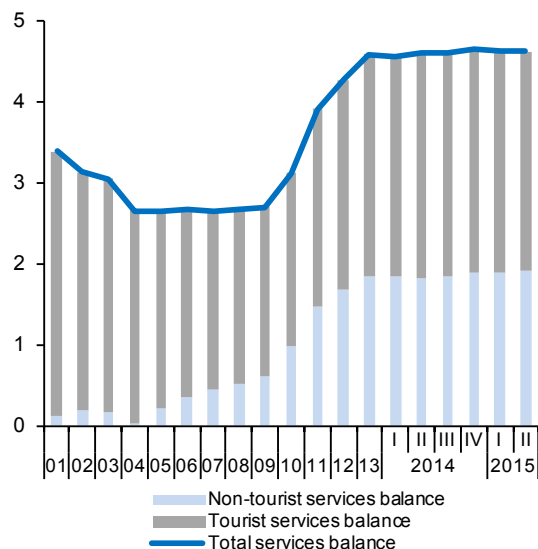
Chart 5.3.- Net lending or borrowing
Percentage of GDP, 4-quarter moving averages

Goods and services
Income and transfers (current and capital)
Net lending/ borrowing with the rest of the world
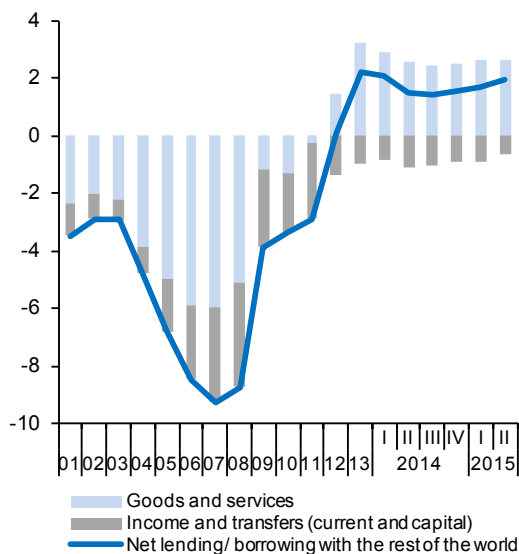
Chart 5.4.- Saving, investment and current account balance
Percentage of GDP, 4-quarter moving averages

Current Account balance (right)
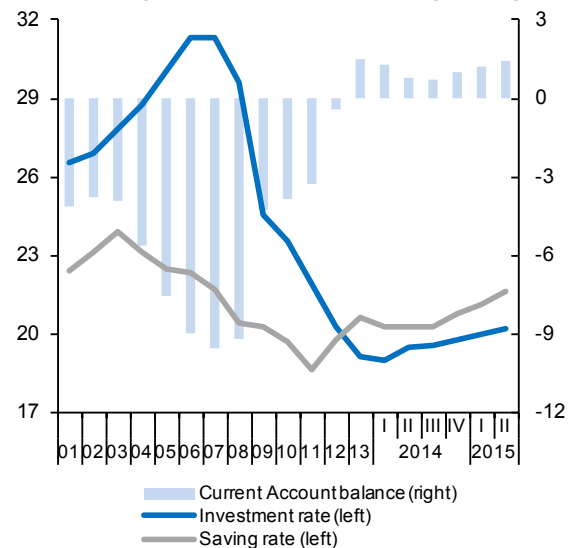Investment rate (left)
Saving rate (left)

Table 6

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

Forecasts in blue

	Gross disposable income (GDI)						Final con-sumption expen-diture	Gross saving (a)	Saving rate (gross saving as a percentage of GDI)	Net capital transfers	Gross capital formation	Net lending (+) or borro-wing (-)	Net lending or borrowing as a per-centage of GDP
	Total	Compen-sation of employees (received)	Mixed income and net property income	Social benefits and other current transfers (received)	Social contri-butions and other current transfers (paid)	Per-sonal income taxes							
	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												
2008	686.1	560.5	213.1	217.0	219.8	84.8	633.5	56.9	8.3	6.2	90.2	-27.1	-2.4
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	697.5	511.1	228.0	241.0	198.7	84.0	623.2	73.2	10.5	3.9	31.3	45.8	4.2
2016	722.1	529.2	241.0	242.9	204.5	86.6	651.6	69.5	9.6	3.4	33.1	39.8	3.5
2013 III	665.3	486.8	211.0	249.7	199.0	83.1	599.6	64.0	9.6	3.7	30.8	36.9	3.6
IV	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 I	664.2	487.1	212.4	246.5	198.3	83.6	598.9	63.8	9.6	3.3	27.3	39.7	3.9
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	674.2	497.4	216.4	240.6	195.3	84.9	608.7	63.9	9.5	4.5	29.0	39.5	3.8
II	677.8	501.8	218.5	240.7	196.6	86.6	612.8	63.4	9.3	3.6	28.8	38.1	3.6

	Annual percentage changes, 4-quarter cumulated operations							Differen-ce from one year ago	**Annual percentage changes, 4-quarter cumulated operations**		Difference from one year ago
2008	5.4	7.1	-5.4	9.8	4.9	-2.4	2.9	48.4	2.4	67.4	-8.7	--	2.8
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	3.7	3.7	4.4	0.2	1.7	0.1	2.7	13.3	0.9	-15.0	6.9	--	0.4
2016	3.5	3.5	5.7	0.8	2.9	3.1	4.6	-5.1	-0.9	-11.0	5.9	--	-0.7
2013 III	-2.4	-5.0	-0.4	1.1	-3.0	-1.0	-2.3	-4.2	-0.2	-15.5	-27.2	--	0.8
IV	-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 I	-0.8	-1.5	0.5	-0.9	-1.7	0.5	-1.2	3.0	0.4	-28.7	-23.8	--	0.9
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	1.5	2.1	1.8	-2.4	-1.5	1.5	1.6	0.3	-0.1	37.9	6.0	--	-0.1
II	1.9	2.8	2.9	-1.6	-0.1	4.0	1.7	3.2	0.1	5.1	4.1	--	0.0

(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
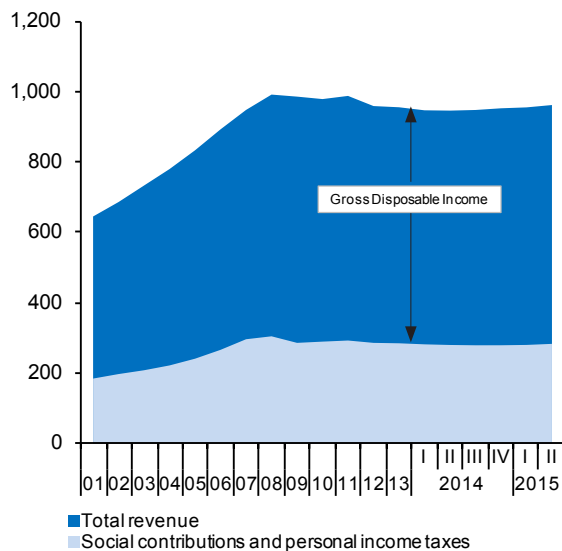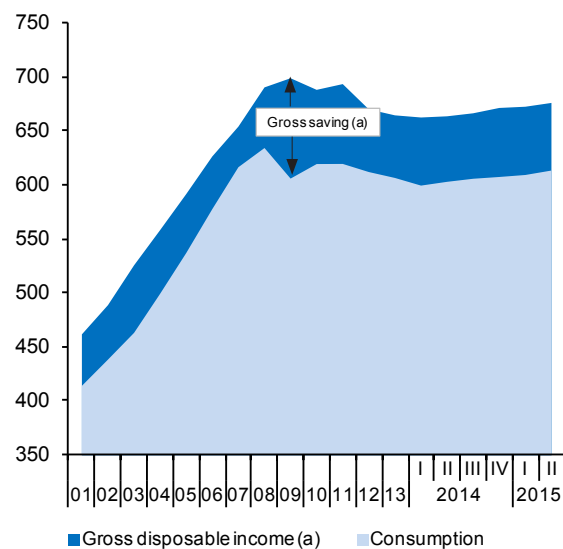### EUR Billions, 4-quarter cummulated

Gross Disposable Income

■ Total revenue
■ Social contributions and personal income taxes

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

Gross saving (a)

■ Gross disposable income (a)   ■ Consumption

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

Chart 6.3.- Households: Income, consumption and saving
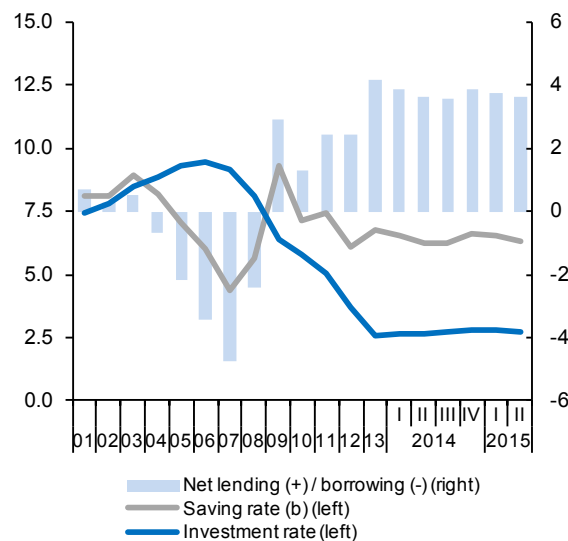### Annual percentage change and percentage of GDI, 4-quarter moving averages

■ Saving rate (right)
— GDI (left)
— Consumption (left)
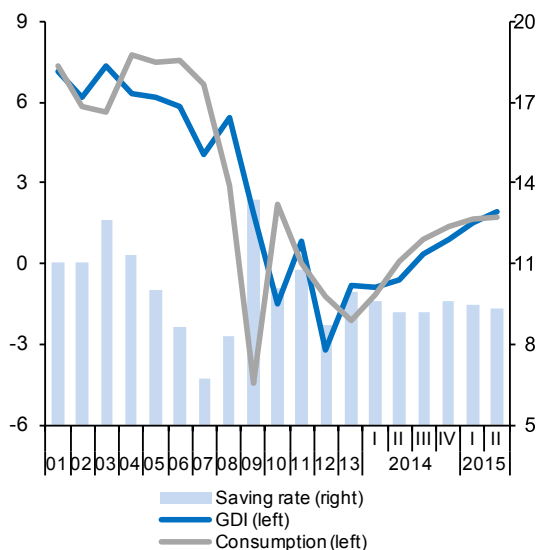
Chart 6.4.- Households: Saving, investment and deficit
Percentage of GDP, 4-quarter moving averages

■ Net lending (+) / borrowing (-) (right)
— Saving rate (b) (left)
— Investment rate (left)

(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												
2008		605.1	369.7	235.4	-78.8	-8.8	25.5	122.3	12.0	178.7	-44.3	-4.0	38.9	29.5
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	139.2	32.1	3.1	43.4	25.5
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		573.7	328.7	245.0	-48.1	-6.8	20.4	169.8	4.6	164.3	10.0	0.9	42.7	28.6
2016		593.0	342.3	250.6	-44.4	-7.0	20.1	179.2	4.6	175.8	7.9	0.7	42.3	29.6
2013	III	548.9	311.0	238.0	-45.8	-8.9	18.4	164.8	6.2	142.8	28.2	2.7	43.4	26.0
	IV	546.0	309.3	236.7	-43.6	-9.0	18.0	166.2	5.1	139.2	32.1	3.1	43.4	25.5
2014	I	545.4	308.4	237.0	-43.8	-8.3	18.1	166.8	5.5	142.1	30.2	2.9	43.5	26.0
	II	547.4	310.0	237.4	-47.9	-7.7	19.4	162.3	4.9	141.9	25.4	2.5	43.4	25.9
	III	548.6	311.6	236.9	-49.8	-7.2	19.2	160.8	4.8	143.8	21.8	2.1	43.2	26.2
	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	555.8	317.5	238.3	-44.7	-6.5	18.2	168.8	4.4	154.4	18.8	1.8	42.9	27.8
	II	561.5	320.7	240.9	-42.6	-6.4	18.4	173.5	5.1	160.4	18.2	1.7	42.9	28.6
		Annual percentage changes, 4-quarter cumulated operations										**Difference from one year ago**		
2008		9.5	7.4	13.0	19.3	6.4	-38.7	32.2	19.2	-5.5	--	4.0	1.2	-4.7
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	--	1.9	0.9	0.4
2014		0.9	1.6	-0.1	13.6	-27.0	3.5	-2.6	-10.9	8.4	--	-1.6	-0.4	1.9
2015		4.1	4.6	3.6	-2.9	3.0	9.5	4.9	0.0	8.9	--	-0.6	-0.2	1.3
2016		3.4	4.1	2.3	-7.6	3.5	-1.4	5.5	0.0	7.0	--	-0.2	-0.4	1.0
2013	III	-2.1	-4.6	1.4	-30.9	-7.7	12.7	15.9	-6.0	3.6	--	1.7	1.5	1.4
	IV	-2.0	-3.6	0.1	-28.2	-6.8	-9.2	13.6	-20.5	-0.5	--	1.9	0.9	0.4
2014	I	-1.5	-2.5	0.0	-24.0	-10.8	-6.4	10.6	-19.8	2.0	--	1.2	0.6	0.9
	II	-0.6	-1.0	-0.2	-7.7	-16.2	-1.2	3.3	-26.1	0.7	--	0.2	0.2	0.3
	III	-0.1	0.2	-0.4	8.5	-19.4	4.4	-2.5	-22.2	0.7	--	-0.6	-0.2	0.2
	IV	0.9	1.6	-0.1	13.6	-27.0	3.5	-2.6	-10.9	8.4	--	-1.6	-0.4	1.9
2015	I	1.9	3.0	0.5	2.0	-21.2	0.4	1.2	-20.1	8.7	--	-1.1	-0.6	1.7
	II	2.6	3.4	1.5	-11.1	-17.4	-5.1	6.9	3.2	13.0	--	-0.7	-0.5	2.6

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

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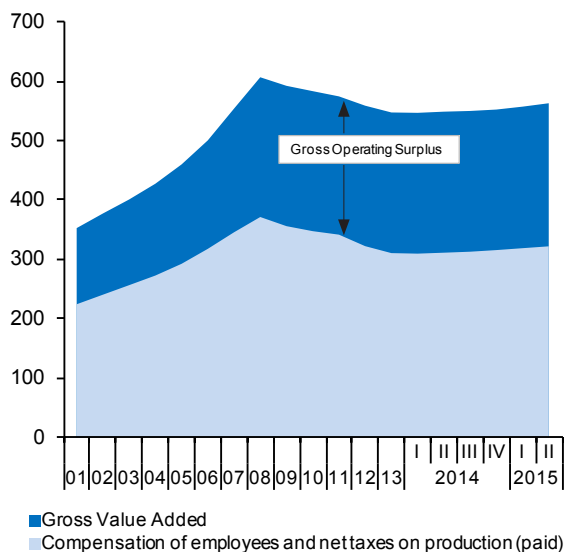EUR Billions, 4-quarter cummulated

■ Gross Value Added
■ Compensation of employees and net taxes on production (paid)

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

Gross Value Added
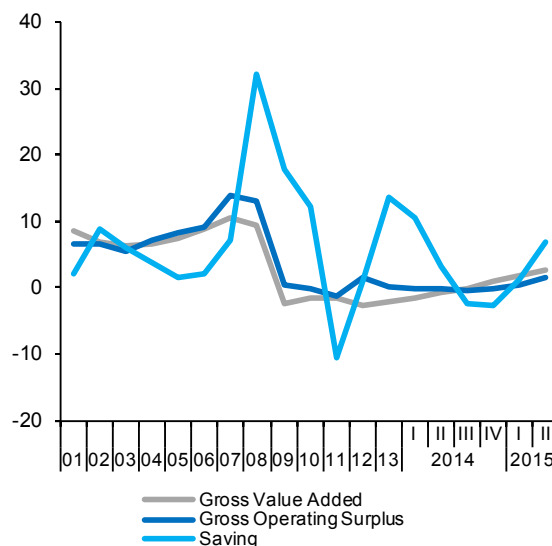Gross Operating Surplus
Saving

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

Net lending (+) / borrowing (-) (right)
Saving rate (a) (left)
Investment rate (left)
(a) Including net capital transfers.
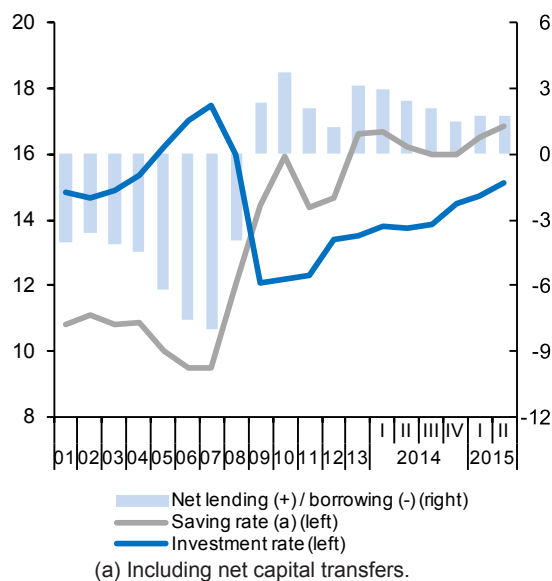
Chart 7.4.- Non-financial corporations: Profit share and investment rate
Percentage of non-financial corporations GVA, 4-quarter moving averages
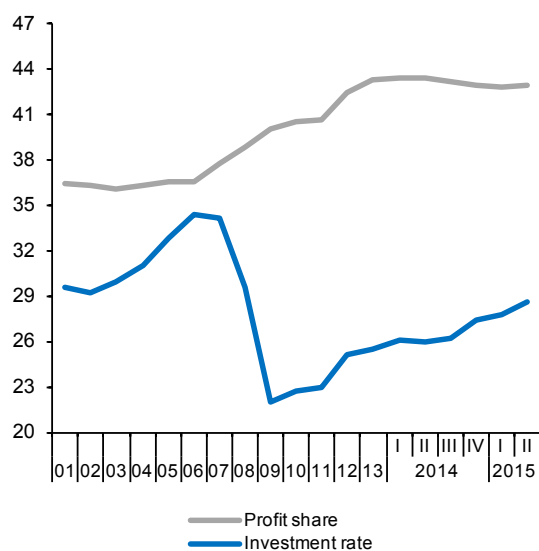

Profit share
Investment rate

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														
2008	142.8	107.9	116.6	142.0	118.1	5.9	137.1	24.4	223.8	209.5	14.3	63.6	-49.4	-49.4
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	-118.2
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	-101.4
2011	150.3	106.2	102.0	137.8	122.6	16.2	164.2	22.6	170.7	219.7	-49.0	52.3	-101.3	-96.1
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	-69.8
2013	142.9	114.6	105.0	128.2	114.7	24.1	170.6	20.5	160.8	202.4	-41.5	31.2	-72.8	-67.9
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	-60.1
2015	146.6	123.8	107.7	132.3	117.8	25.4	170.7	21.6	174.8	206.3	-31.5	24.4	-55.9	-55.8
2016	150.3	130.9	110.1	136.6	121.0	23.4	171.5	21.7	190.3	210.7	-20.4	24.9	-45.3	-45.3
2013 III	139.5	112.0	105.2	128.7	111.1	22.9	171.3	19.6	160.4	199.5	-39.1	58.2	-97.3	-63.4
IV	142.9	114.6	105.0	128.2	114.7	24.1	170.6	20.5	160.8	202.4	-41.5	31.2	-72.8	-67.9
2014 I	142.8	115.9	105.6	128.6	114.6	24.7	170.2	20.8	162.6	202.6	-40.0	30.7	-70.6	-65.7
II	142.7	117.0	105.9	128.6	114.5	24.9	169.8	22.5	162.5	202.5	-40.0	27.4	-67.4	-65.3
III	143.0	118.0	106.2	129.2	114.8	24.9	169.1	21.3	166.3	203.0	-36.6	25.2	-61.8	-61.0
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	-60.1
2015 I	144.2	120.4	106.1	130.2	115.9	26.1	170.6	21.6	166.7	203.9	-37.1	24.9	-62.0	-60.9
II	145.1	122.7	108.0	131.1	116.8	25.8	170.7	20.8	172.8	205.3	-32.4	25.0	-57.5	-56.2
Percentage of GDP, 4-quarter cumulated operations														
2008	12.8	9.7	10.4	12.7	10.6	0.5	12.3	2.2	20.0	18.8	1.3	5.7	-4.4	-4.4
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	-9.4
2011	14.0	9.9	9.5	12.9	11.5	1.5	15.3	2.1	15.9	20.5	-4.6	4.9	-9.5	-9.0
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	-6.7
2013	13.9	11.1	10.2	12.4	11.1	2.3	16.5	2.0	15.6	19.6	-4.0	3.0	-7.1	-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	13.5	11.4	9.9	12.2	10.9	2.3	15.8	2.0	16.1	19.0	-2.9	2.3	-5.2	-5.2
2016	13.4	11.6	9.8	12.2	10.8	2.1	15.3	1.9	16.9	18.7	-1.8	2.2	-4.0	-4.0
2013 III	13.5	10.9	10.2	12.5	10.8	2.2	16.6	1.9	15.6	19.4	-3.8	5.6	-9.4	-6.2
IV	13.9	11.1	10.2	12.4	11.1	2.3	16.5	2.0	15.6	19.6	-4.0	3.0	-7.1	-6.6
2014 I	13.9	11.2	10.2	12.5	11.1	2.4	16.5	2.0	15.8	19.6	-3.9	3.0	-6.9	-6.4
II	13.8	11.3	10.3	12.4	11.1	2.4	16.4	2.2	15.7	19.6	-3.9	2.7	-6.5	-6.3
III	13.8	11.4	10.2	12.5	11.1	2.4	16.3	2.1	16.0	19.6	-3.5	2.4	-6.0	-5.9
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	11.5	10.1	12.4	11.0	2.5	16.3	2.1	15.9	19.4	-3.5	2.4	-5.9	-5.8
II	13.7	11.6	10.2	12.4	11.0	2.4	16.1	2.0	16.3	19.4	-3.1	2.4	-5.4	-5.3

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

- Net lending or borrowing (right)
- Revenue (left)
- Expenditure (left)
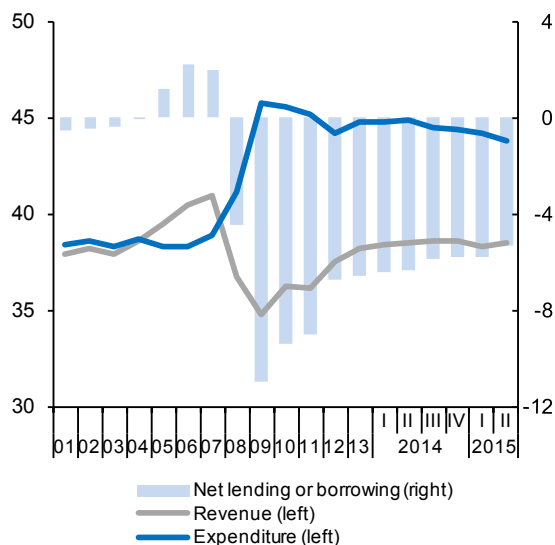
(a) Excluding financial entities bail-out expenditures.

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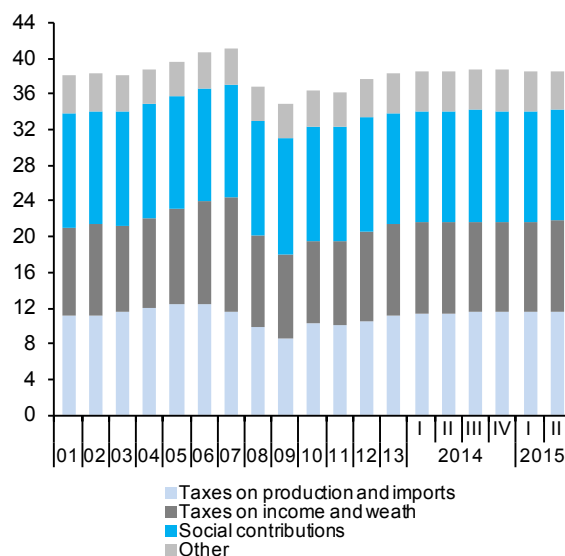Percentage of GDP, 4-quarter moving averages

- Taxes on production and imports
- Taxes on income and weath
- Social contributions
- Other

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

- Compensation of employees
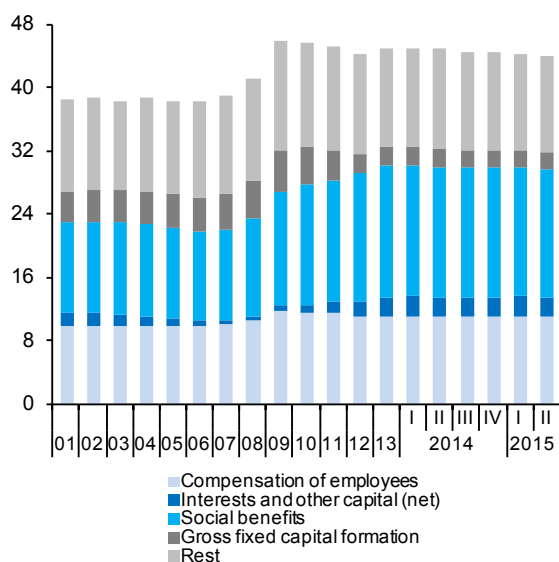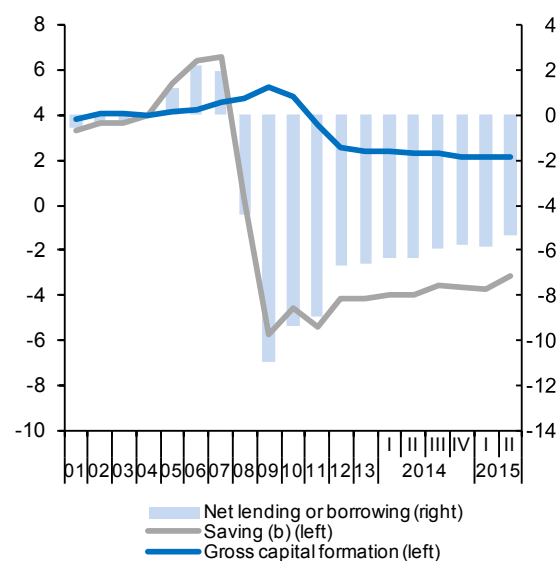- Interests and other capital (net)
- Social benefits
- Gross fixed capital formation
- Rest

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

- Net lending or borrowing (right)
- Saving (b) (left)
- Gross capital formation (left)

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

Table 9
Public sector balances, by level of Government
Forecasts in blue

		Net lending (+)/net borrowing (-) (a)					Debt				
		Central Government	Regional Governments	Local Governments	Social Security	TOTAL Government	Central Government	Regional Governments	Local Governments	Social Security	TOTAL Government (consolidated)
		EUR Billions, 4-quarter cumulated operations					**EUR Billions, end of period**				
2008		-32.3	-19.1	-5.4	7.4	-49.4	368.9	73.6	31.8	17.2	439.8
2009		-98.4	-21.7	-5.9	7.8	-118.2	487.7	92.4	34.7	17.2	568.7
2010		-51.4	-40.2	-7.1	-2.4	-101.1	551.6	123.4	35.5	17.2	649.3
2011		-31.7	-54.8	-8.5	-1.1	-96.1	624.2	145.1	36.8	17.2	743.5
2012		-43.5	-19.4	3.3	-10.2	-69.8	761.9	188.4	44.0	17.2	890.7
2013		-44.3	-16.2	5.7	-11.5	-66.3	837.9	209.8	42.1	17.2	966.0
2014		-37.0	-18.2	5.9	-10.9	-60.1	895.7	236.8	38.3	17.2	1,033.7
2015		-30.4	-15.2	3.8	-14.1	-55.8	--	--	--	--	1,079.7
2016		-20.6	-11.2	3.4	-16.9	-45.3	--	--	--	--	1,125.1
2013	III	-40.3	-16.3	4.9	-11.6	-63.4	833.3	199.7	43.1	17.2	961.0
	IV	-44.3	-16.2	5.7	-11.5	-66.3	837.9	209.8	42.1	17.2	966.0
2014	I	-42.1	-16.9	5.3	-10.6	-64.2	866.0	225.0	41.9	17.2	995.7
	II	-37.1	-18.3	5.4	-13.8	-63.7	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	1,020.1
	IV	-37.0	-18.2	5.9	-10.9	-60.1	895.7	236.8	38.3	17.2	1,033.7
2015	I	-38.6	-17.1	6.4	-11.5	-60.9	907.1	241.8	38.5	17.2	1,047.6
	II	-33.4	-16.1	7.1	-13.8	-56.2	918.0	251.3	37.9	17.2	1,054.0
		Percentage of GDP, 4-quarter cumulated operations					**Percentage of GDP**				
2008		-2.9	-1.7	-0.5	0.7	-4.4	33.0	6.6	2.8	1.5	39.4
2009		-9.1	-2.0	-0.5	0.7	-11.0	45.2	8.6	3.2	1.6	52.7
2010		-4.8	-3.7	-0.7	-0.2	-9.3	51.0	11.4	3.3	1.6	60.1
2011		-3.0	-5.1	-0.8	-0.1	-9.0	58.3	13.6	3.4	1.6	69.5
2012		-4.2	-1.9	0.3	-1.0	-6.7	73.1	18.1	4.2	1.6	85.4
2013		-4.3	-1.6	0.6	-1.1	-6.4	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		-2.8	-1.4	0.4	-1.3	-5.2	--	--	--	--	99.7
2016		-1.8	-1.0	0.3	-1.5	-4.0	--	--	--	--	100.1
2013	III	-3.9	-1.6	0.5	-1.1	-6.2	80.8	19.4	4.2	1.7	93.2
	IV	-4.3	-1.6	0.6	-1.1	-6.4	81.3	20.3	4.1	1.7	93.7
2014	I	-4.1	-1.6	0.5	-1.0	-6.2	84.0	21.8	4.1	1.7	96.6
	II	-3.6	-1.8	0.5	-1.3	-6.2	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	-5.8	86.5	23.0	3.7	1.6	99.8
	II	-3.2	-1.5	0.7	-1.3	-5.3	86.6	23.7	3.6	1.6	99.5

(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
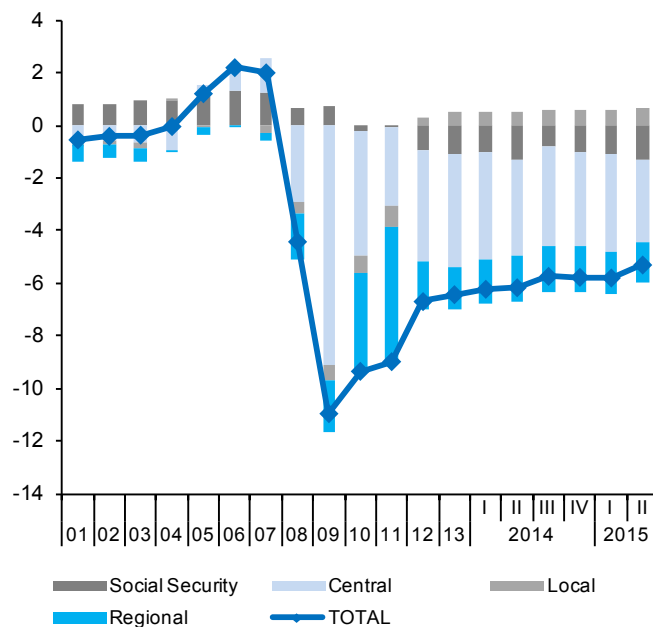### Percent of GDP, 4-quarter cumulated operations

Legend: Social Security, Central, Local, Regional, TOTAL

Chart 9.2.- Government debt
Percent of GDP

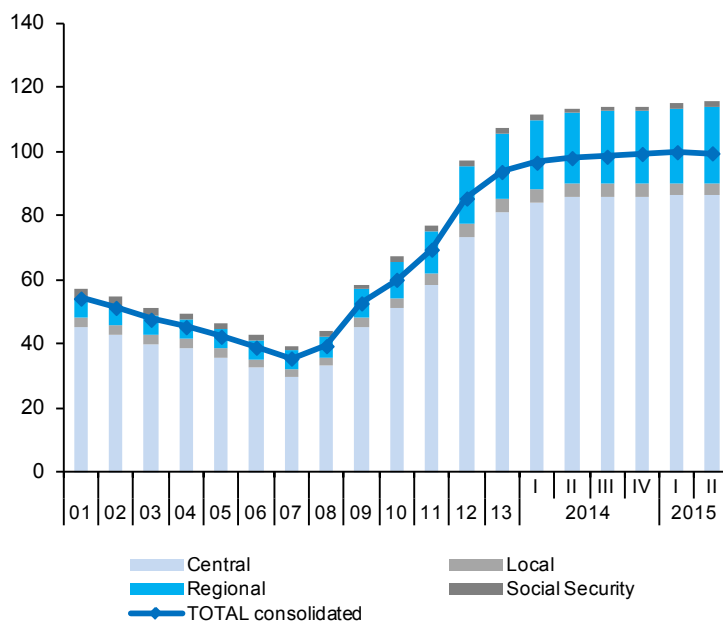Legend: Central, Local, Regional, Social Security, TOTAL consolidated

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**
2008		87.1	38.5	19,132	269.5	117.8	2,696	40.4	-18.0	120.4	-24.0
2009		83.1	40.9	18,019	256.9	99.2	2,411	40.9	-30.8	97.1	-54.4
2010		93.5	50.0	17,667	263.8	100.0	2,295	50.6	-13.8	100.0	-36.9
2011		93.5	46.6	17,431	261.3	98.4	2,232	47.3	-12.5	100.3	-30.7
2012		88.9	43.1	16,846	255.7	91.9	2,114	43.8	-17.5	95.5	-36.9
2013		92.9	48.3	16,298	250.2	90.5	2,022	48.5	-13.9	92.3	-30.6
2014		102.8	55.1	16,554	249.8	91.6	2,023	53.2	-7.1	93.7	-16.4
2015 (b)		109.0	57.0	17,047	189.9	94.7	2,062	53.8	-0.6	94.7	-6.3
2013	IV	97.1	51.6	15,890	62.6	91.3	2,013	50.1	-11.6	92.9	-27.0
2014	I	101.0	54.3	15,956	62.7	91.6	2,015	52.5	-9.1	93.5	-20.5
	II	102.4	55.7	16,044	62.6	91.8	2,019	53.4	-8.2	93.8	-18.4
	III	103.6	56.0	16,162	62.6	91.6	2,026	53.1	-5.7	94.0	-14.0
	IV	104.3	54.6	16,290	62.6	91.9	2,033	53.7	-5.3	94.2	-12.9
2015	I	107.7	56.6	16,431	62.9	93.1	2,046	54.4	-3.2	94.7	-11.2
	II	109.7	57.7	16,594	63.2	94.7	2,060	54.8	0.9	95.1	-2.8
	III (b)	109.5	57.2	16,706	63.5	95.2	2,074	52.8	0.7	95.2	-5.2
2015	Aug	110.4	58.8	16,704	21.2	75.5	2,073	53.2	1.6	95.2	-4.5
	Sep	109.5	54.6	16,745	21.2	98.9	2,078	51.7	1.4	--	-5.7
	Oct	108.8	55.0	16,790	--	--	2,084	51.3	-0.7	--	-5.3
Percentage changes (c)											
2008		--	--	-0.5	0.7	-7.6	-2.2	--	--	-8.2	--
2009		--	--	-5.8	-4.7	-15.8	-10.6	--	--	-19.3	--
2010		--	--	-2.0	2.7	0.8	-4.8	--	--	2.9	--
2011		--	--	-1.3	-0.9	-1.6	-2.7	--	--	0.3	--
2012		--	--	-3.4	-2.2	-6.7	-5.3	--	--	-4.8	--
2013		--	--	-3.3	-2.2	-1.5	-4.4	--	--	-3.4	--
2014		--	--	1.6	-0.2	1.3	0.1	--	--	1.5	--
2015	(d)	--	--	3.2	1.2	3.1	2.1	--	--	1.5	--
2013	IV	--	--	1.8	1.0	1.3	0.1	--	--	1.9	--
2014	I	--	--	1.7	0.4	1.3	0.3	--	--	2.5	--
	II	--	--	2.2	-0.2	1.0	0.7	--	--	1.7	--
	III	--	--	3.0	-0.5	-0.9	1.4	--	--	0.8	--
	IV	--	--	3.2	0.5	1.4	1.5	--	--	0.9	--
2015	I	--	--	3.5	1.5	5.3	2.5	--	--	2.0	--
	II	--	--	4.0	2.0	6.8	2.7	--	--	1.8	--
	III (e)	--	--	2.7	1.8	2.4	2.7	--	--	0.2	--
2015	Aug	--	--	0.2	0.1	-1.4	0.2	--	--	0.0	--
	Sep	--	--	0.2	0.1	1.2	0.2	--	--	--	--
	Oct	--	--	0.3	--	--	0.3	--	--	--	--

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

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

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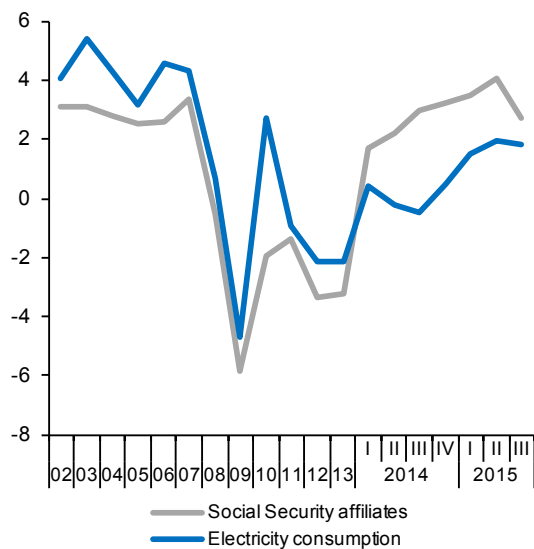### Annualized percent change from previous period

- Social Security affiliates
- Electricity consumption

Chart 10.2.- General activity indicators (II)
Index

- Economic Sentiment (left)
- Composite PMI (right)
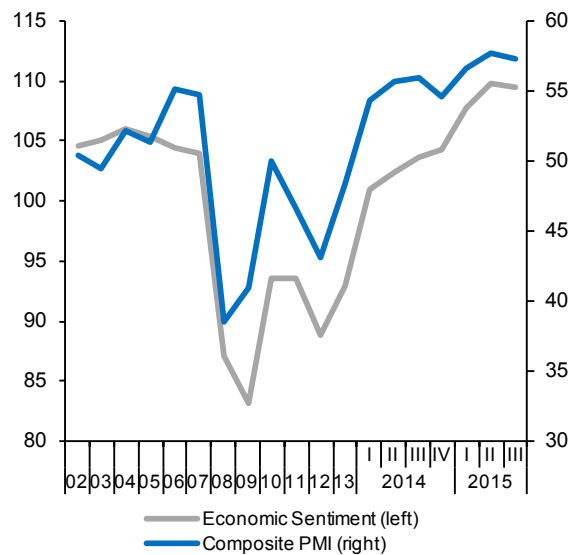
Chart 10.3.- Industrial sector indicators (I)
Annualized percent change from previous period

- IPI
- Turnover
- Social Security affiliates in industry
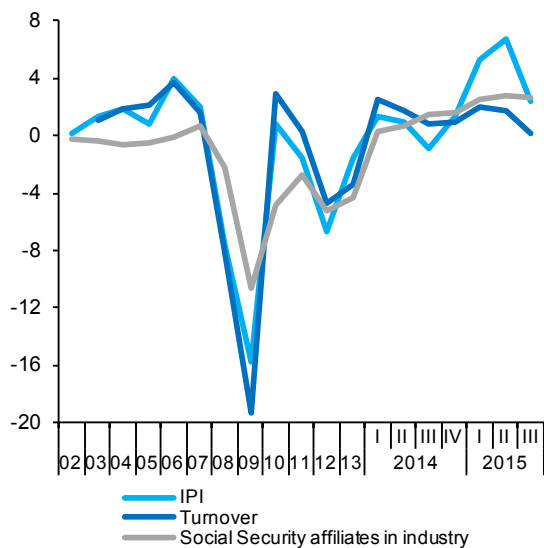
Chart 10.4.- Industrial sector indicators (II)
Index

- Manufacturing PMI (left)
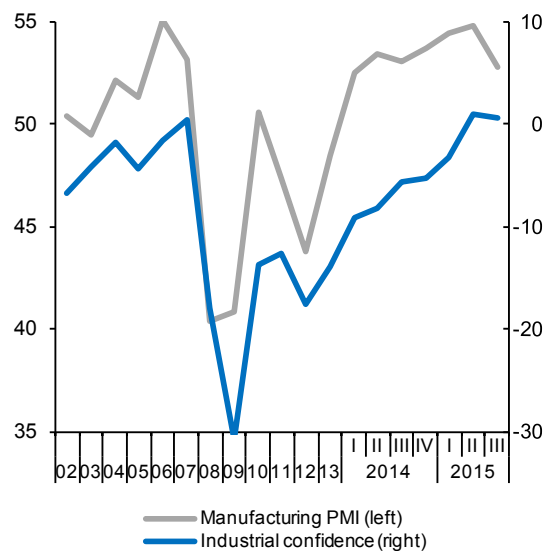- Industrial confidence (right)

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	Million m²	Thousands	2010=100 (smoothed)	Index	Million (smoothed)	Million (smoothed)	Balance of responses
2008	2,340	42.7	154.7	-23.8	39.8	44.9	12,644	114.6	38.2	268.6	202.3	-18.8
2009	1,800	28.9	115.9	-32.3	39.6	19.4	12,247	99.2	41.0	251.0	186.3	-29.7
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	66.8	-54.9	7.4	8.5	11,907	92.8	43.1	280.7	193.2	-21.5
2013	997	10.8	63.1	-55.6	9.2	6.8	11,728	91.0	48.3	286.0	186.5	-15.3
2014	980	10.9	62.1	-41.4	13.1	6.9	11,995	93.3	55.2	295.3	195.0	9.9
2015 (b)	1,024	7.6	66.8	-26.3	6.9	9.4	12,409	95.9	57.5	249.1	160.6	19.1
2013 IV	978	2.7	63.8	-57.4	2.9	1.6	11,788	91.6	51.8	72.6	47.0	-3.1
2014 I	970	2.6	63.5	-52.3	3.7	1.7	11,853	92.1	54.2	73.1	47.5	7.5
II	974	2.7	62.4	-55.8	3.2	1.8	11,944	92.8	55.7	73.4	48.1	9.1
III	983	2.8	61.2	-35.0	3.4	1.9	12,044	93.7	56.7	73.9	48.8	8.8
IV	996	2.8	61.7	-22.6	2.9	1.5	12,147	94.7	54.3	74.7	49.4	14.0
2015 I	1,014	2.8	63.6	-23.3	2.7	2.1	12,279	95.8	56.7	75.4	50.0	17.5
II	1,025	2.9	66.0	-27.7	3.0	2.5	12,390	97.1	58.3	76.0	50.7	20.1
III (b)	1,030	1.8	68.5	-28.5	1.2	1.6	12,482	98.0	58.1	51.1	34.2	19.7
2015 Aug	1,029	0.9	68.5	-21.5	0.3	0.6	12,481	98.2	59.6	25.5	17.1	20.0
Sep	1,032	--	69.3	-34.1	--	--	12,513	--	55.1	25.6	17.2	20.4
Oct	1,035	--	--	-24.6	--	--	12,550	--	55.9	--	--	19.3
Percentage changes (c)												
2008	-10.0	-23.8	-17.8	--	-1.3	-56.6	1.5	-3.7	--	-1.2	-3.0	--
2009	-23.1	-32.3	-25.1	--	-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	-6.2	--	-2.1	-5.0	--
2013	-12.2	-20.7	-5.7	--	23.3	-20.3	-1.5	-2.0	--	1.9	-3.5	--
2014	-1.7	0.9	-1.4	--	42.9	2.2	2.3	2.6	--	3.2	4.6	--
2015 (d)	4.9	5.6	6.0	--	-24.6	28.3	3.7	4.6	--	3.8	5.2	--
2013 IV	-3.3	0.8	0.0	--	87.1	-8.3	2.3	2.1	--	5.4	4.2	--
2014 I	-3.2	-12.9	-1.8	--	129.2	-12.6	2.2	2.3	--	2.7	4.6	--
II	1.5	16.6	-7.1	--	48.2	11.2	3.1	3.1	--	1.7	5.3	--
III	3.9	18.1	-7.6	--	32.7	21.2	3.4	3.9	--	2.8	5.3	--
IV	5.1	7.7	3.2	--	0.3	-8.0	3.4	4.3	--	4.1	5.1	--
2015 I	7.7	-2.4	13.0	--	-25.0	23.6	4.4	4.9	--	3.8	5.5	--
II	4.5	7.3	16.0	--	-7.0	37.3	3.7	5.2	--	3.5	5.5	--
III (e)	1.6	-13.6	16.1	--	-50.9	27.4	3.0	3.9	--	3.2	5.2	--
2015 Aug	0.2	3.8	1.2	--	-60.6	40.9	0.2	0.4	--	0.3	0.4	--
Sep	0.2	--	1.2	--	--	--	0.3	--	--	0.3	0.4	--
Oct	0.3	--	--	--	--	--	0.3	--	--	--	--	--

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

Sources: European Commision, Markit Economics Ltd., M. of Labour, M. of Public Works, National Statistics Institute, AENA, OFICEMEN, SEOPAN and FUNCAS.
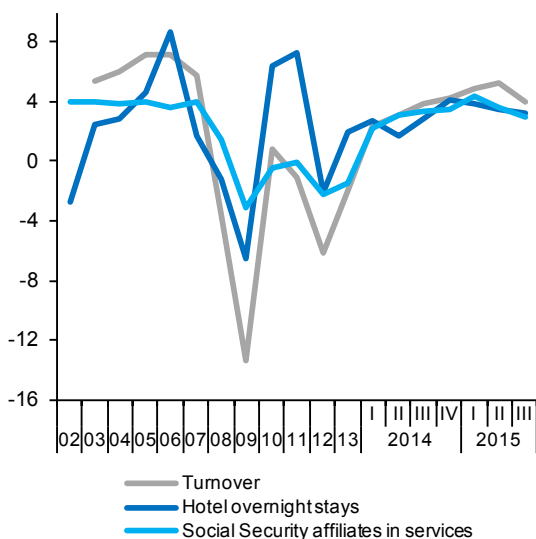
Chart 11.1.- Construction indicators (I)
Annualized percentage changes from previous period and index

S. Security affiliates in construction (left)
Construction confidence index (right)
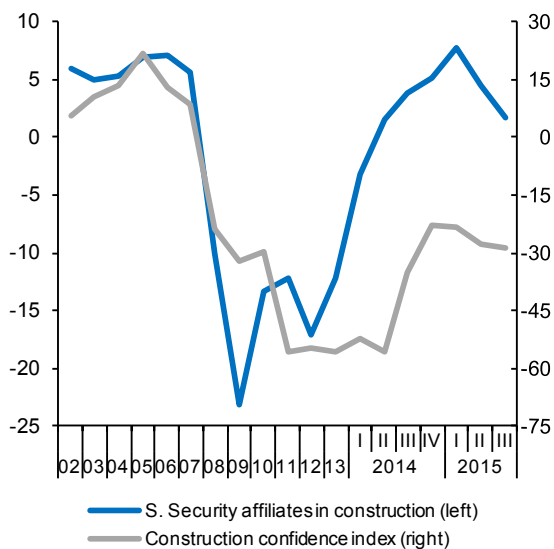
Chart 11.2.- Construction indicators (II)
Annualized percentage changes from previous period

Official tenders
Housing permits
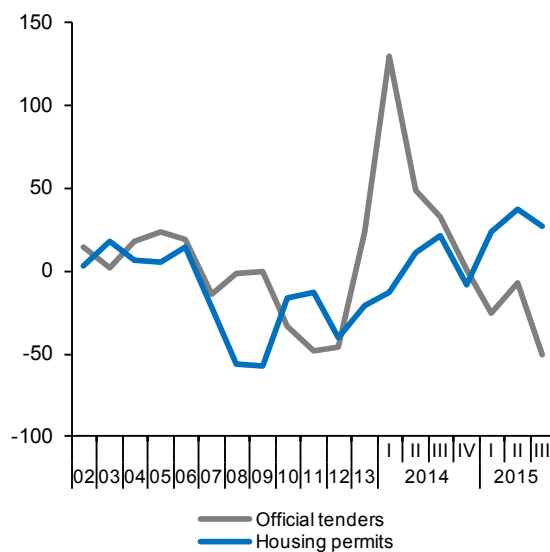
Chart 11.3.- Services indicators (I)
Percentage changes from previous period

Turnover
Hotel overnight stays
Social Security affiliates in services

Chart 11.4.- Services indicators (II)
Index

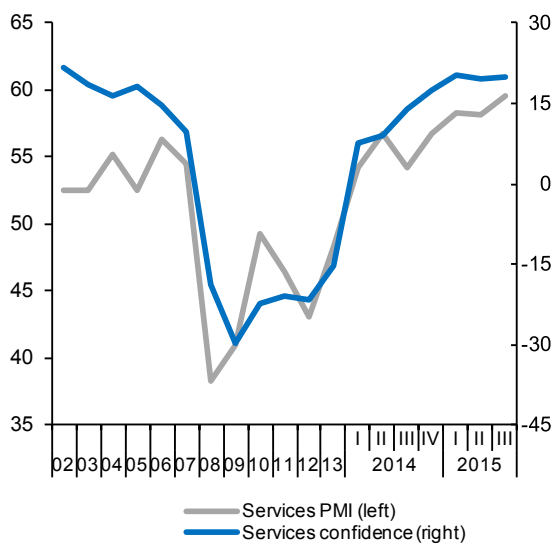Services PMI (left)
Services confidence (right)

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)
2008		107.5	1,185.3	-33.8	113.2	-21.0	236.9	-4.5	90.4
2009		101.8	971.2	-28.3	109.8	-40.2	142.1	-50.8	66.6
2010		100.0	1,000.1	-20.9	113.2	-26.7	152.1	-31.1	70.9
2011		94.4	808.3	-17.1	111.5	-21.7	142.0	-23.0	68.7
2012		87.4	710.6	-31.7	102.1	-24.2	107.7	-38.6	61.3
2013		84.0	742.3	-25.3	100.6	-21.8	107.6	-33.5	70.0
2014		84.9	890.1	-8.9	104.7	-9.2	137.5	-16.1	83.1
2015	(b)	86.1	825.2	-0.2	89.5	-4.4	130.6	-0.8	90.6
2013	IV	83.9	193.4	-19.4	25.3	-19.7	29.7	-35.7	75.7
2014	I	84.0	204.5	-11.8	25.5	-11.8	31.5	-20.1	79.9
	II	84.4	215.9	-6.1	25.8	-7.9	33.1	-16.9	83.0
	III	85.1	226.8	-7.9	26.2	-7.5	34.9	-15.8	84.4
	IV	85.9	240.3	-9.6	26.6	-9.7	37.6	-11.3	87.0
2015	I	86.7	254.0	-0.6	27.1	-4.5	40.8	-9.1	91.9
	II	87.4	264.5	1.6	27.4	-5.8	43.8	5.7	96.0
	III (b)	88.2	274.5	-1.3	18.5	-3.7	46.5	-0.7	98.1
2015 Aug		88.2	91.5	-1.3	9.2	-8.9	15.5	0.9	98.4
Sep		88.4	92.7	-2.6	9.3	0.7	15.8	5.3	--
Oct		--	--	-1.2	--	-2.1	--	4.2	--
		Percentage changes (c)							
2008		-6.0	-27.5	--	-2.9	--	-43.6	--	-20.1
2009		-5.4	-18.1	--	-3.0	--	-40.0	--	-26.3
2010		-1.7	3.0	--	3.2	--	7.0	--	6.5
2011		-5.6	-19.2	--	-1.5	--	-6.6	--	-3.1
2012		-7.4	-12.1	--	-8.4	--	-24.2	--	-10.7
2013		-3.9	4.5	--	-1.4	--	-0.1	--	14.1
2014		1.1	19.9	--	4.1	--	27.8	--	18.7
2015	(d)	3.4	24.2	--	6.0	--	33.9	--	16.6
2013	IV	-0.7	18.9	--	4.1	--	32.4	--	22.3
2014	I	0.3	24.9	--	3.2	--	26.7	--	24.2
	II	2.2	24.5	--	5.2	--	22.5	--	16.3
	III	3.1	21.6	--	6.2	--	23.9	--	7.0
	IV	3.7	26.2	--	6.4	--	34.1	--	13.1
2015	I	3.7	24.7	--	6.4	--	39.0	--	24.2
	II	3.5	17.7	--	5.6	--	33.0	--	19.1
	III (e)	3.6	16.0	--	3.8	--	26.1	--	9.2
2015 Aug		0.3	1.3	--	0.3	--	1.9	--	0.5
Sep		0.3	1.3	--	0.3	--	1.8	--	--
Oct		--	--	--	--	--	--	--	--

(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
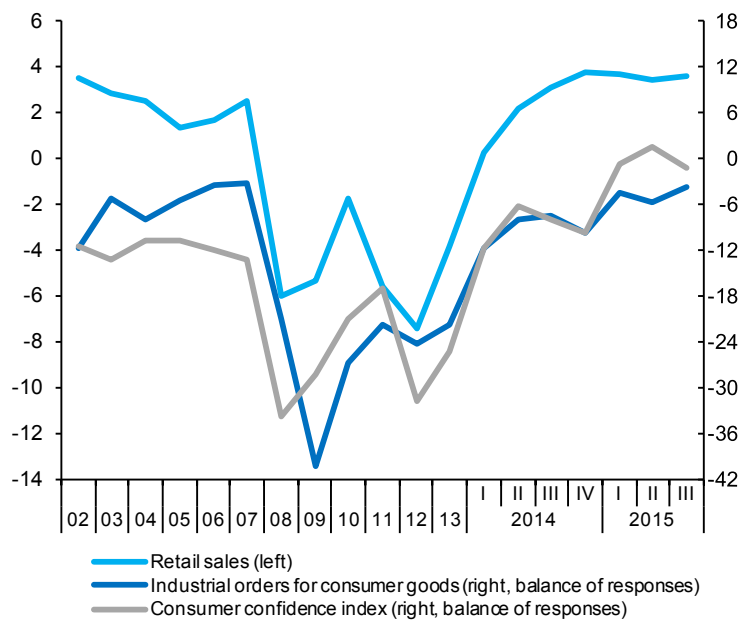### Percent change from previous period and balance of responses

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

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

Imports of capital goods
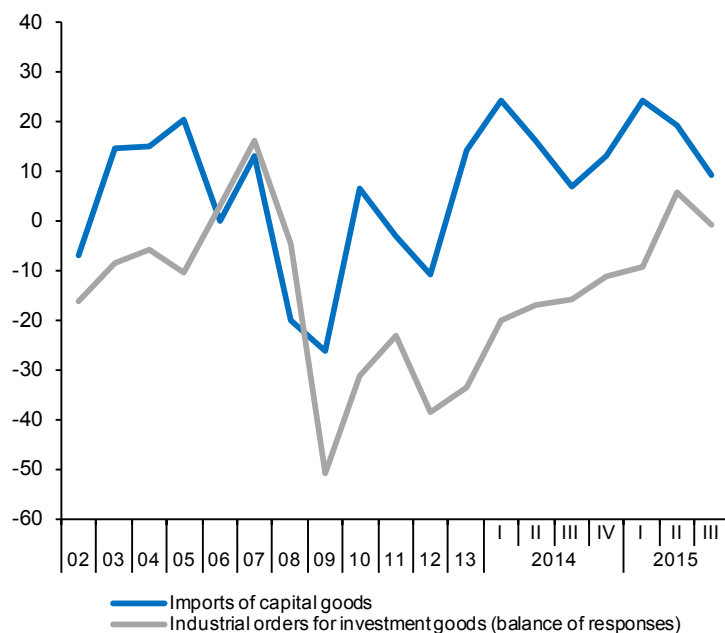Industrial orders for investment goods (balance of responses)

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)			
		Original	Seasonally adjusted	Original	Seasonally adjusted	Original	Seasonally adjusted			Total	Aged 16-24	Spanish	Foreign
										Seasonally adjusted			
	1	2=4+6	3=5+7	4	5	6	7	8	9	10=7/3	11	12	13
	Million							**Percentage**					
2008	31.0	23.1	--	20.5	--	2.6	--	73.8	65.4	11.3	24.5	10.2	17.4
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	23.0	--	17.9	--	5.1	--	75.6	58.7	22.2	--	--	--
2016	30.1	23.0	--	18.3	--	4.6	--	75.8	60.4	20.2	--	--	--
2013 IV	30.4	23.1	23.0	17.1	17.1	5.9	5.9	75.2	55.9	25.7	54.9	24.2	36.5
2014 I	30.3	22.9	22.9	17.0	17.1	5.9	5.8	75.1	55.4	25.3	54.5	23.7	36.2
II	30.3	23.0	22.9	17.4	17.3	5.6	5.6	75.2	56.8	24.5	53.0	23.1	34.4
III	30.3	22.9	22.9	17.5	17.4	5.4	5.5	75.1	57.3	24.1	53.1	22.7	33.7
IV	30.3	23.0	23.0	17.6	17.6	5.5	5.4	75.5	57.6	23.7	51.7	22.4	33.2
2015 I	30.2	22.9	23.0	17.5	17.7	5.4	5.3	75.4	57.3	23.1	50.4	21.8	32.2
II	30.2	23.0	23.0	17.9	17.8	5.1	5.1	75.6	58.7	22.4	49.0	20.9	33.0
III	30.2	22.9	22.9	18.0	17.9	4.9	4.9	75.4	59.4	21.6	47.5	20.0	33.2
	Percentage changes (d)							**Difference from one year ago**					
2008	1.5	2.9	--	-0.5	--	40.6	--	1.0	-1.3	3.0	6.4	2.6	5.3
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	1.0
2014	-0.9	-1.0	--	1.2	--	-7.3	--	0.0	1.2	-1.7	-2.3	-1.4	-2.5
2015	-0.5	0.0	--	3.0	--	-9.3	--	0.3	1.9	-2.3	--	--	--
2016	-0.3	0.0	--	2.5	--	-8.9	--	0.2	1.7	-2.0	--	--	--
2013 IV	-1.3	-1.2	-1.6	-1.2	0.1	-1.4	-6.4	0.0	0.1	-0.1	-0.3	0.1	-0.1
2014 I	-1.3	-1.8	-2.0	-0.5	0.4	-5.5	-8.8	-0.3	0.5	-1.0	-1.4	-0.8	-1.5
II	-1.0	-1.0	0.3	1.1	4.4	-7.0	-11.1	0.1	1.3	-1.5	-2.4	-1.4	-1.6
III	-0.8	-1.0	-0.5	1.6	1.7	-8.7	-7.1	-0.2	1.3	-1.9	-1.9	-1.6	-3.8
IV	-0.6	-0.2	1.4	2.5	3.6	-8.1	-5.4	0.2	1.7	-2.0	-3.2	-1.8	-3.2
2015 I	-0.4	0.1	-0.7	3.0	2.4	-8.2	-10.2	0.3	1.8	-2.2	-4.1	-1.9	-4.1
II	-0.5	0.2	0.4	3.0	4.0	-8.4	-11.0	0.4	1.9	-2.1	-4.0	-2.2	-1.4
III	-0.5	-0.1	-1.6	3.1	2.5	-10.6	-14.6	0.2	2.1	-2.5	-5.6	-2.8	-0.5

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

Sources: INE (Labour Force Survey) and FUNCAS.

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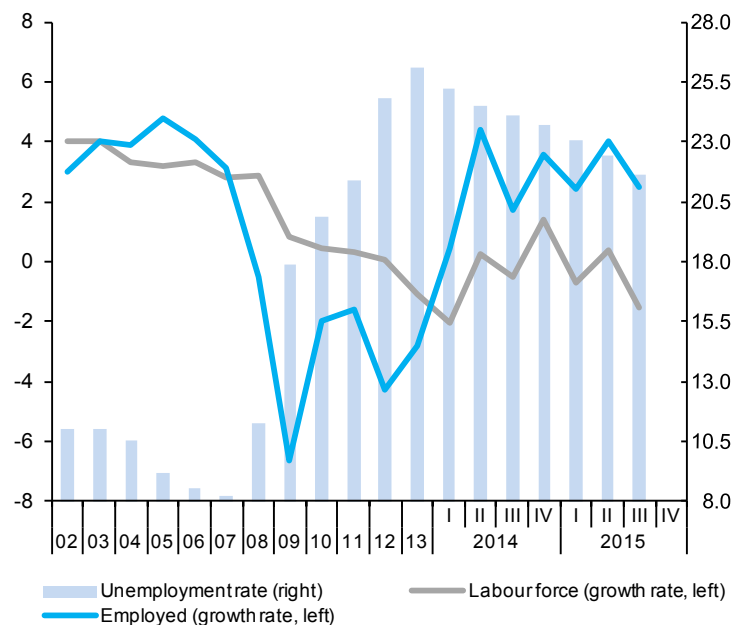Annual / annualized quarterly growth rates and percentage of active population

- Unemployment rate (right)
- Employed (growth rate, left)
- Labour force (growth rate, left)

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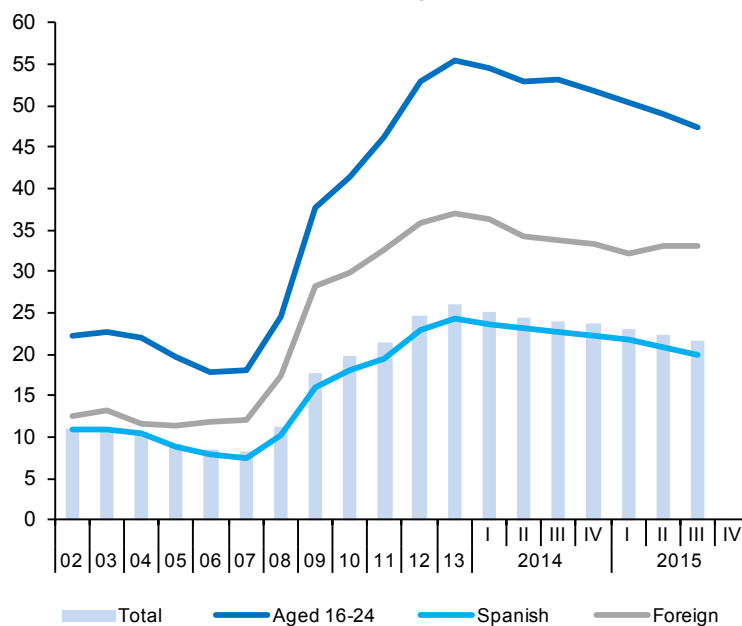

- Total
- Aged 16-24
- Spanish
- Foreign

Table 13b

Labour market (II)

		Employed by sector				Employed by professional situation					Employed by duration of the working-day		
							Employees						
								By type of contract					
		Agriculture	Industry	Construc-tion	Services	Total	Temporary	Indefinite	Temporary employment rate (a)	Self- emplo-yed	Full-time	Part-time	Part-time employ-ment rate (b)
		1	2	3	4	5=6+7	6	7	8=6/5	9	10	11	12
Million (original data)													
2008		0.83	3.24	2.46	13.94	16.86	4.91	11.95	29.1	3.61	18.06	2.41	11.8
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 (c)		0.72	2.44	1.06	13.24	14.39	3.40	11.00	23.6	3.06	14.62	2.84	16.3
2013	IV	0.78	2.34	0.99	13.03	14.09	3.33	10.76	23.7	3.04	14.38	2.75	16.1
2014	I	0.81	2.30	0.94	12.90	13.93	3.22	10.71	23.1	3.02	14.20	2.75	16.2
	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
Annual percentage changes									**Difference from one year ago**	**Annual percentage changes**			**Difference from one year ago**
2008		-0.3	0.2	7.1	4.6	4.0	6.0	3.1	0.6	2.8	3.2	10.8	0.5
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 (d)		-2.1	5.4	9.9	2.4	3.4	7.9	2.0	1.0	1.3	3.1	2.3	-0.1
2013	IV	0.4	-4.0	-9.1	-0.1	-1.4	2.3	-2.4	0.8	-0.3	-2.3	5.3	1.0
2014	I	12.9	-3.4	-11.6	0.2	-0.4	5.0	-1.9	1.2	-0.7	-0.9	2.1	0.4
	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

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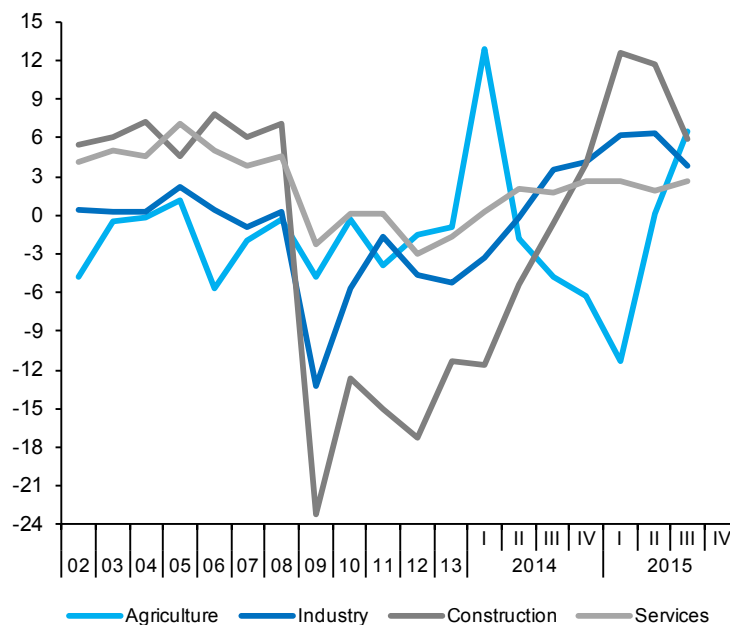
Chart 13b.1.- Employment by sector
Annual percentage changes

Agriculture — Industry — Construction — Services

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

Temporary employment rate (right)
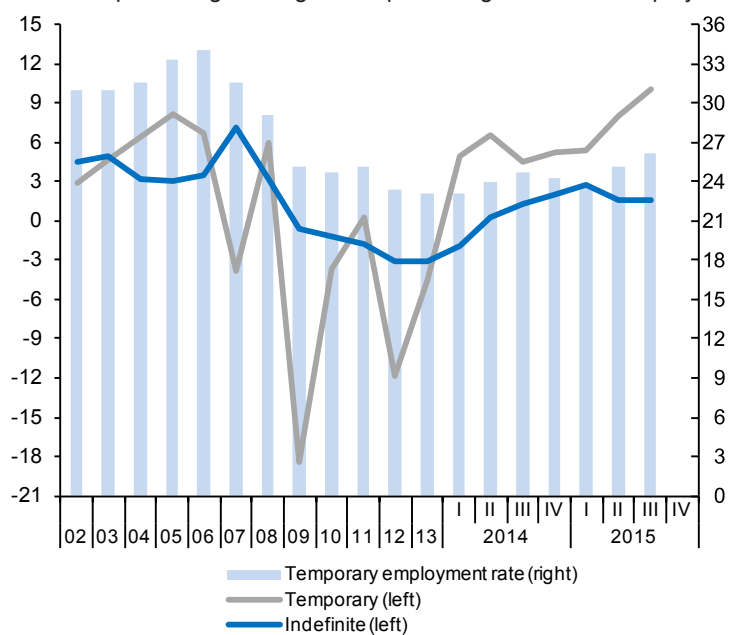Temporary (left)
Indefinite (left)

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 2015		100.0	66.09	81.21	26.42	39.67	15.13	6.64	12.14	21.77
Indexes, 2011 = 100										
2010		96.9	98.7	98.3	99.4	98.3	96.4	98.2	86.4	96.9
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		103.3	102.8	103.7	101.3	103.8	107.7	106.3	98.8	107.2
2016		104.2	103.6	104.7	101.9	104.7	109.6	108.5	98.9	109.2
Annual percentage changes										
2010		1.8	0.6	0.6	-0.5	1.3	1.0	0.0	12.5	0.7
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	0.2	0.7	1.0	1.6	-8.5	1.2
2016		0.9	0.8	1.0	0.6	0.9	1.7	2.1	0.0	1.9
2015	Jan	-1.3	0.2	0.2	-0.1	0.5	-0.1	-0.7	-11.4	-0.3
	Feb	-1.1	0.2	0.2	-0.1	0.3	0.1	0.9	-10.2	0.3
	Mar	-0.7	0.2	0.2	-0.2	0.4	0.3	0.9	-7.4	0.5
	Apr	-0.6	0.2	0.3	0.0	0.3	0.7	0.2	-7.2	0.5
	May	-0.2	0.4	0.5	0.1	0.6	0.9	2.3	-6.4	1.3
	Jun	0.1	0.5	0.6	0.3	0.7	1.2	3.2	-5.7	1.8
	Jul	0.1	0.7	0.8	0.4	0.9	1.2	1.7	-5.8	1.4
	Aug	-0.4	0.6	0.7	0.3	0.8	1.4	2.7	-9.8	1.8
	Sep	-0.9	0.7	0.8	0.4	0.9	1.4	2.6	-13.6	1.8
	Oct	-0.7	0.7	0.8	0.4	0.9	1.4	1.1	-12.0	1.3
	Nov	-0.2	0.8	0.9	0.6	0.9	1.4	1.7	-8.7	1.5
	Dec	0.5	0.8	0.9	0.6	0.9	1.6	2.7	-3.7	1.9
2016	Jan	0.9	0.8	0.9	0.6	0.9	1.7	2.7	-0.1	2.0
	Feb	0.8	0.8	1.0	0.6	0.9	1.8	0.9	-1.0	1.5
	Mar	0.7	1.0	1.1	0.6	1.2	1.8	2.3	-3.1	2.0
	Apr	0.5	0.7	0.9	0.6	0.7	1.8	3.0	-3.3	2.2
	May	0.4	0.8	0.9	0.6	0.9	1.8	1.9	-3.9	1.9
	Jun	0.3	0.7	0.9	0.5	0.8	1.8	1.3	-4.3	1.6
	Jul	0.5	0.7	0.9	0.6	0.8	1.8	2.8	-3.5	2.1
	Aug	1.1	0.8	1.0	0.6	0.9	1.8	1.9	1.1	1.8
	Sep	1.5	0.8	1.0	0.6	0.9	1.7	2.1	4.6	1.8
	Oct	1.5	0.8	1.0	0.6	0.9	1.7	2.1	5.0	1.8
	Nov	1.5	0.8	1.0	0.6	0.9	1.7	2.1	4.5	1.8
	Dec	1.4	0.8	1.0	0.6	0.9	1.7	2.1	4.4	1.8

Sources: INE and FUNCAS (Forecasts).

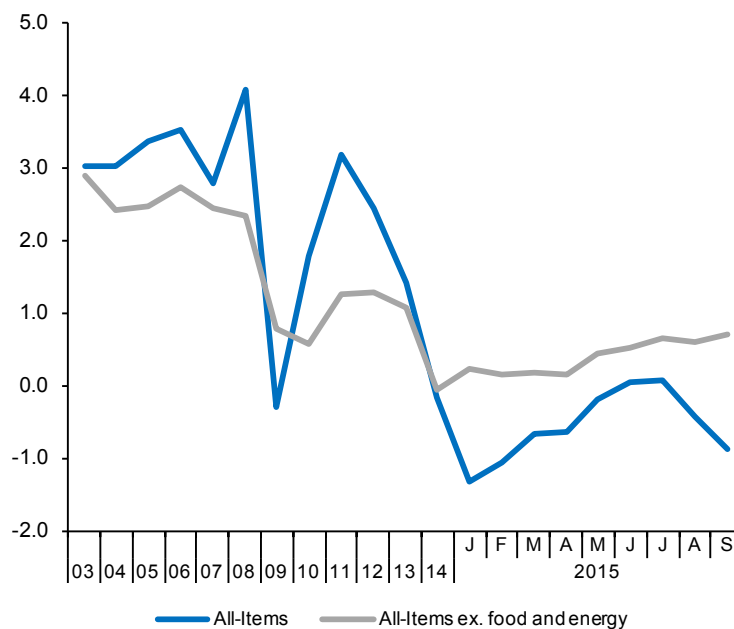**Chart 14.1.- Inflation rate (I)**
Annual percentage changes

All-Items   All-Items ex. food and energy

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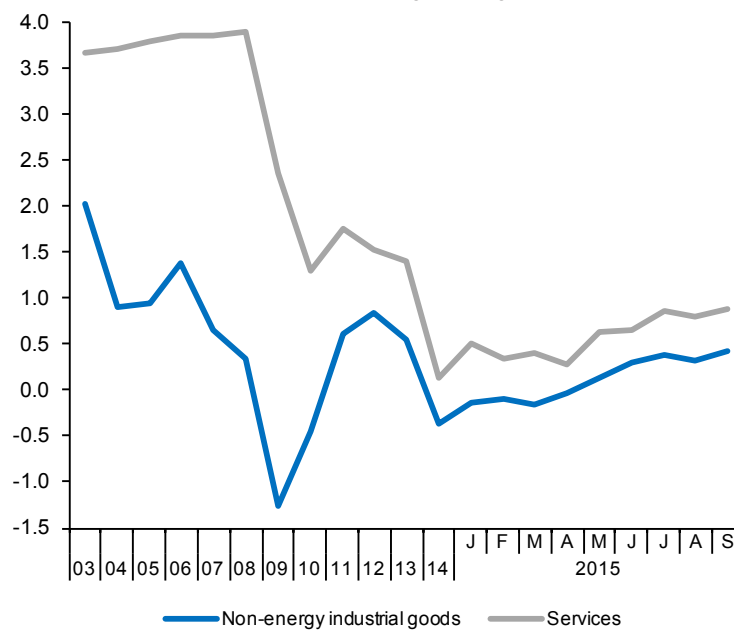

Non-energy industrial goods   Services

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)	M² 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				
2008	99.6	99.8	100.5	98.5	100.7	91.1	137.4	134.8	145.6	142.8	--
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	152.2	155.3	--
2014	100.2	110.2	105.9	64.5	71.0	52.6	143.3	140.9	150.7	155.5	--
2015 (b)	100.6	108.5	106.3	66.0	71.4	54.4	143.6	141.3	150.5	150.8	--
2013 IV	100.7	111.5	106.0	63.8	71.3	53.1	149.9	149.5	151.3	162.7	--
2014 I	100.1	109.8	105.7	63.6	71.0	50.8	139.8	135.2	154.0	145.6	--
II	100.2	110.6	105.8	64.7	71.0	52.5	145.9	144.5	150.2	153.8	--
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	148.9	162.2	--
2015 I	100.6	107.7	105.9	64.6	70.9	53.8	140.6	137.2	151.1	147.0	--
II	100.6	109.2	106.5	67.3	71.8	55.0	146.5	145.4	149.8	154.5	--
III (b)	--	108.5	106.6	--	--	--	--	--	--	--	--
2015 Aug	--	108.2	106.6	--	--	--	--	--	--	--	--
Sep	--	107.3	106.4	--	--	--	--	--	--	--	--
Oct	--	--	--	--	--	--	--	--	--	--	--
Annual percent changes											
2008	2.1	6.5	4.5	-1.5	0.7	-8.9	4.8	5.1	4.0	5.2	3.6
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	0.1	0.6
2015 (c)	0.4	-1.8	0.4	2.8	0.5	3.4	0.5	1.0	-1.1	0.7	0.8
2013 IV	0.5	0.0	-0.8	-7.8	-4.2	-21.1	2.1	2.5	0.7	2.2	0.5
2014 I	-0.5	-2.2	-1.5	-1.6	-3.8	-10.0	-0.3	-0.2	-0.6	0.3	0.6
II	-0.5	-0.1	-1.0	0.8	-2.9	-9.3	0.0	0.1	-0.3	0.8	0.5
III	-0.2	-0.9	-0.4	0.3	-2.6	-3.3	-0.4	-0.1	-1.4	-0.2	0.6
IV	-0.3	-2.1	-0.1	1.8	-0.3	5.2	-0.5	-0.2	-1.6	-0.3	0.6
2015 I	0.4	-1.9	0.2	1.5	-0.1	5.9	0.5	1.4	-1.9	0.9	0.7
II	0.4	-1.2	0.7	4.0	1.2	4.7	0.4	0.6	-0.2	0.5	0.7
III (c)	--	-2.4	0.5	--	--	--	--	--	--	--	0.8
2015 Aug	--	-2.2	0.6	--	--	--	--	--	--	--	0.7
Sep	--	-3.6	0.4	--	--	--	--	--	--	--	0.8
Oct	--	--	--	--	--	--	--	--	--	--	0.8

(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).

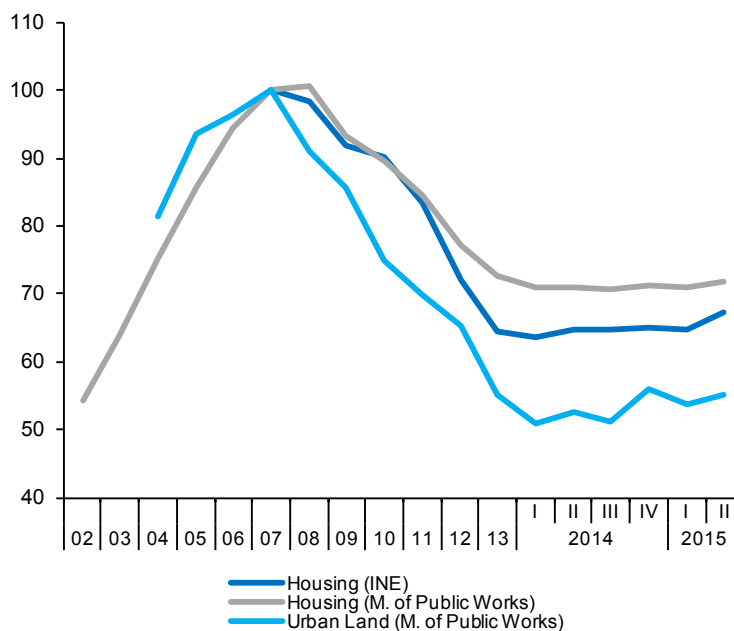**Chart 15.1.- Housing and Urban land prices**
Index (2007=100)

Housing (INE)
Housing (M. of Public Works)
Urban Land (M. of Public Works)

Chart 15.2.- Wage costs
Annual percent change

Total labour cost
Wage cost
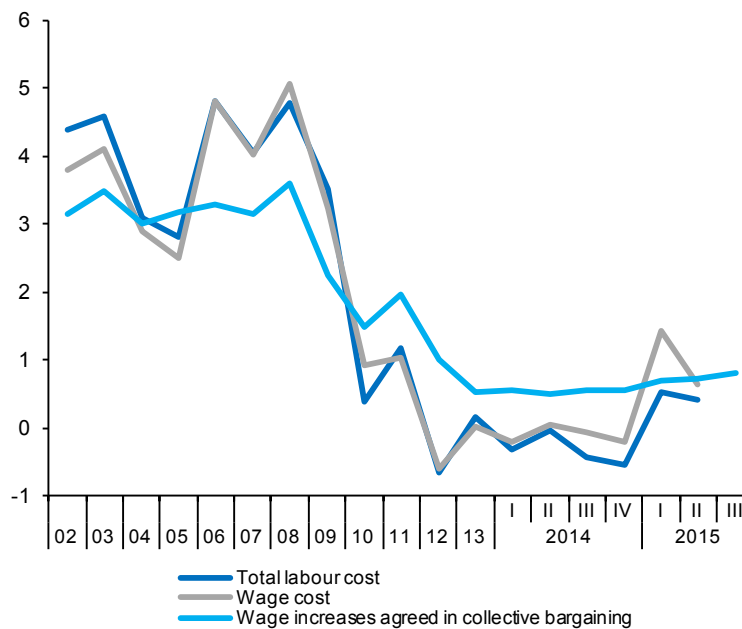Wage increases agreed in collective bargaining

Table 16
External trade (a)

		Exports of goods			Imports of goods			Exports to EU countries	Exports to non-EU countries	Total Balance of goods	Balance of goods excluding energy	Balance of goods with EU countries
		Nominal	Prices	Real	Nominal	Prices	Real					
		EUR Billions	2005=100		EUR Billions	2005=100				EUR Billions		
2008		189.2	109.0	112.0	283.4	109.1	111.5	131.0	58.2	-94.2	-50.7	-26.0
2009		159.9	101.6	101.5	206.1	96.2	92.0	110.7	49.2	-46.2	-18.8	-8.9
2010		186.8	103.2	116.7	240.1	100.6	102.4	126.5	60.3	-53.3	-17.9	-4.8
2011		215.2	108.2	128.4	263.1	109.1	103.5	142.6	72.6	-47.9	-4.0	3.6
2012		226.1	110.4	132.2	257.9	114.2	97.0	143.2	82.9	-31.8	14.3	12.2
2013		235.8	110.2	138.1	252.3	109.3	99.1	147.7	88.1	-16.5	25.4	17.1
2014		240.0	109.1	143.3	264.5	106.7	107.1	152.3	87.7	-24.5	15.4	11.2
2015	(b)	164.8	109.9	147.4	180.9	104.4	113.8	106.0	58.8	-16.1	3.5	6.3
2013	IV	59.1	111.4	137.3	62.7	109.5	98.9	37.1	22.0	-3.7	5.9	3.7
2014	I	58.7	109.0	139.5	65.5	105.5	107.1	37.5	21.2	-6.8	4.6	3.1
	II	60.2	108.7	143.2	65.8	106.6	106.6	37.7	22.5	-5.7	4.2	2.5
	III	62.0	109.1	147.1	67.4	107.6	108.1	38.9	23.1	-5.4	4.4	3.5
	IV	61.6	109.5	145.7	65.9	107.3	106.0	38.2	23.5	-4.2	4.6	2.2
2015	I	61.0	109.7	143.8	67.2	104.1	111.5	39.6	21.3	-6.2	1.0	2.3
	II	63.4	110.2	148.8	69.6	104.9	114.6	40.5	22.8	-6.3	1.2	2.0
	III (b)	42.6	109.6	150.7	46.7	104.1	116.3	26.6	16.0	-4.2	0.8	0.9
2015	Jun	21.3	110.2	150.2	23.6	104.2	117.1	13.6	7.7	-2.3	0.3	0.5
	Jul	22.8	111.2	159.0	24.5	104.5	121.7	14.3	8.4	-1.8	0.7	0.4
	Aug	19.8	107.9	142.3	22.2	103.7	110.9	12.2	7.5	-2.4	0.1	0.5
		Percentage changes (c)								Percentage of GDP		
2008		2.3	1.6	0.7	-0.6	4.1	-4.5	-0.1	8.0	-8.4	-4.5	-2.3
2009		-15.5	-6.8	-9.4	-27.3	-11.8	-17.5	-15.5	-15.4	-4.3	-1.7	-0.8
2010		16.8	1.6	15.0	16.5	4.6	11.3	14.3	22.5	-4.9	-1.7	-0.4
2011		15.2	4.8	10.0	9.6	8.4	1.1	12.7	20.5	-4.5	-0.4	0.3
2012		5.1	2.0	3.0	-2.0	4.7	-6.3	0.5	14.1	-3.1	1.4	1.2
2013		4.3	-0.2	4.5	-2.2	-4.3	2.2	3.1	6.3	-1.6	2.5	1.7
2014		2.5	-1.0	3.5	5.7	-2.4	8.3	3.1	-0.4	-2.4	1.5	1.1
2015	(d)	4.9	1.2	3.7	4.2	-1.9	6.2	6.2	2.6	--	--	--
2013	IV	-3.1	2.2	-5.1	-1.6	-1.9	0.3	6.5	-16.9	-1.4	2.3	1.4
2014	I	-2.3	-8.3	6.5	18.7	-14.0	37.7	5.0	-13.9	-2.6	1.8	1.2
	II	10.1	-1.1	11.1	2.3	4.2	-1.9	1.4	27.1	-2.2	1.6	1.0
	III	12.9	1.5	11.4	9.6	3.8	5.6	14.0	11.0	-2.1	1.7	1.4
	IV	-2.4	1.5	-3.7	-8.6	-1.1	-7.5	-7.5	6.7	-1.6	1.8	0.9
2015	I	-4.2	0.7	-5.1	8.1	-11.4	22.3	16.2	-31.5	-2.3	0.4	0.9
	II	16.7	1.8	14.6	15.5	3.1	11.7	9.5	30.9	-2.3	0.4	0.8
	III (e)	2.8	-2.3	5.1	2.7	-3.0	6.1	-6.6	21.4	--	--	--
2015	Jun	3.7	-2.0	5.8	5.1	-1.2	6.4	4.0	3.1	--	--	--
	Jul	6.9	0.9	5.9	4.1	0.3	3.9	5.3	9.7	--	--	--
	Aug	-13.2	-3.0	-10.5	-9.6	-0.8	-8.9	-14.6	-10.7	--	--	--

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

Source: Ministry of Economy.

Chart 16.1.- External trade (real)
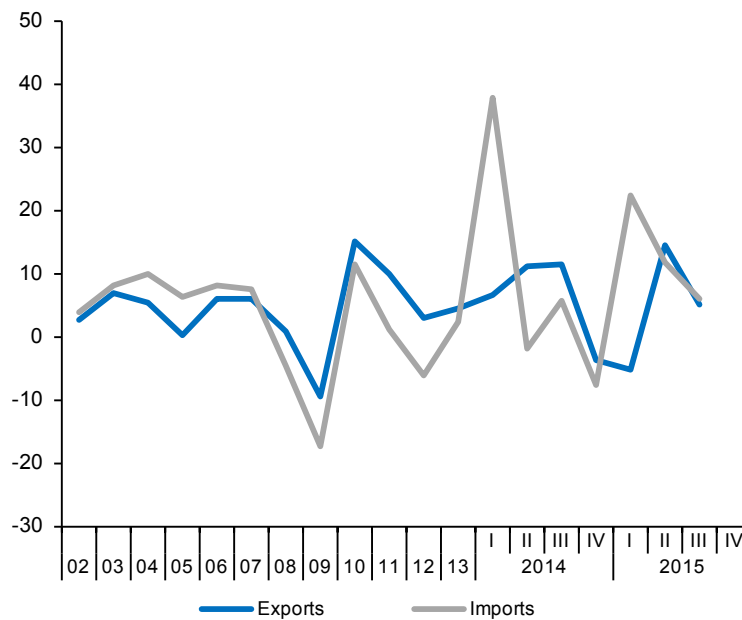Percent change from previous period

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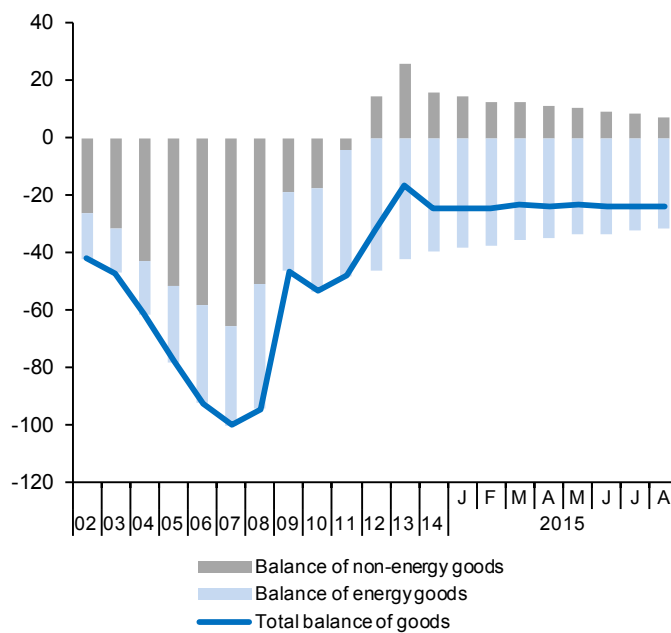EUR Billions, moving sum of 12 months

Table 17
Balance of Payments (according to IMF manual)
(Net transactions)

		Current account				Capital account	Current and capital accounts	Financial account					Bank of Spain	Errors and omissions
								Financial account, excluding Bank of Spain						
		Total	Goods	Services	Income	Transfers			Total	Direct investment	Porfolio investment	Other investment	Financial derivatives		
		1 = 2 + 3 + 4 + 5	2	3	4	5	6	7=1+6	8 = 9 + 10 + 11 + 12	9	10	11	12	13	14
EUR billions															
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
2013	III	5.85	-5.12	16.93	-2.72	-3.24	0.99	6.84	1.13	1.14	11.91	-11.04	-0.88	11.52	3.55
	IV	5.40	-4.78	10.15	2.73	-2.70	2.21	7.61	36.95	4.51	35.39	-1.62	-1.33	53.67	9.12
2014	I	-3.26	-5.68	8.47	-1.68	-4.37	1.62	-1.64	-18.80	-5.18	-18.13	5.33	-0.82	-12.49	7.95
	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	-1.41	-4.28	8.51	-1.05	-4.58	0.69	-0.72	-6.37	-0.59	3.36	-9.92	0.77	-14.85	-7.76
	II	3.08	-5.36	12.48	-1.64	-2.41	2.24	5.32	-18.91	-16.05	-4.47	1.21	0.40	-8.93	4.67

			Goods and Services		Income and Transfers										
2015	Jun	1.66	2.49		-0.84		0.50	2.16	-23.40	-6.04	-8.66	-8.91	0.21	-13.24	8.00
	Jul	2.98	4.94		-1.96		0.69	3.67	-1.50	0.91	-1.10	-0.06	-1.25	-0.11	-2.28
	Aug	1.65	3.21		-1.56		0.92	2.57	-7.47	-0.31	2.13	-9.73	0.44	-0.53	4.38
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
2013	III	2.3	-2.0	6.7	-1.1	-1.3	0.4	2.7	0.4	0.5	4.7	-4.4	-0.3	4.6	1.4
	IV	2.0	-1.8	3.8	1.0	-1.0	0.8	2.9	13.9	1.7	13.3	-0.6	-0.5	20.2	3.4
2014	I	-1.3	-2.3	3.4	-0.7	-1.7	0.6	-0.7	-7.5	-2.1	-7.3	2.1	-0.3	-5.0	3.2
	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	-0.5	-1.7	3.3	-0.4	-1.8	0.3	-0.3	-2.5	-0.2	1.3	-3.8	0.3	-5.8	-3.0
	II	1.1	-2.0	4.5	-0.6	-0.9	0.8	1.9	-6.9	-5.8	-1.6	0.4	0.1	-3.3	1.7

Source: Bank of Spain.

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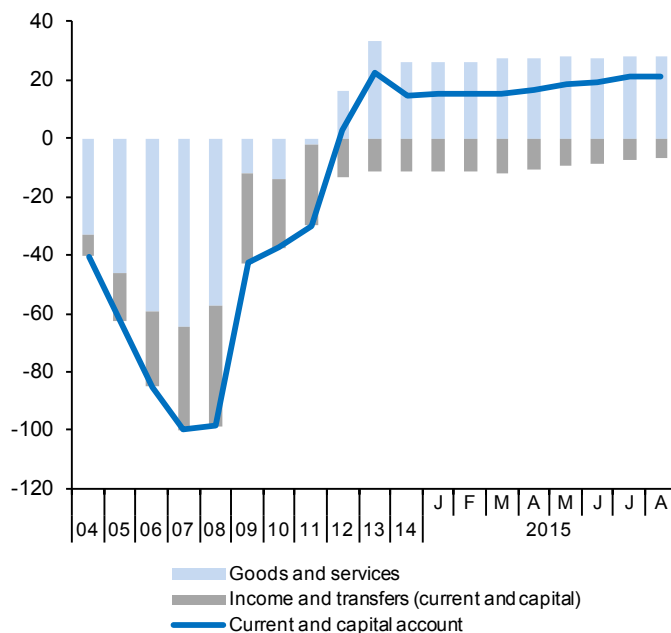EUR Billions, 12-month cumulated

Goods and services
Income and transfers (current and capital)
Current and capital account

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

Bank of Spain   Direct investment
Portfolio invesment   Other investment
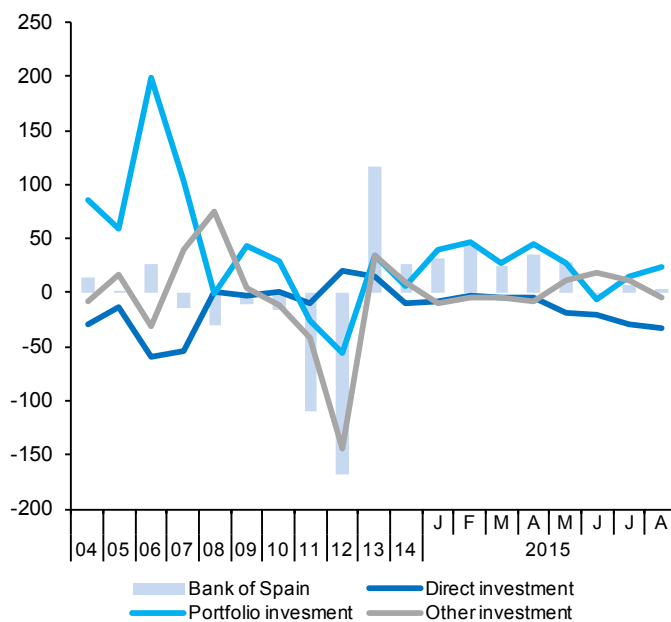
Table 18

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 (c)	-25.6	131.7	157.3	154.0	65.5	61.7	26.7	-5.6	94.7	75.3	100.2	84.0
2015 Jul	-34.0	179.4	213.4	216.0	97.0	80.7	38.3	-16.2	122.3	99.6	138.4	116.4
Aug	-32.9	180.0	212.9	219.0	98.1	81.1	39.8	-16.4	122.4	99.7	138.8	116.6
Sept	-33.3	179.6	212.8	218.7	97.9	81.3	39.5	-16.4	122.7	100.0	139.1	116.8
Annual percentage changes												
2009	--	-19.3	17.8	-13.9	-14.2	-21.2	20.4	--	-0.5	-1.3	4.7	5.9
2010	--	20.3	-9.3	7.7	-0.7	29.1	-15.7	--	-1.0	-1.7	4.5	6.2
2011	--	4.2	-5.6	1.1	3.1	-0.9	-0.8	--	-0.7	-0.1	1.7	3.9
2012	--	3.0	8.5	21.7	7.3	0.5	195.9	--	-2.5	-4.0	1.9	3.9
2013	--	-1.9	-0.9	-11.3	-2.2	3.0	-51.1	--	2.3	-3.0	4.6	5.3
2014	--	2.7	-0.3	7.7	1.6	6.1	37.6	--	-1.6	1.1	2.4	3.0
2015 (d)	--	4.1	-1.1	9.1	3.7	5.3	38.3	--	3.7	1.1	6.1	3.0
2015 Jul	--	3.7	-0.1	8.6	3.2	4.2	39.1	--	3.9	1.2	4.1	2.8
Aug	--	4.1	-0.6	4.9	-2.2	0.0	46.0	--	4.1	1.2	4.5	3.1
Sep	--	3.1	-1.5	8.9	2.3	4.8	43.2	--	4.0	1.3	5.3	3.0
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 Jul	-3.2	16.9	20.1	20.4	9.2	7.6	3.6	-1.5	11.5	9.4	13.1	11.0
Aug	-3.1	17.0	20.1	20.7	9.3	7.7	3.8	-1.5	11.6	9.4	13.1	11.0
Sep	-3.1	16.9	20.1	20.6	9.2	7.7	3.7	-1.5	11.6	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 (National Accounts basis)
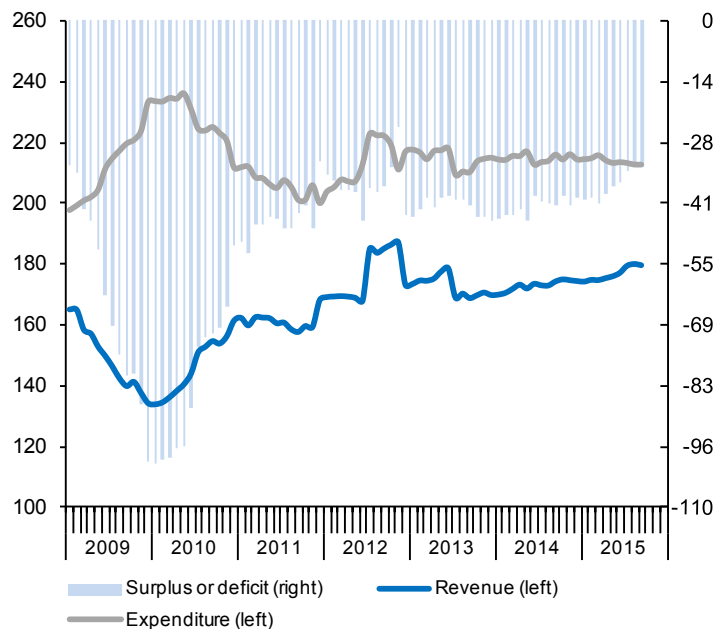EUR Billions, 12-month cumulated

Surplus or deficit (right) ▬▬ Revenue (left)
▬▬ Expenditure (left)

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

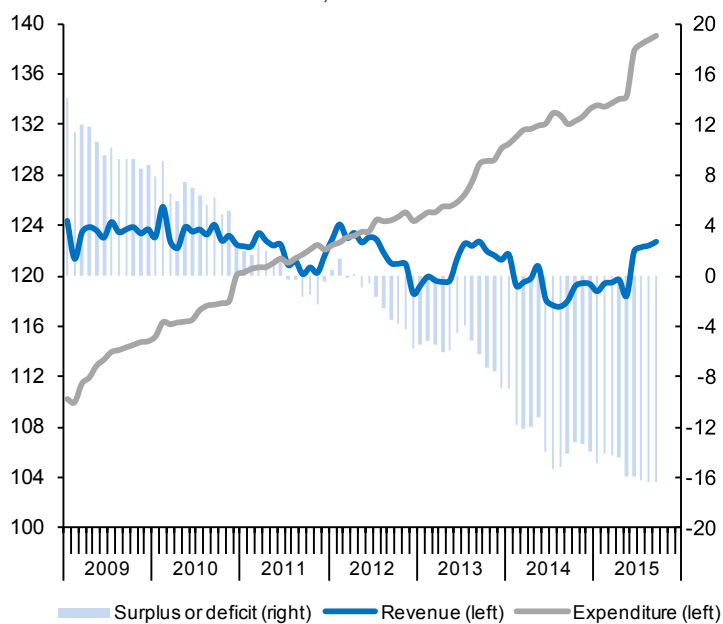Surplus or deficit (right) ▬▬ Revenue (left) ▬▬ Expenditure (left)

Table 19
Monetary and financial indicators

		Interest rates (percentage rates)				Credit stock (EUR billion)				Contribution of Spanish MFI to Eurozone M3	Stock market (IBEX-35)
		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		
		Average of period data					**End of period data**					
2007		4.3	7.3	5.3	9.8	5.8	2,432.2	383.8	1,175.8	872.6	--	15,182.3
2008		4.4	38.3	5.8	10.9	6.4	2,609.0	439.8	1,261.1	908.2	--	9,195.8
2009		4.0	75.7	3.4	10.5	4.7	2,715.6	568.7	1,246.5	900.4	--	11,940.0
2010		4.3	150.8	2.6	8.6	4.3	2,788.5	649.3	1,244.0	895.2	--	9,859.1
2011		5.4	283.3	3.5	8.6	5.1	2,805.5	743.5	1,194.0	867.9	--	8,563.3
2012		5.8	435.1	3.4	9.1	5.6	2,821.3	890.7	1,099.7	830.9	--	8,167.5
2013		4.6	299.2	3.2	9.7	5.5	2,760.0	966.0	1,011.0	783.0	--	9,916.7
2014		2.7	156.0	3.1	9.6	4.9	2,725.7	1,033.7	942.9	749.1	--	10,279.5
2015	(a)	1.7	123.3	2.5	9.1	3.9	2,708.3	1,050.5	926.9	728.7	--	10,360.7
2013	IV	4.2	240.3	3.2	9.7	5.3	2,760.0	966.0	1,011.0	783.0	--	9,916.7
2014	I	3.6	194.3	3.3	9.7	5.4	2,755.4	995.7	988.2	771.5	--	10,340.5
	II	2.9	157.0	3.2	9.6	5.1	2,761.2	1,012.5	978.3	770.5	--	10,923.5
	III	2.4	143.7	3.1	9.7	4.8	2,747.6	1,020.1	971.0	756.4	--	10,825.5
	IV	2.0	129.0	2.8	9.5	4.3	2,725.7	1,033.7	942.9	749.1	--	10,279.5
2015	I	1.4	112.3	2.6	9.3	4.2	2,733.6	1,047.6	945.1	740.9	--	11,521.1
	II	1.8	126.0	2.5	8.9	3.7	2,726.2	1,054.0	930.0	742.2	--	10,769.5
	III	2.0	132.5	2.5	9.2	3.7	--	--	926.9	728.7	--	9,559.9
2015	Aug	1.9	128.8	2.5	9.4	3.7	2,708.3	1,050.5	926.9	730.9	--	10,259.0
	Sep	2.0	135.1	2.4	9.2	3.6	--	--	926.9	728.7	--	9,559.9
	Oct	1.7	120.6	--	--	--	--	--	--	--	--	10,360.7
							Percentage change from same period previous year					**(b)**
2007		--	--	--	--	--	12.5	-2.1	18.4	12.5	15.1	7.3
2008		--	--	--	--	--	8.0	14.6	8.5	4.3	7.7	-39.4
2009		--	--	--	--	--	4.1	29.3	-1.4	-0.3	-0.8	29.8
2010		--	--	--	--	--	3.4	14.2	0.7	0.2	-2.2	-17.4
2011		--	--	--	--	--	1.7	14.5	-2.0	-2.4	-1.6	-13.1
2012		--	--	--	--	--	1.3	19.8	-6.4	-3.8	0.1	-4.6
2013		--	--	--	--	--	-1.1	8.5	-5.9	-5.1	-4.4	21.4
2014		--	--	--	--	--	-0.2	7.0	-4.3	-3.7	3.4	3.7
2015	(a)	--	--	--	--	--	-0.2	4.0	-2.1	-2.7	4.6	-1.1
2013	IV	--	--	--	--	--	-1.1	8.5	-5.9	-5.1	-4.4	8.0
2014	I	--	--	--	--	--	-1.5	7.1	-6.4	-4.9	-5.1	4.3
	II	--	--	--	--	--	-1.0	6.6	-5.2	-4.4	-1.5	5.6
	III	--	--	--	--	--	-0.8	6.2	-4.7	-4.1	0.5	-0.9
	IV	--	--	--	--	--	-0.2	7.0	-4.3	-3.7	3.4	-5.0
2015	I	--	--	--	--	--	0.1	5.2	-2.4	-3.3	4.6	12.1
	II	--	--	--	--	--	-0.2	4.1	-2.5	-2.8	3.6	-6.5
	III	--	--	--	--	--	--	--	-2.1	-2.7	4.6	-11.2
2015	Aug	--	--	--	--	--	-0.2	4.0	-2.7	-2.6	3.3	-8.2
	Sep	--	--	--	--	--	--	--	-2.1	-2.7	4.6	-6.8
	Oct	--	--	--	--	--	--	--	--	--	--	8.4

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

Source: Bank of Spain.

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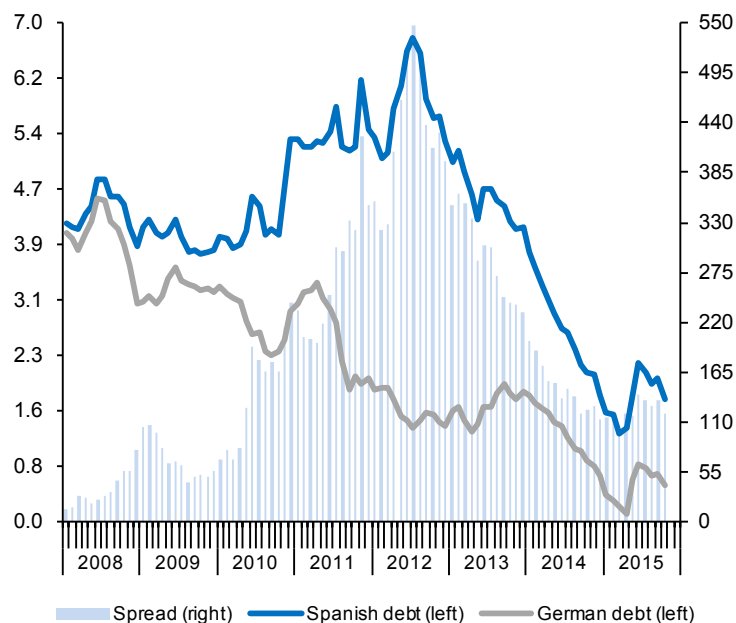Percentage rates and basis points

Spread (right) — Spanish debt (left) — German debt (left)

Chart 19.2.- Credit stock growth
Annual percentage change

Total — Non-financial corporations
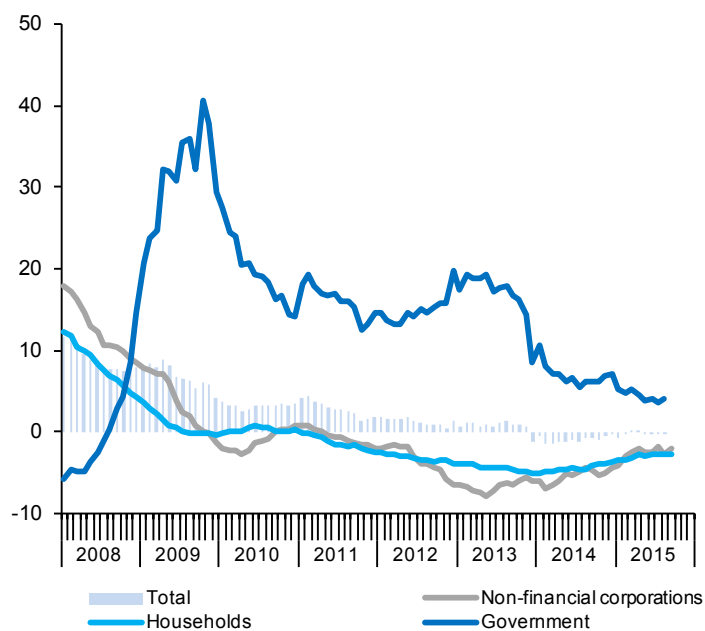Households — Government

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 wages	Relative productivity	Relative ULC	Spain	EMU	Spain/EMU	Spain	EMU	Spain/EMU	
	1998=100			2005=100			2010=100			1999 I =100
2008	110.2	90.3	122.0	110.9	107.8	102.9	99.5	101.6	98.0	114.4
2009	107.6	96.8	111.1	110.6	108.1	102.4	96.2	97.0	99.2	114.0
2010	106.1	89.8	118.2	112.9	109.8	102.8	100.0	100.0	100.0	112.8
2011	105.3	87.8	119.8	116.3	112.8	103.1	106.5	105.2	101.2	113.1
2012	102.7	88.2	116.5	119.2	115.6	103.1	110.1	107.9	102.0	111.6
2013	101.0	89.3	113.1	121.0	117.4	103.1	110.0	107.4	102.4	113.4
2014	100.5	90.3	111.4	120.8	117.8	102.6	108.4	105.8	102.4	112.4
2015 (a)	--	--	--	119.9	117.9	101.8	107.3	104.5	102.7	109.0
2013 IV	--	--	--	121.4	116.7	104.0	109.6	106.9	102.5	114.0
2014 I	--	--	--	119.9	116.6	102.8	108.0	106.5	101.4	112.6
II	--	--	--	121.6	117.7	103.3	108.6	106.1	102.4	113.3
III	--	--	--	120.9	117.5	102.9	109.3	106.1	103.0	111.7
IV	--	--	--	121.6	117.8	103.2	107.7	105.3	102.3	111.8
2015 I	--	--	--	119.9	117.4	102.2	106.6	104.2	102.3	108.7
II	--	--	--	121.9	118.3	103.0	108.0	104.9	102.9	109.6
III	--	--	--	120.4	117.9	102.1	107.4	104.3	103.0	108.6
2015 Aug	--	--	--	121.8	118.7	102.6	107.1	103.8	103.2	108.3
Sep	--	--	--	119.9	117.9	101.7	106.3	--	--	108.9
Oct	--	--	--	119.4	117.9	101.3	--	--	--	--

	Annual percentage changes					Differential	Annual percentage changes		Differential	Annual percentage changes
2008	1.6	0.4	1.1	4.1	3.3	0.9	5.7	4.9	0.8	2.3
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	3.1	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	1.5	0.0	-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 (b)	--	--	--	-0.7	0.0	-0.7	-1.2	-1.6	0.4	-3.2
2013 IV	--	--	--	0.2	1.0	-0.8	-0.8	-1.2	0.4	0.8
2014 I	--	--	--	0.0	0.6	-0.6	-2.6	-1.5	-1.1	-0.1
II	--	--	--	0.2	0.6	-0.4	-0.6	-1.1	0.5	-0.2
III	--	--	--	-0.4	0.4	-0.7	-0.9	-1.2	0.3	-1.3
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	-1.7	-1.7	-0.1	-2.8
2015 Aug	--	--	--	-0.5	0.1	-0.7	-1.6	-2.0	0.4	-2.8
Sep	--	--	--	-1.1	-0.1	-1.0	-2.9	--	--	-2.8
Oct	--	--	--	-0.9	0.0	-0.9	--	--	--	--

(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.

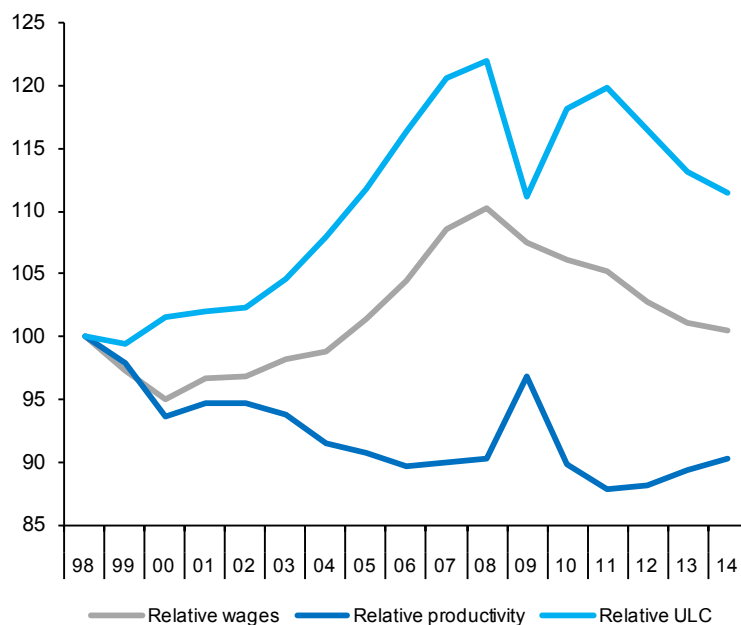## Chart 20.1.- Relative Unit Labour Costs in industry (Spain/EMU)
1998=100

Relative wages   Relative productivity   Relative ULC

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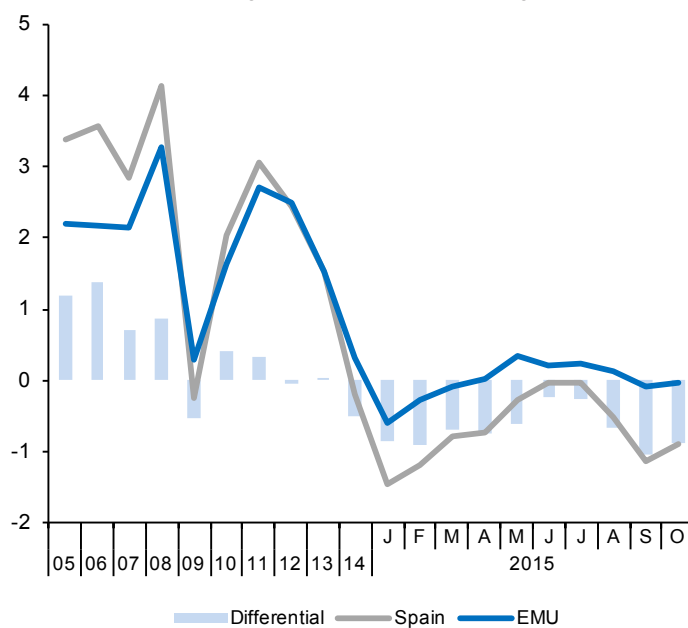

Differential   Spain   EMU

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	--	-542.8	-47.0	393.5	--	8,496.5	552.0	-70.3	44.5	-737.7	-16.6
2006	22.1	-171.8	-410.6	-41.0	392.2	7,056.8	8,817.7	597.1	-90.7	27.1	-802.2	-32.3
2007	21.6	-100.6	-512.5	-44.5	383.8	7,135.1	9,267.3	646.2	-104.1	25.3	-718.1	-37.3
2008	-49.4	-285.3	-1,030.1	-76.9	439.8	7,572.7	10,720.2	786.3	-102.9	-80.8	-691.6	-55.2
2009	-118.2	-756.9	-1,824.2	-160.1	568.7	8,532.1	12,406.4	975.5	-46.5	13.6	-381.9	-45.2
2010	-101.4	-760.2	-1,793.9	-150.9	649.3	9,580.4	14,179.9	1,190.9	-42.0	33.5	-445.9	-43.5
2011	-101.3	-547.2	-1,644.6	-124.9	743.5	10,258.9	15,379.1	1,324.2	-35.3	72.3	-481.5	-27.4
2012	-108.9	-536.4	-1,424.2	-138.6	890.7	10,893.7	16,548.9	1,421.1	-4.6	160.1	-468.2	-54.7
2013	-71.2	-409.5	-881.9	-98.1	966.0	11,242.5	17,340.8	1,496.2	15.2	198.6	-395.8	-77.9
2014	-61.3	-386.6	-842.2	-103.5	1,033.7	11,788.4	18,249.8	1,602.4	10.3	224.7	-401.1	-92.9
2015	-51.2	-334.7	-726.4	-83.0	1,088.3	12,222.0	18,936.2	1,665.8	15.2	318.3	-418.6	-82.0
2016	-40.3	-279.4	-666.6	-58.7	1,134.2	12,487.4	19,702.7	1,727.9	14.7	326.7	-454.2	-76.8
Percentage of GDP												
2005	1.2	--	-4.1	-3.5	42.3	--	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	-5.1	39.4	63.5	72.8	51.7	-9.2	-0.7	-4.7	-3.6
2009	-11.0	-6.7	-12.7	-10.8	52.7	75.4	86.0	65.7	-4.3	0.1	-2.6	-3.0
2010	-9.4	-6.5	-12.0	-9.7	60.1	81.3	94.8	76.6	-3.9	0.3	-3.0	-2.8
2011	-9.5	-4.5	-10.6	-7.7	69.5	84.7	99.1	81.8	-3.3	0.6	-3.1	-1.7
2012	-10.4	-4.3	-8.8	-8.3	85.4	88.2	102.4	85.3	-0.4	1.3	-2.9	-3.3
2013	-6.9	-3.3	-5.3	-5.7	93.7	90.3	104.1	86.2	1.5	1.6	-2.4	-4.5
2014	-5.9	-3.0	-4.9	-5.7	99.3	91.9	105.2	88.2	1.0	1.8	-2.3	-5.1
2015	-4.7	-2.5	-4.0	-4.4	100.8	90.9	105.3	88.3	1.4	2.4	-2.3	-4.3
2016	-3.6	-2.0	-3.5	-3.0	101.3	90.2	104.4	88.0	1.3	2.4	-2.4	-3.9

Source: European Commission.

Chart 21a.1.- Government deficit
Percentage of GDP
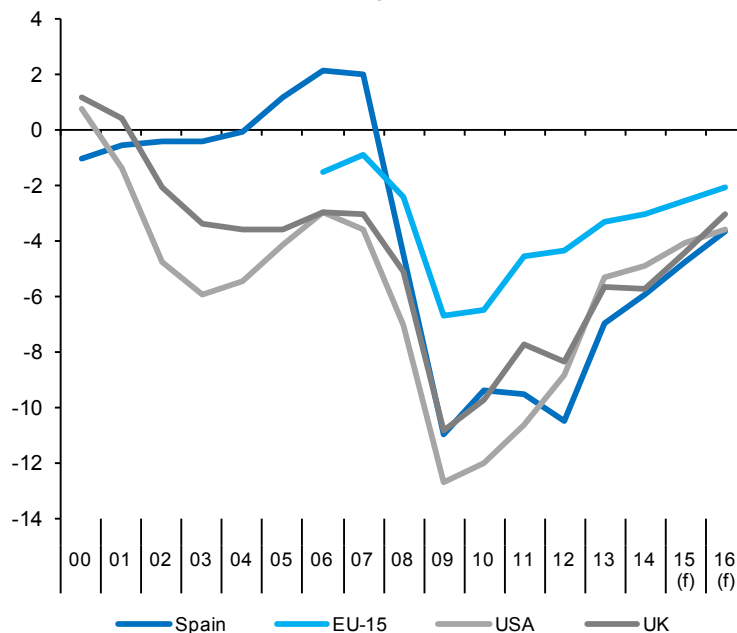
(f) European Commission forecast.

Chart 21a.2.- Government gross debt
Percentage of GDP
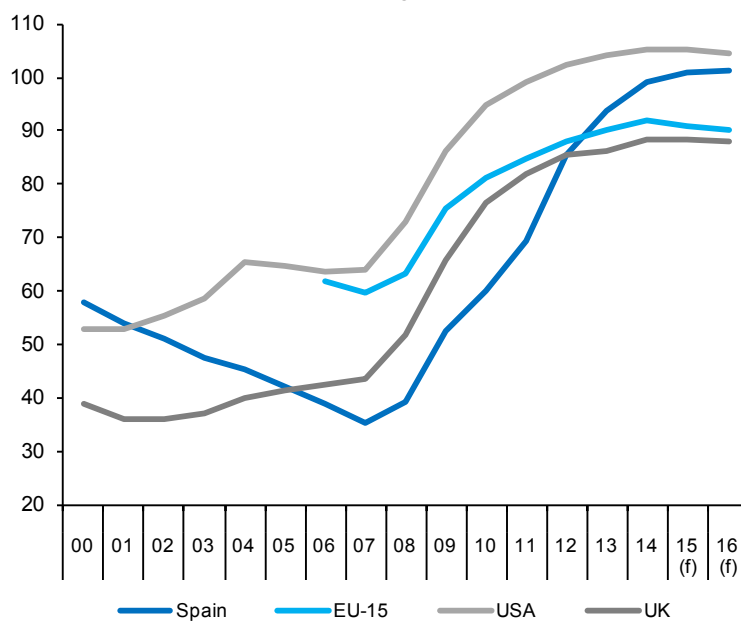
(f) European Commission forecast.

Table 21b
Imbalances: International comparison (II)

	Household debt (a)				Non-financial corporations debt (a)				Financial corporations debt (a)			
	Spain	EMU-19	USA	UK	Spain	EMU-19	USA	UK	Spain	EMU-19	USA	UK
Billions of national currency												
2005	653.5	4,710.5	11,953.6	1,189.8	925.0	7,668.9	8,166.3	1,121.7	541.5	8,325.8	13,618.8	2,381.7
2006	780.7	5,117.6	13,238.1	1,310.9	1,158.8	8,312.1	8,990.6	1,219.6	771.2	9,212.2	15,010.5	2,619.8
2007	876.6	5,483.4	14,156.6	1,426.4	1,344.5	9,131.2	10,111.2	1,299.9	1,000.0	10,426.3	17,176.0	3,125.7
2008	914.0	5,746.0	14,015.0	1,477.0	1,422.6	9,780.8	10,687.0	1,500.7	1,068.0	11,435.1	17,881.8	3,614.5
2009	906.2	5,888.2	13,762.5	1,473.8	1,406.1	9,722.7	10,136.0	1,434.2	1,147.5	11,924.4	16,449.3	3,593.5
2010	902.5	6,023.1	13,508.6	1,476.9	1,429.4	10,006.8	9,963.9	1,401.7	1,141.4	12,120.3	15,219.2	3,728.5
2011	875.2	6,121.0	13,296.6	1,486.7	1,415.7	10,191.3	10,254.2	1,423.8	1,153.8	12,702.9	14,831.6	3,645.7
2012	838.2	6,202.5	13,355.4	1,509.2	1,310.4	10,331.0	10,782.6	1,486.9	1,182.1	13,075.1	14,630.5	3,707.4
2013	790.8	6,149.7	13,507.6	1,525.5	1,228.8	10,264.5	11,305.7	1,374.8	992.9	12,235.3	14,847.3	3,586.3
2014	754.0	6,185.5	13,876.1	1,567.0	1,164.1	10,624.1	12,010.8	1,396.9	915.4	12,675.7	15,161.1	3,672.1
2015 Q2 (b)	747.9	6,182.2	14,045.7	1,574.6	1,145.7	10,903.9	12,477.4	1,371.2	886.8	12,649.0	15,202.8	3,649.3
Percentage of GDP												
2005	70.2	55.7	91.3	89.4	99.4	90.6	62.4	84.3	58.2	98.4	104.0	179.0
2006	77.5	57.5	95.5	93.2	115.0	93.3	64.9	86.7	76.5	103.5	108.3	186.2
2007	81.1	58.3	97.8	96.1	124.4	97.1	69.8	87.6	92.5	110.9	118.6	210.6
2008	81.9	59.6	95.2	97.2	127.5	101.5	72.6	98.8	95.7	118.7	121.5	237.9
2009	84.0	63.4	95.4	99.2	130.3	104.7	70.3	96.5	106.3	128.4	114.1	241.9
2010	83.5	63.1	90.3	94.9	132.2	104.8	66.6	90.1	105.6	127.0	101.7	239.7
2011	81.8	62.5	85.7	91.8	132.3	104.0	66.1	87.9	107.8	129.6	95.6	225.1
2012	80.4	63.1	82.7	90.6	125.6	105.0	66.7	89.3	113.4	132.9	90.6	222.6
2013	76.7	61.9	81.1	87.9	119.2	103.3	67.8	79.2	96.3	123.2	89.1	206.7
2014	72.4	61.2	80.0	86.3	111.8	105.1	69.2	76.9	87.9	125.4	87.4	202.2
2015 Q2 (b)	69.3	59.6	78.1	83.5	106.1	105.1	69.4	72.7	82.2	121.9	84.5	--

(a) Loans and securities other than shares, excluding financial derivatives. (b) United Kingdom: First quarter 2015.
Sources: Eurostat, European Central Bank and Federal Reserve.
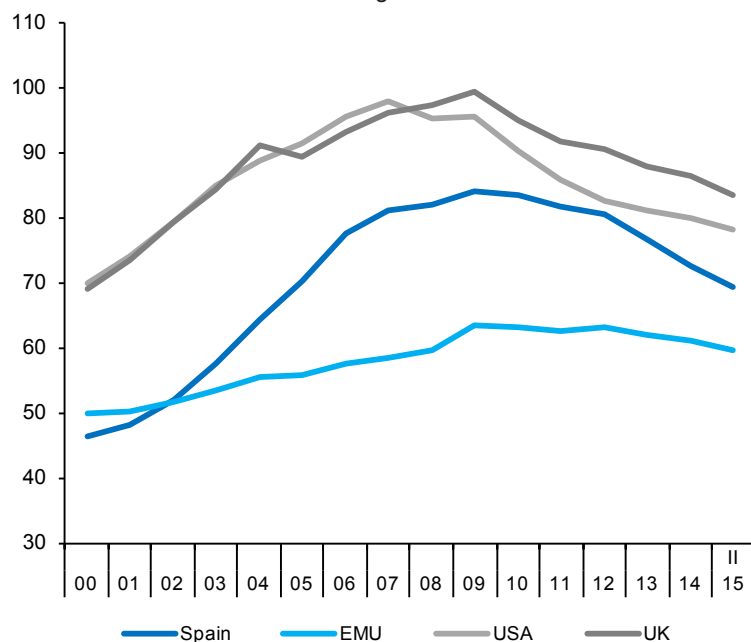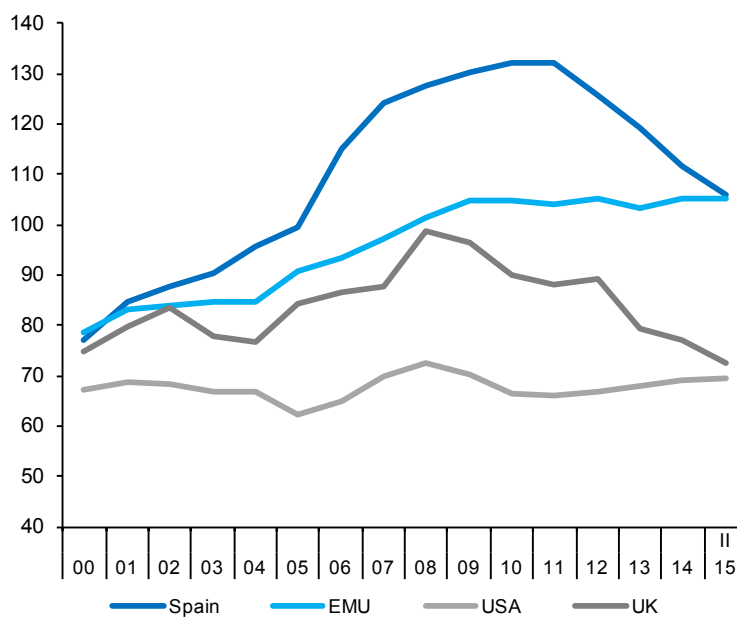
Chart 21b.1.- Household debt
Percentage of GDP

Spain — EMU — USA — UK

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

Spain — EMU — USA — UK

Updated: October 31st, 2015

Highlights

Indicator	Last value available	Corresponding to:
Bank lending to other resident sectors (monthly average % var.)	-0.9	August 2015
Other resident sectors' deposits in credit institutions (monthly average % var.)	-0.5	August 2015
Doubtful loans (monthly % var.)	-0.7	August 2015
Recourse to the Eurosystem (Eurozone financial institutions, million euros)	379,685	September 2015
Recourse to the Eurosystem (Spanish financial institutions, million euros)	135,735	September 2015
Recourse to the Eurosystem (Spanish financial institutions million euros)- Main L/T refinancing operations	14,394	September 2015
Operating expenses/gross operating income ratio (%)	48.47	June 2015
Customer deposits/employees ratio (thousand euros)	5,615.85	June 2015
Customer deposits/branches ratio (thousand euros)	36,139.85	June 2015
Branches/institutions ratio	146.26	June 2015

A. Money and interest rates

Indicator	Source:	Average 1999-2012	2013	2014	2015 September	2015 October	Definition and calculation
1. Monetary Supply (% chg.)	ECB	5.8	2.3	1.9	1.8	-	M3 aggregate change (non-stationary)
2. Three-month interbank interest rate	Bank of Spain	2.68	0.22	0.21	-0.041	-0.068	Daily data average
3. One-year Euribor interest rate (from 1994)	Bank of Spain	2.95	0.54	0.48	0.14	0.10	End-of-month data
4. Ten-year Treasury bonds interest rate (from 1998)	Bank of Spain	4.6	4.6	2.7	1.88	1.67	Market interest rate (not exclusively between account holders)
5. Corporate bonds average interest rate	Bank of Spain	4.6	3.9	2.3	2.00	-	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 -0.068% and the 1-year Euribor has decreased to 0.10% in October. The ECB has pointed to an intensification of its bond-buying program in December as it observed inflation is adjusting but doing so at a slower pace than expected. As for the Spanish 10-year bond yield, it has reached 1.67% in October from 1.88% in September.

B. Financial markets

Indicator	Source:	Average 1999-2012	2013	2014	2015 August	2015 September	Definition and calculation
6. Outright spot treasury bills transactions trade ratio	Bank of Spain	29.6	82.9	75.6	79.8	86.9	(Traded amount/ outstanding balance) x100 in the market (not exclusively between account holders)
7. Outright spot government bonds transactions trade ratio	Bank of Spain	78.9	61.2	73.2	53.5	60.6	(Traded amount/ outstanding balance) x100 in the market (not exclusively between account holders)
8. Outright forward treasury bills transactions trade ratio	Bank of Spain	0.7	1.8	2.6	3.7	2.4	(Traded amount/ outstanding balance) x100 in the market (not exclusively between account holders)
9. Outright forward government bonds transactions trade ratio	Bank of Spain	4.4	3.2	4.6	2.1	2.0	(Traded amount/ outstanding balance) in the market (not exclusively between account holders)
10. Three-month maturity treasury bills interest rate	Bank of Spain	2.4	0.2	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	565.2	846.3	1,037.9	1,030.9	1,040.8	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	2.3	0.6	-7.1	-5.6	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	4.2	6.9	7.0	-36.0	1.3	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	1,026.5	1,012.0	1,042.5	1,039.5	1,043.9[a]	Base 1985=100
15. Ibex-35 (Dec1989=3000)	Bank of Spain and Madrid Stock Exchange	9,864.5	8,715.6	10,528.8	10,259.0	10,360.7[a]	Base dec1989=3000
16. Madrid Stock Exchange PER ratio (share value/ profitability)	Bank of Spain and Madrid Stock Exchange	15.6	33.1	26.1	16.1	17.7[a]	Madrid Stock Exchange Ratio "share value/ capital profitability"

B. Financial markets (continued)

Indicator	Source:	Average 1999-2012	2013	2014	2015 August	2015 September	Definition and calculation
17. Long-term bonds. Stock trading volume (% chg.)	Bank of Spain and Madrid Stock Exchange	3.7	10.6	7.4	-54.5	217.9	Variation for all stocks
18. Commercial paper. Trading balance (% chg.)	Bank of Spain and AIAF	2.3	10.9	-1.3	2.1	0.2	AIAF fixed-income market
19. Commercial paper. Three-month interest rate	Bank of Spain and AIAF	2.8	2.4	0.6	0.1	0.1	AIAF fixed-income market
20. IBEX-35 financial futures concluded transactions (% chg.)	Bank of Spain	0.7	6.4	4.3	-5.8	11.4	IBEX-35 shares concluded transactions
21. IBEX-35 financial options concluded transactions (% chg.)	Bank of Spain	9.0	6.7	6.4	-62.7	126.3	IBEX-35 shares concluded transactions

(a) Last data published: October 31st, 2015.

Comment on "Financial Markets:" During the last month, there has been an increase in transactions with outright spot T-bills, and of spot government bonds transactions, which stood at 86.9% and 60.6%, respectively. The stock market has shown a recovery in October, with the IBEX-35 up to 10,361 points, and the General Index of the Madrid Stock Exchange to 1,044. Additionally, there was an increase of 11.4% in financial IBEX-35 futures transactions and of 126.3% in transactions with IBEX-35 financial options.

C. Financial Savings and Debt

Indicator	Source:	Average 2007-2012	2013	2014	2015 Q 1	2015 Q 2	Definition and calculation
22. Net Financial Savings/GDP (National Economy)	Bank of Spain	-5.3	2.1	1.0	1.2	1.6	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	4.0	3.5	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	314.3	306.7	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 1	2015 Q 2	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	71.1	70.6	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	3.5	0.2	Total assets percentage change (financial balance)
27. Households and non-profit institutions balance: financial liabilities (quarterly average % chg.)	Bank of Spain	3.5	-5.3	-3.8	-0.8	0.1	Total liabilities percentage change (financial balance)

Comment on "Financial Savings and Debt:" During 2015Q2, there was an increase in financial savings to GDP in the overall economy of 1.6%. There was a fall in the financial savings rate of households from 4% in 2015Q1 to 3.5% in 2015Q2. The debt to GDP ratio fell to 70.6% from 71.1% in the same period. Finally, the stock of financial assets on households' balance sheets registered a growth of 0.2%, while there was a 0.1% increase in the stock of financial liabilities.

D. Credit institutions. Business Development

Indicator	Source:	Average 1999-2012	2013	2014	2015 July	2015 August	Definition and calculation
28. Bank lending to other resident sectors (monthly average % var.)	Bank of Spain	10.8	-9.5	-4.6	-0.1	-0.9	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	9.9	1.3	-1.5	-0.1	-0.5	Deposits percentage change for the sum of banks, savings banks and credit unions
30. Debt securities (monthly average % var.)	Bank of Spain	11.3	-5.1	1.2	-2.5	-1.4	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	15.5	8.9	-6.8	2.2	-2.0	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	-1.3	-5.9	-5.9	-5.8	-6.1	Difference between the asset-side and liability-side "Credit System" item as a proxy of the net position in the interbank market (month-end)

D. Credit institutions. Business Development (continued)

Indicator	Source:	Average 1999-2012	2013	2014	2015 July	2015 August	Definition and calculation
33. Doubtful loans (monthly average % var.)	Bank of Spain	37.9	17.8	-12.7	-1.7	-0.7	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	-2.1	6.5	-6.1	-11.5	-10.5	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	10.1	19.6	-1.1	1,0	-0,6	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 August 2015 show a decrease in bank credit to the private sector and in financial institutions deposit-taking from the previous month of 0.9% and 0.5%, respectively. Holdings of debt securities fell by 1.4%, while shares and equity were down by 2%. Also, doubtful loans decreased 0.7% compared to the previous month.

E. Credit institutions. Market Structure and Eurosystem Refinancing

Indicator	Source:	Average 2000-2012	2013	2014	2015 March	2015 June	Definition and calculation
36. Number of Spanish credit institutions	Bank of Spain	206	155	138	133	133	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	64	86	86	85	83	Total number of foreign credit institutions operating in Spanish territory
38. Number of employees	Bank of Spain	249,001	212,998	203,305	-	-	Total number of employees in the banking sector
39. Number of branches	Bank of Spain	40,630	33,527	31,999	31,804	31,412	Total number of branches in the banking sector
40. Recourse to the Eurosystem (total Eurozone financial institutions) (Euro millions)	Bank of Spain	373,328	665,849	506,285	436,119	379,685 [a]	Open market operations and ECB standing facilities. Eurozone total
41. Recourse to the Eurosystem (total Spanish financial institutions) (Euro millions)	Bank of Spain	41,806	201,865	141,338	123,819	135,735 [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 March	2015 June	Definition and calculation
42. Recourse to the Eurosystem (total Spanish financial institutions): main long term refinancing operations (Euro millions)	Bank of Spain	21,288	19,833	21,115	53,920	14,394[a]	Open market operations: main long term refinancing operations. Spain total

(a) Last data published: September 2015.

Comment on "Credit institutions. Market Structure and Eurosystem Refinancing:" In September 2015, recourse to Eurosystem funding by Spanish credit institutions accounted for 35.7% of net total funds borrowed from the ECB by the Eurozone. This means a 2.18 billion euro decrease in recourse to the Eurosystem by Spanish banks from August.

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

Indicator	Source:	Average 2000-2012	2013	2014	2015 March	2015 June	Definition and calculation
43. "Operating expenses/gross operating income" ratio	Bank of Spain	52.27	48.25	47.27	47.36	48.47	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	2,899.17	5,426,09	5,892.09	6,266.54	5,615.85	Productivity indicator (business by employee)
45. "Customer deposits/ branches" ratio (Euro thousands)	Bank of Spain	20,102.13	34,472.09	40,119.97	40,058.42	36,139.85	Productivity indicator (business by branch)
46. "Branches/ institutions" ratio	Bank of Spain	199.04	216.30	142.85	145.89	146.26	Network expansion indicator
47. "Employees/ branches" ratio	Bank of Spain	6.1	6.3	6.8	6.4	6.4	Branch size indicator
48. Equity capital (monthly average % var.)	Bank of Spain	0.12	0.16	0.07	0.02	0.17	Credit institutions equity capital variation indicator
49. ROA	Bank of Spain	0.75	0.13	0.49	0.50	0.47	Profitability indicator, defined as the "pre-tax profit/average total assets"
50. ROE	Bank of Spain	11.20	1.88	6.46	6.92	5.93	Profitability indicator, defined as the "pre-tax profit/equity capital"

Comment on "Credit institutions. Efficiency and Productivity, Risk and Profitability:" In June 2015, 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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